

# R.M.K

## COLLEGE OF ENGINEERING AND TECHNOLOGY

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Approved by AICTE.New Delhi



## NAAC SELF STUDY REPORT

For Accreditation

Cycle 1

Submitted to



April 2017

**SELF STUDY REPORT (SSR)****(Accreditation – Cycle – I)****CONTENTS**

<b>VOLUME - I</b>	<b>Page No.</b>
<b>Covering Letter</b>	01
<b>Preface</b>	02
<b>Executive Summary and SWOC analysis of the Institution</b>	04
<b>Profile of the College</b>	19
<b>CRITERIA WISE INPUTS</b>	
<b>Criterion I Curricular Aspects</b>	
<b>1.1</b>	Curriculum Planning and Implementation
<b>1.2</b>	Academic flexibility
<b>1.3</b>	Curriculum Enrichment
<b>1.4</b>	Feedback System
<b>Criterion II Teaching-Learning and Evaluation</b>	
<b>2.1</b>	Student Enrolment and Profile
<b>2.2</b>	Catering to Student Diversity
<b>2.3</b>	Teaching - Learning Process
<b>2.4</b>	Teacher Quality
<b>2.5</b>	Evaluation Process and Reforms
<b>2.6</b>	Student Performance and Learning Outcomes
<b>Criterion III Research, Consultancy and Extension</b>	
<b>3.1</b>	Promotion of Research
<b>3.2</b>	Resource Mobilization for Research
<b>3.3</b>	Research Facilities
<b>3.4</b>	Research Publications and Awards
<b>3.5</b>	Consultancy
<b>3.6</b>	Extension Activities and Institutional Social Responsibilities
<b>3.7</b>	Collaboration

<b>Criterion IV</b>	<b>Infrastructure and Learning Resources</b>	
<b>4.1</b>	Physical Facilities	167
<b>4.2</b>	Library as a Learning Resource	174
<b>4.3</b>	IT Infrastructure	182
<b>4.4</b>	Maintenance of Campus Facilities	186
<b>Criterion V</b>	<b>Student Support and Progression</b>	
<b>5.1</b>	Student Mentoring and Support	188
<b>5.2</b>	Student Progression	198
<b>5.3</b>	Student Participation and Activities	201
<b>Criterion VI</b>	<b>Governance, Leadership and Management</b>	
<b>6.1</b>	Institutional Vision and Leadership	206
<b>6.2</b>	Strategy Development and Deployment	220
<b>6.3</b>	Faculty Empowerment Strategies	230
<b>6.4</b>	Financial Management and Resource Mobilization	233
<b>6.5</b>	Internal Quality Assurance System (IQAS)	236
<b>Criterion VII</b>	<b>Innovations and Best Practices</b>	
<b>7.1</b>	Environment Consciousness	241
<b>7.2</b>	Innovations	245
<b>7.3</b>	Best practices	250

**VOLUME – II****Evaluative Report of the Departments****ANNEXURE****Declaration by the Head of the Institution****Certificate of Compliance****AICTE Approval letter (2017-18)****Anna University Affiliation letters (2016-17)****Minority Status Approval Letter**

## List of Tables

Table No.	Description	Page No.
<b>Criteria 1</b>		
<b>1.1</b>	Contents of the Course File	29
<b>1.2</b>	Details of MOU's signed	34
<b>1.3</b>	List of Electives Offered	40
<b>1.4</b>	Programs Offered by the Institute with Approved Intake	42
<b>1.5</b>	Enrichment Courses	42
<b>1.6</b>	List of Skill Enrichment Courses	48
<b>1.7</b>	List of Programme Conducted By Higher Education Cell	49
<b>1.8</b>	List of Entrepreneurship Activities	50
<b>1.9</b>	List of Career Guidance Activities	52
<b>1.10</b>	Feedback from stakeholders and the significant Action plan	54
<b>1.11</b>	Feedback from students and stakeholders and the significant Action plan	56
<b>1.12</b>	List of the new courses and their rationale	58
<b>Criteria 2</b>		
<b>2.1</b>	Eligibility Criteria for Admission	63
<b>2.2</b>	List of Courses Offered	64
<b>2.3</b>	Minimum and Maximum Cut of Marks for UG Programmes	65
<b>2.4</b>	Minimum and Maximum Cut of Marks for RMK Engineering	65
<b>2.5</b>	Minimum and Maximum Cut of Marks for Velammal Institute of Technology	66
<b>2.6</b>	Minimum and Maximum Cut of Marks for T.J.S. Engineering College	66
<b>2.7</b>	Details of Scholarship provided by the Management	67
<b>2.8</b>	Details of Student Application, Admission and Demand Ratio	68
<b>2.9</b>	Details of Add – on Course	71
<b>2.10</b>	Dropout Student Details	74
<b>2.11</b>	List of NPTEL Course	81
<b>2.12</b>	Particulars of Events Organized by the Department	84
<b>2.13</b>	Particulars of Events Attended by the Faculty	85
<b>2.14</b>	Particulars of Guest Lectures Organized by the Department	85
<b>2.15</b>	Particulars of Industrial Visits Organized by the Department	86
<b>2.16</b>	List of Accolades	88
<b>2.17</b>	Details of Faculty	90
<b>2.18</b>	Particulars of Programme Organized and Attended by the Department	92
<b>2.19</b>	Faculty Invited as Recourse Person	94

<b>2.20</b>	Awards Received by Faculty	96
<b>2.21</b>	Impact of continuous Assessment	102
<b>2.22</b>	Allocation of Assessment Marks	102
<b>2.23</b>	Details of Result and University Ranks	108
<b>2.24</b>	Assessment Tools and Evaluation Methods	109
<b>2.25</b>	Result Analysis Last Four Years	113
<b>2.26</b>	University Rank List Last Four Years	115
<b>2.27</b>	College Ranking among Affiliated Colleges	115

**Criteria 3**

<b>3.1</b>	Details of Research Cell Committee	120
<b>3.2</b>	List of Recognized Supervisors	122
<b>3.3</b>	Details of funded Research Projects	123
<b>3.4</b>	Details of Faculty engaged in Individual / Collaborative research Activity	123
<b>3.5</b>	List of Programs organized for last four years	124
<b>3.6</b>	The details of research areas and the expertise	124
<b>3.7</b>	The details of ISRO Project Modules to students	125
<b>3.8</b>	The details of seed money provided to students for project contest	126
<b>3.9</b>	The details of percentage of total budget earmarked for research	127
<b>3.10</b>	Details of percentage of faculty availed seed money	127
<b>3.11</b>	Details of inter-disciplinary research activities	128
<b>3.12</b>	List of research facilities available within the campus	130
<b>3.13</b>	List of research facilities developed on receiving special grants	132
<b>3.14</b>	List of international journal packages subscribed	133
<b>3.15</b>	Details of Patent granted	134
<b>3.16</b>	Details of Patents Filed	134
<b>3.17</b>	Details of research products developed	135
<b>3.18</b>	List of Papers published per faculty	137
<b>3.19</b>	List of Papers published by faculty and students	137
<b>3.20</b>	List of publications in international data base	137
<b>3.21</b>	Details of Citation Index, Impact Factor, h-index	138
<b>3.22</b>	Details of books published by faculty members	139
<b>3.23</b>	Details of research awards received by faculty members	141
<b>3.24</b>	Details of consultancy service provided by the institution	143
<b>3.25</b>	YRC activities and its expenditure	146
<b>3.26</b>	Details of ISTE Staff Chapter Activities	146
<b>3.27</b>	Details of ISTE Student Chapter Activities	146
<b>3.28</b>	Details of EDC Activities	147
<b>3.29</b>	Details of YRC Activities	148

<b>3.30</b>	Details of ISTE Staff Chapter Activities	149
<b>3.31</b>	Details of ISTE Student Chapter Activities	150
<b>3.32</b>	Details of EDC Activities for last four years	151
<b>3.33</b>	Details of research scholars from other institute using lab facilities	153
<b>3.34</b>	List of MOUs Signed	155
<b>3.35</b>	List of COE Developed	156
<b>3.36</b>	List of Students Trained through COE	156
<b>3.37</b>	List of Faculty Trained through COE	157
<b>3.38</b>	List of Details of Faculties providing training to Industry Persons	157
<b>3.39</b>	List of students undergone internship in industries	158
<b>3.40</b>	Workshops Organized and Papers Published with industry contribution	159
<b>3.41</b>	Details of Eminent resource persons invited for conference	159
<b>3.42</b>	Details of Eminent resource persons invited for symposium	161
<b>3.43</b>	Details of Eminent resource persons invited for FDP	162
<b>3.44</b>	Details of Eminent resource persons invited for Seminar/Workshop	163

**Criteria 4**

<b>4.1</b>	Physical Academic Infrastructure	167
<b>4.2</b>	Laboratories Area	168
<b>4.3</b>	Supporting Facilities	169
<b>4.4</b>	Details of Hostel within the Campus	171
<b>4.5</b>	Details of Staff Quarters within the Campus	171
<b>4.6</b>	Campus Facilities	172
<b>4.7</b>	Library Advisory Committee	174
<b>4.8</b>	Library Details	175
<b>4.9</b>	Details of Journals, E Resources, Membership	176
<b>4.10</b>	Electronic Resource Management package for e-journals	177
<b>4.11</b>	Services Provided in Library	180
<b>4.12</b>	Total Number of Computers and other IT Equipment	182
<b>4.13</b>	Computer System Configuration	182
<b>4.14</b>	List of Licensed Software	184
<b>4.15</b>	Annual Budget for the last four years	185
<b>4.16</b>	NPTEL Registration details	186
<b>4.17</b>	Maintenance Cost	186

**Criteria 5**

<b>5.1</b>	Scholarship provided by Management	188
<b>5.2</b>	Scholarship provided by State and Central Government	189
<b>5.3</b>	Competitive Exam Details	193
<b>5.4</b>	List of Training Program	194

<b>5.5</b>	Placement Statistics	195
<b>5.6</b>	Composition of Grievance redressal cell	196
<b>5.7</b>	Composition of Internal Complaints Committee	196
<b>5.8</b>	Composition of Anti-ragging Committee	197
<b>5.9</b>	Student Progression	198
<b>5.10</b>	Students Pass Percentage and University Ranks	199
<b>5.11</b>	Pass Percentage Comparison with Neighboring Institute	200
<b>5.12</b>	Extracurricular Calendar	202
<b>5.13</b>	Student participation in Co-Curricular and Extra Curricular Activities	202
<b>5.14</b>	List of Department News Letters	204
<b>Criteria 6</b>		
<b>6.1</b>	Members of the Governing Council	207
<b>6.2</b>	Authorities Roles & Responsibilities	209
<b>6.3</b>	Responsibilities and functions of various committees in the college	213
<b>6.4</b>	Structure of Planning and Monitoring Board	216
<b>6.5</b>	Structure of Anti- Ragging Committee	216
<b>6.6</b>	Structure of Discipline and Welfare Committee	217
<b>6.7</b>	Structure of Complaints cum Redressal Committee	217
<b>6.8</b>	Structure of Alumni Association	218
<b>6.9</b>	Structure of Placement Cell	218
<b>6.10</b>	Structure of Entrepreneurship Development Cell	218
<b>6.11</b>	List of sponsored Research Projects	224
<b>6.12</b>	Management Council resolutions	226
<b>6.13</b>	List of feedback outcomes and response of the institution	229
<b>6.14</b>	Percentage of staff availed benefits	232
<b>6.15</b>	List of IQAC members	226
<b>6.16</b>	List of Quality Assurance Programmes	238
<b>Criteria 7</b>		
<b>7.1</b>	List of Students Participated in Mini project Contest	252
<b>7.2</b>	List of Project Batches participated in conferences	253
<b>7.3</b>	Special Courses offered to our students by various departments	255
<b>7.4</b>	Placement details	256
<b>7.5</b>	Number of department –wise university rank holders	256
<b>7.6</b>	Higher studies details	257

## List of Figures

<b>Figure No.</b>	<b>Description</b>	<b>Page No.</b>
<b>Criteria 1</b>		
<b>1.1</b>	Deployment of Action plans	28
<b>1.2</b>	PDCA Cycle for Curricular Planning and Implementation	31
<b>1.3</b>	Process of getting Feedback from Internal and external Stake Holders for Curriculum Development	25
<b>1.4</b>	Process of Design and Development of Add-on Courses	36
<b>1.5</b>	Method of Analyzing and ensuring the objectives of Curriculum	37
<b>1.6</b>	Process of Implementing Enriched Curriculum	46
<b>1.7</b>	Skill Development Programme on Machine Tools	50
<b>1.8</b>	Entrepreneurship Awareness Camp	50
<b>1.9</b>	Principal honoring the Chief Guest	51
<b>1.10</b>	Photocopy of parents Feedback	53
<b>1.11</b>	Photocopy of Alumni Feedback	53
<b>1.12</b>	Photocopy of Employer Feedback	54
<b>1.13</b>	Quality Evaluation Chart	55
<b>Criteria 2</b>		
<b>2.1</b>	Comparison of cut-off percentage for CSE (year 2015-2016)	65
<b>2.2</b>	Bridge Course for Fresher's	70
<b>2.3</b>	Bridge Course for Lateral Entry Mechanical Engineering Students	70
<b>2.4</b>	Add – on Course Chart	71
<b>2.5</b>	Academic Calendar	75
<b>2.6</b>	Class Time Table	76
<b>2.7</b>	Flowchart for Planning and Organizing related to Teaching, Learning and Evaluation	78
<b>2.8</b>	Hierarchy of Counselling Responsibility	86
<b>Criteria 3</b>		
<b>3.1</b>	Blood donation camp	149
<b>3.2</b>	Fire Fighting Awareness	150
<b>3.3</b>	Science for Nation Building	150
<b>3.4</b>	Skill Development Programme on Machine Tools	152
<b>3.5</b>	(a) YRC Award Received by Former Principal (b) ISTE Award Received by Vice Chairman	153
<b>Criteria 4</b>		
<b>4.1</b>	Master plan	170
<b>Criteria 5</b>		
<b>5.1</b>	Placement Statistics	195
<b>5.2</b>	Student progression Chart	199

<b>Criteria 6</b>		
<b>6.1</b>	Internal organizational structure	222
<b>6.2</b>	Flow chart for Grievance Redressal Mechanism	228
<b>6.3</b>	Top down approach of Financial Resource Management	234
<b>Criteria 7</b>		
<b>7.1</b>	Tree Plantation by YRC	244
<b>7.2</b>	Mini project competition conducted on 27.02.2017	251
<b>7.3</b>	Mini project competition conducted on 30.03.2016	252
<b>7.4</b>	Mini project competition conducted on 07.03.2014	252
<b>7.5</b>	Placement details	256

ABBREVIATIONS	
<b>ACL</b>	Access Control List
<b>AERB</b>	Atomic Energy Regulatory Board
<b>AICTE</b>	All India Council for Technical Education
<b>AMC</b>	Annual Maintenance Contract
<b>AMCAT</b>	Aspiring Minds Common Aptitude Test
<b>AP</b>	Assistant Professor
<b>ASME</b>	American Society of Mechanical Engineers
<b>ASP</b>	Associate Professor
<b>ASTM</b>	American Society for Testing and Materials
<b>AV</b>	Audio visual
<b>BEC</b>	Business English Certificate
<b>BHEL</b>	Bharat Heavy Electricals Ltd
<b>BLDC</b>	Brushless Direct Current
<b>BSNL</b>	Bharat Sanchar Nigam Limited
<b>CAD</b>	Computer-Aided Drawing
<b>CAT</b>	Common Admission Test
<b>CCNA</b>	Cisco Certified Network Associate
<b>CCSP</b>	Cisco Certified Security Professional
<b>CEFR</b>	Common European Framework of Reference for Languages
<b>CEP</b>	Complex Event Processing
<b>CIPET</b>	Central Institute of Plastics Engineering and Technology
<b>CNC</b>	Computer Numerical Control
<b>COE</b>	Centre of Excellence
<b>CPT</b>	Campus Performance Tracker
<b>CRO</b>	Cathode-Ray Oscilloscope
<b>CSI</b>	Computer Society of India
<b>CSIR</b>	Council for Scientific and Industrial Research
<b>CTS</b>	Cognizant Technology Solutions
<b>DA</b>	Dearness allowance
<b>DAC</b>	Department Advisory Committee
<b>DBMS</b>	Database Management Systems
<b>DC</b>	Direct Current
<b>DELNET</b>	Developing Library Network
<b>DRDO</b>	Defense Research and Development Organization
<b>DSIR</b>	Department of Scientific and Industrial Research
<b>DST</b>	Department of Science and Technology
<b>ECE</b>	Electronics and Communication Engineering
<b>EDC</b>	Entrepreneurship Development Cell
<b>EDI</b>	Entrepreneurship Development Institute
<b>EEE</b>	Electrical and Electronics Engineering
<b>EPF</b>	Employees Provident Fund

<b>ESOL</b>	English for Speakers of Other Languages
<b>EVS</b>	Environmental Studies
<b>FDP</b>	Faculty Development Program
<b>FDTP</b>	Faculty Development Training Program
<b>GATE</b>	Graduate Aptitude Test for Engineering
<b>GMAT</b>	Graduate Management Admission Test
<b>GRE</b>	Graduate Record Examination
<b>HEC</b>	Higher Education Cell
<b>HOD</b>	Head of Department
<b>HR</b>	Human resources
<b>IACSIT</b>	International Association of Computer Science and Information Technology
<b>IAENG</b>	International Association of Engineers
<b>IAESTD</b>	International Association of Science and Technology for Economic Development
<b>IBM</b>	International Business Machines
<b>ICT</b>	Information communication Technology
<b>ICTACT</b>	ICT Academy of Tamil Nadu
<b>IEEE</b>	Institute of Electrical and Electronics Engineers
<b>IEI</b>	Institution of Engineers
<b>IELTS</b>	International English Language Testing System
<b>IET</b>	Institution of Engineering and Technology
<b>IETE</b>	Institution of Electronics and Telecommunication Engineers
<b>IGCAR</b>	Indira Gandhi Centre for Atomic Research
<b>IIPE</b>	Indian Institution of Production Engineers
<b>IIT</b>	Indian Institute of Technology
<b>IJAER</b>	International Journal of Applied Engineering Research
<b>IJARMET</b>	International Journal of Advanced Research Methodology in Engineering & Technology
<b>IOS</b>	Internetwork Operating System
<b>IoT</b>	Internet of Things
<b>IP</b>	Internet Protocol
<b>IQAC</b>	Internal Quality Assurance Cell
<b>ISBN</b>	International Standard Book Number
<b>ISO</b>	International Organization for Standardization
<b>ISRD</b>	International Society for Research and Development
<b>ISRO</b>	Indian Space Research Organisation
<b>ISTE</b>	Indian Society for Technical Education
<b>IT</b>	Information Technology
<b>LAN</b>	Local Area Network
<b>LCD</b>	Liquid Crystal Display
<b>MEA</b>	Mechanical Engineering Association

<b>MECH</b>	Mechanical Engineering
<b>MNC</b>	Multinational companies
<b>MOU</b>	Memorandum of Understanding
<b>NAAC</b>	National Assessment and Accreditation Council
<b>NASSCOM</b>	National Association of Software and Services Companies
<b>NBA</b>	National Board of Accreditation
<b>NPTEL</b>	National Programme on Technology Enhanced Learning
<b>OBE</b>	Outcome Based Education
<b>OER</b>	Open Educational Resources
<b>OHP</b>	Overhead Projector
<b>OPAC</b>	Online Public Access Catalog
<b>PDCA</b>	Plan–do–check–act
<b>PLC</b>	Programmable Logic Controller
<b>PLM</b>	Product Lifecycle Management
<b>PO</b>	Purchase Order
<b>PRP</b>	Project Readiness Program
<b>QMS</b>	Quality Management System
<b>R&amp;D</b>	Research & Development
<b>RFID</b>	Radio-Frequency Identification
<b>RMKCET</b>	RMK College of Engineering and Technology
<b>RO</b>	Reverse Osmosis
<b>S&amp;H</b>	Science & Humanities
<b>SAE</b>	Society of Automotive Engineers
<b>SDSC</b>	Satish Dhawan Space Centre
<b>STP</b>	Sewage Treatment Plant
<b>T&amp;P</b>	Training & Placement
<b>TA</b>	Travelling Allowance
<b>TNEA</b>	Tamil Nadu Engineering Admission
<b>TOEFL</b>	Test of English as a Foreign Language
<b>TSSC</b>	Telecom Skill Sector Council
<b>UG</b>	Under Graduate
<b>UPS</b>	Uninterruptible Power Supply
<b>UTM</b>	universal testing Machine
<b>VLSI</b>	Very large-scale Integration
<b>WAN</b>	Wide Area Network
<b>XAT</b>	Xavier Aptitude Test
<b>YRC</b>	Youth Red Cross



# R.M.K. COLLEGE OF ENGINEERING AND TECHNOLOGY

(Sponsored by LAKSHMIKANTHAMMAL EDUCATIONAL TRUST)

(ISO 9001 : 2008 Certified Institution)

(Approved by the All India Council for Technical Education, New Delhi  
and Affiliated to Anna University, Chennai)

R.S.M. NAGAR, PUDUVOYAL-601 206, GUMMIDIPOONDI TK., THIRUVALLUR DIST., TAMILNADU, INDIA.



**Dr.T.Rengaraja**  
Principal

TRACK ID: TNCOGN27617

Ref : RMKCET/NAAC/E1/2017/511

Date : 02.05.2017

TO

**The Director,**  
National Assessment and Accreditation Council,  
PO Box. No. 1075,  
Opp NLSIU, Nagarbhavi,  
Bangalore – 5600072,  
Karnataka.

Sir,

Sub : R M K College of Engineering and Technology - TRACK ID: TNCOGN27617 –  
Cycle 1 - Submitting SSR – 05 Hard Copies, 01 soft Copy and A&A Demand draft –  
Reg.

Ref : LOI acceptance vide your Email Dated : 21.04.2017

With reference to the subject cited, we are submitting five hard copies and one soft copy of  
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mentioned in your email.

We are offering 04 UG Courses approved by AICTE and Affiliated to Anna University. We  
enclosed a Demand draft NO: 935951 dated 02.05.2017 drawn on Indian Overseas Bank,  
Kavaripettai for sum of Rs. 3,45,000/- (Rupees Three Lakh Forty Five Thousand Only) towards  
Assessment and Accreditation fee.

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Thanking you,

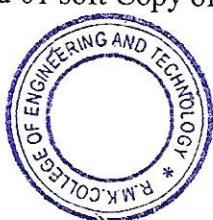
Yours truly,

**Dr. T.Rengaraja**

Dr. T RENGARAJA, M.E., Ph.D., MISTE  
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PUDUVOYAL, GUMMIDIPOONDI TALUK - 601 206

Encl:

1. 05 Hard Copies and 01 soft Copy of SSR
2. Demand Draft



Administrative Office

## PREFACE

RMK College of Engineering and Technology (RMKCET) was started in the Academic year 2008-09 by Sri Ravilla Swaminatha Naidu Munirathinam under the aegis of Sri Lakshmikanthammal Educational Trust. The primary objective of Vidya Rathna Sri R S Munirathinam is to serve the educational needs of the people of India.

The aim of the Founder Chairman is to make the student to become full-fledged Engineers, enviable Technologists and sought-after Technocrats who would end up as the lead points in guiding the country to prosperity in future. The dictum “Innovate, Improve, Educate and Prosper” is his hallmark and he channels all available resources to achieve this goal. With a generous funding provided by him combined with adequate and quality man power made available on hand, he leads the Institution to success and the students to excel in their studies thereby structuring a rosy path for them for their career progression in future.

Our college RMKCET has made remarkable strides in bagging excellent ranking in the University examinations. The untiring efforts put forth by the entire team manning the college, particularly the teaching community and the encouragement and spontaneous support coming from our Chairman help the Institution to continuously get a place among the top 10 ranks in the examinations conducted under the aegis of Anna University.

The college has earned a great reputation in the country as a place wherefrom the students get, not only good education but also the much desired discipline and decorum. Every student of this college, imbibes the excellent qualities of our leader primarily his humane bent of mind and his determination to undertake and execute to perfection any difficult task, even under very trying circumstances.

The success of the Institution can be measured from copious appreciation received from all quarters of educational and industrial arena and many honours and accolades showered on the Institution by different reputed organizations. Our college was selected to receive “ENGINEERING COLLEGE OF THE YEAR 2016 Award in Teaching Capability” from Higher Education Review Magazine in acknowledgement of the positive impact the institution made on the Society and the Educational Fraternity with its enviable performance.

The College also bagged Bharatiya Vidya Bhavan Sponsored National Award for the Best Engineering College for its overall performance in the year 2015 and Best Chapter award 2015 - Tamil Nadu and Pondicherry Section of ISTE, New Delhi. It was ranked 82<sup>nd</sup> among the top ranking 100 colleges including IITs and NITs in the All India Survey 2015 conducted by OUTLOOK MAGAZINE. Further it has also been recognized as one of the top 20 most promising Educational Institutions in Tamil Nadu by the Higher Education Review Magazine. Our college has been placed under PLATINUM category in the AICTE - CII Survey – 2015 and is also the proud recipient of an award from the British Council for the highest number of examinations undertaken by the students in South Asia. One more feather in the cap of the Institution is the Best Institutional Food Service Management Award received from Food Safety and Drug Administration Department, Ministry of Health and Family Welfare, Government of Tamil Nadu.

It is also a proud moment for us to record here that, the college has been outstanding in its academic performances and in acquiring suitable placements for the outgoing students. The excellence in teaching coupled with the most conducive

and peaceful atmosphere made available to the student community to concentrate on their studies have resulted in bringing the desired results. We are happy to announce that our results and placements have always been above 85% and all efforts are being taken not only to sustain this appreciable mark of excellence but to surpass and reach the magic mark of 100% in the days to come.

We are very confident of succeeding in our efforts by enticing the students with some more additional encouragement and inputs to do still better in their studies which would make them walk out of the campus on completion of their studies with a suitable placement order of their choice in their hands from coveted corporate entities and renowned MNCs which make a beeline to our campus every year for this purpose.

The path that we have set before us is very challenging but not unachievable. Our goal is to prepare our youngsters to become responsible leaders and role models of tomorrow who will keep in mind that we have borrowed the tomorrow from the posterity and will strive hard to leave the world a better place to live in. We are highly hopeful of achieving the desired goals under the able guidance of our Chairman who is not only a visionary but also an incurable optimist. We reiterate that, we would achieve our lofty ideals and reach the goal set forth before us, as we strongly believe in the immortal words of poet P.B. Shelley viz “If winter comes, Can spring be far behind?”

# **Executive Summary**



## EXECUTIVE SUMMARY

### **Establishment:**

#### **The College:**

RMK College of Engineering and Technology (RMKCET) was founded by Shri R S Munirathinam in the Academic Year 2008. Prompted by an unquenchable thirst to serve the people through education and create a highly disciplined man power, he established this college in a very small village of Puduvoyal, about 33 kilometers off Chennai city. It has a lush green ambience, serene and quiet atmosphere which are conducive to the process and progress of learning.

The RMK Group of Institutions has under its canopy, two well established Engineering Colleges - the RMK Engineering College and the RMD Engineering College besides our RMK College of Engineering and Technology (RMKCET). There are also three schools following the CBSE curriculum and one of the three is a posh Residential School. The Group also runs a Matriculation and Higher Secondary School and a well established Polytechnic College.

#### **The Infrastructure:**

<b>Category</b>	<b>Facility</b>
<b>General</b>	The College has huge complexes that house class rooms, air conditioned seminar halls, Central library, Departmental libraries, Internet with 195 Mbps connectivity, and so on. Besides this the college has separate hostel facilities for boys and girls and a well networked transport system with well-maintained buses to transport the students safely to the college and back home.
<b>Computer Centre</b>	There are 5 Computer Labs which provide the required support to the user community consisting of students, faculty, research staff and office staff for academic and office automation purposes. There are 606 systems in all, which are supported by servers with high configuration. All other systems are fully networked and furnished with latest software. The computer centers have 51 Printers and 140KVA UPS backup to meet with contingencies.
<b>Library</b>	The College library contains 22159 Volumes of books with 4886 Titles. The library subscribes 54 National Journals and 621 International Journals and has also subscription to access IEEE (ASPP), SPRINGER LINK, SCIENCE DIRECT, Mc GRAWHILL, J-GATE, ASTM, ASME, IET and ISO – JTC1 Online Journals and other publications. Besides these, 25 magazines, 11 newspapers and back volumes of journals are also available to the staff and

	students. The library also has conference proceedings and 1574 CD ROMs.
<b>Auditorium &amp; Seminar halls</b>	The Main auditorium with a seating capacity of more than 1000 is fully air conditioned and is well equipped with good acoustics. Further, there are 3 AC Seminar halls, each has seating capacity around 200 for conducting Seminars/Guest lectures.
<b>Sports Complex</b>	Excellent facilities for playing indoor and outdoor games are provided for the students. The required infrastructural facilities comprising Cricket ground, Basket Ball Court, Foot Ball ground and Tennis courts are there. Facilities for playing Carom, Chess and Table Tennis are also provided. Further, a well maintained 400 Meter Athletic track field created meriting international standard is available for the students to develop their sports skills.
<b>Hostel</b>	Separate hostels are provided for boys and girls. Boys Hostel has 85 rooms and can accommodate about 340 students and the Girls hostel has 56 rooms with a capacity to accommodate 224 students. The hostel rooms are spacious, adequately ventilated, well maintained and furnished with necessary amenities. The hostel also has a separate gymnasium and beauty parlor for the girls and a gymnasium, and an air-conditioned saloon for the boys. General store facility is also available for the students.
<b>Department of Computer Science and Engineering</b>	The department has enviable infrastructure facilities, technical expertise, highly qualified and efficient and sufficient faculty strength, modern teaching aids, internet facilities etc. The department has excellent and well equipped air-conditioned laboratories with state-of-the-art computing facilities that include updated versions of latest software and their compatible hardware.
<b>Department of Electronics and Communication Engineering</b>	This department has well qualified and experienced faculty in all specializations such as VLSI, Microwave & Optical Engineering, Control & Instrumentation, Applied Electronics, Communication Systems, Medical Electronics, Power Electronics, Digital Systems and Computer Science. The department has very good instructional and infrastructure facilities.
<b>Department of Electrical and Electronics Engineering</b>	The department is equipped with the latest infrastructure facilities to cater to the needs of students and the training needs in Electrical and Electronics Engineering. Students are encouraged to gain practical experience under the guidance of faculty members in Electrical Machines Lab, Power Electronics Lab, Control Systems Lab, Power System Simulation Lab and Centralized Microprocessors Lab.
<b>Department of Mechanical Engineering</b>	The Department of Mechanical Engineering was started in the year 2010. It has the latest version equipment catering to the needs of both academics and industry. The asset value of the equipment exceeds Rs. 1.5 crores. Thermal lab,

	Manufacturing Technology lab and CAD/CAM laboratories are well equipped with research facilities. The Department also has constituted the Centre for Composite Fabrication and Testing to offer worthy consultancy to the research / technical community.
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### **The Teachers:**

Realising that the success of any educational institution depends mainly on its faculty, very special care is taken by the management in appointing the teachers. The selection committee not only looks into the academic excellence of the candidates but also their proficiency in propagating their acquired knowledge and gives utmost importance to their attitude, before considering them for appointment as teachers. Presently there are in all 133 faculty members taking care of the academic requirements of 1994 students. The entire faculty is well qualified and also well experienced. There are 21 Doctorate degree holders and more than 64 faculty members are working hard to get their Ph. D degrees. These faculties leave no stone unturned in imparting individual attention to students who in turn respond with great enthusiasm. The efficacy of the teachers and the results they produce are very carefully monitored on a regular basis and all support systems sought for by them for effective teaching are readily conceded to after a careful assessment by the management. Lots of freedom is given to the teaching fraternity to voice their opinions on matters relating to not only academics but also administration and the well being of the students. With this kind of free deliberation in place, a very transparent relationship blossoms and gets maintained between the faculty and the management leading to the smooth functioning of the institution.

### **The Non -Teaching Staff:**

The office administration is maintained and efficiently managed by a set of well trained and qualified staff. The non-teaching but technically qualified staff looks after the maintenance and day to day operations of the laboratories. The mess staff prepare and serve wholesome food and have earned a very good name not only in preparing tasty foods but also in serving the variety with a smile, not only to the student community, the teachers and other staff but also to everyone who visits the campus.

There are a number of people who look after the general upkeep of the campus and the infrastructure facilities. The excellent ambience that surrounds the entire campus crowned by an absolute cleanliness that looms large over it and the greenery that provides a pollution- free atmosphere bear witness to the efficacy of the staff involved in the maintenance of the entire infrastructure facilities in the vast campus.

### **The Students:**

The perfect understanding among the teachers, students and other staff reflects in good results in the examinations and the students' standing in the society. The students are astounded in the beginning by the cleanliness, punctuality and dedication of all. They automatically imbibe the positive qualities and are totally absorbed in the process of learning without any diversions eating on their quality

time. It is hard for the students and parents to believe that the venomous act of “RAGGING” is unheard of in this campus. They have comfortable seats in their class rooms, a cozy atmosphere prevailing in and around the College, clean and healthy food and caring teachers. Naturally, their learning process gets enhanced multifold, they excel in their academics and finally they blossom into a deservingly qualified and well-disciplined citizen of the country by the time they leave the college with their degrees.

### **The Food:**

Realising, that food is the most important ingredient of good health, absolute care is taken in the preparation and serving of food in the campus. The entire student community and staff have their breakfast and lunch in the college mess as per their preferences. The quality of food served is excellent, incomparable and an invite to the taste buds of everyone who walks into the mess hall.

### **The Parents:**

The parents of the students feel proud of their wards studying in this college. The discipline of the college and their stern stand on cell phone and dress code impresses them so much that they feel confident that their children are in safe hands. The culture blended in right proportion with the extracurricular and co-curricular activities will make their wards grow well balanced, meritoriously qualified and proud members of a successful genre. Besides this, the parents visit the college now and then to know about the progress of their wards.

### **Progression of the College:**

The College began functioning with 240 students. There were 4 branches CSE, ECE, EEE & IT with 60 students in each branch. Endowed with sufficient number of well qualified teachers, it is not a surprise that the first batch of students proved to be an excellent set producing astounding results and the College ranked No. 2 in the very first semester of its existence.

The tempo set in by these students went on without slackening and there was no looking back on their creditable performances. Year after year and semester after semester, their thirst for acquiring knowledge through hard work increased multifold resulting in the first set of graduates coming out in flying colours with 22 University ranks to their credit.

The Mechanical Engineering Department was added as a new branch in the year 2010 with 60 students which completed the overall picture of the core Engineering College.

### **Current Intake Details:**

Branch	Intake
CSE	120
ECE	180
EEE	60
MECH	120
<b>TOTAL</b>	<b>480</b>

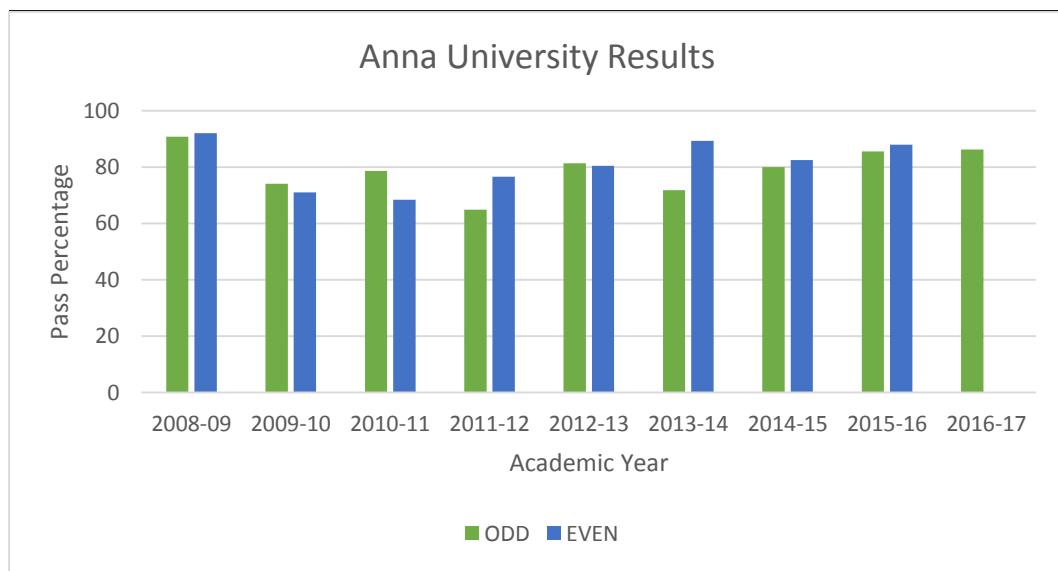
While the students are ably guided by the Principal, Vice Principal and the Heads of Departments, the financial and administrative activities are looked after and well facilitated by the Management.

This institution was certified ISO 9001:2008 by the world renowned TUV NORD in 2010 and later went for an up - gradation to **ISO 9001:2015**.

### **University Results:**

RMKCET consistently maintains the ranking within the top 10 in the results published by Anna University.

- ❖ RMKCET achieved **II Rank** among 270 Engineering Colleges in the state in its very first year first semester itself (2008-09).
- ❖ In I semester Examination, ECE and EEE branches were adjudged **No. 1** in their respective discipline in the entire State (2008 -09).
- ❖ Anna University I year I semester results was **97.47 %** (2014-15)
- ❖ **100%** results were produced in various subjects numbering to 145 in the Academic Year 2014-15, 95 in the Academic year 2015-16.
- ❖ **124** University Ranks have been bagged till now.
- ❖ RMKCET was ranked **9<sup>th</sup>** in the Anna University results in Nov / Dec 2015



### **Hall of Fame:**

- ❖ “ENGINEERING COLLEGE OF THE YEAR 2016” award in Teaching Capability by Higher Education Review Committee, in acknowledgement of the positive impact we made on the Society and the Education Fraternity.
- ❖ Bharatiya Vidya Bhavan Sponsored National Award for the Best Engineering College for Overall Best Performance in the year 2015.
- ❖ Best Chapter award 2015 in Tamil Nadu and Pondicherry section of ISTE, New Delhi.
- ❖ Ranked 82<sup>nd</sup> in the top 100 Colleges including IITS and NITS in the All India Survey 2015 conducted by OUTLOOK MAGAZINE.
- ❖ Ranked 4<sup>th</sup> among the top 20 emerging Engineering colleges in India by the Higher Education Review magazine 2016

- ❖ Ranked 16<sup>th</sup> among the top 20 Engineering colleges in India in Placements by the Higher Education Review magazine 2016
- ❖ The college has been placed under PLATINUM category by AICTE - CII survey in 2015 and 2016.
- ❖ One student each from ECE and EEE received Best Student Award from ISTE.
- ❖ HOD of Mechanical Engineering and a student of Mechanical Engineering received Best Faculty and Best Student Awards from CTS respectively.
- ❖ The Best Institutional food service Management Award from Food Safety and Drug Administration Department, Ministry of Health and Family Welfare, Government of Tamil Nadu in 2016
- ❖ The British High Commission rewarded our college with Engineering Educators Award for exemplary services in imparting Engineering Educators. Staffordshire University UK and Education Walters India rewarded our EEE Department with Teaching awards in Engineering
- ❖ We received IET Students awards, Michael Faraday Academic Awards, IET Trend Setter of the year award, AVM Krishnaswamy Leadership Awards and Er. S. Gonindarajan activities award, CTS Best Faculty Award.
- ❖ In appreciation of the social service our Chairman was bestowed with “Life Time Achievement Award” by the Lions Club International in 2014.
- ❖ RMK Group of Institutions received Best SPoC (Single Point of Contact) Award for active participation in Infosys Campus Connect Programme.
- ❖ RMK Group of Institutions received an Award from British Council for the Highest Number of Exam Takers in South Asia in 2015



**“For the Sake of Honour Award” Received by our beloved Chairman  
Benevolence Extended:**

Travel grant is given to the paper presenters who go abroad for this cause by the management. On duty leave is granted for faculty for presenting papers in Conferences and Seminars. Registration fee and Travel expenses are also borne by the management for both domestic and international travel.

#### **Prize Amount:**

To encourage and motivate the students, the management provides them with attractive scholarships for their academic achievements and for excellence in sports and cultural activities.

Various Scholarships are given to the economically weak but academically hard working students.

#### Cash Awards:

##### For University Rank Holders;

Ranks	Prize Amount
First(Gold Medal)	Rs. 1,00,000
Second	Rs. 75,000
Third	Rs. 50,000
Fourth	Rs. 25,000
Fifth to Tenth	Rs. 15,000
Eleventh to Fiftieth	Rs. 10,000

##### For College Rank:

Ranks	Prize Amount
First	Rs. 20,000
Second	Rs. 15,000
Third	Rs. 10,000

##### For Year Wise Performance:

Ranks	Prize Amount
First	Rs. 7,500
Second	Rs. 5,000
Third	Rs.3,000

##### Gold Coins Rewarded to Final Year Students:

The following Gold Medal Rewards of 10 grams each are given to the students who excel in respective fields:

- ❖ Best outgoing Student (1-7 Semesters)
- ❖ Best outgoing Student (3-7 Semesters)
- ❖ Academic Topper
- ❖ Best outgoing Hostel Student – Boy
- ❖ Best outgoing Hostel Student – Girl

##### Placement Records:

Realising that the ultimate goal of a student and the desire of his / her parents is only that the student should end up in a suitable job commensurate to their educational qualifications, skill sets and aptitude. All efforts are taken by the College to fulfill this aim of the student as well as the parents to the maximum extent possible. To this effect, the Training and Placement cell in the College strives continuously to help students identify, focus and pursue their career options in their dream conglomerates and MNCs. An enviable and proud placement record distinguishes RMKCET from the rest of the institutions.

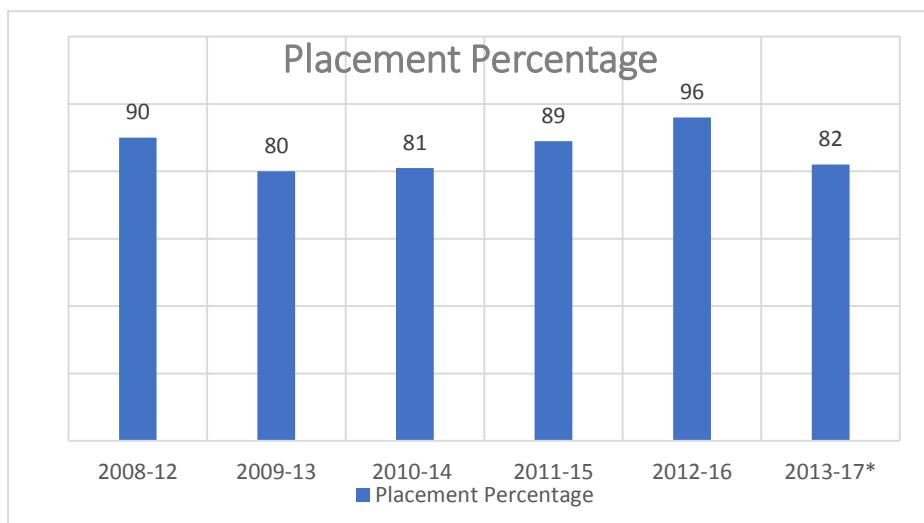
Every year, more than 150 top companies visit our Group of Institution for their recruitments. In the year ended 2015, the Day One Placement was 1923 and in the year ended 2016, it swelled to 2211. It is laudable that the above numbers relate only to the offers received from three IT giants viz Wipro, Cognizant & Infosys put together



**Day One Offers Declaration by Wipro, Cognizant & Infosys**

**2012-16 Batch**  
**Total offers – 2211**

**2011-15 Batch**  
**Total offers – 1923**



**\*In Progress**

#### Placement Details of 2013 -2017 Batch

S. No	Dept.	No. of Students Registered For Placement	No. of Students Selected			
			Effective Placement	Single Offer	Dual Offers	Triple Offers
1	CSE	66	55	34	14	7
2	IT	28	26	20	3	3
3	ECE	133	109	90	12	7
4	EEE	27	25	22	2	1
5	MECH	61	42	40	1	1
<b>TOTAL</b>		<b>315</b>	<b>257</b>	<b>206</b>	<b>32</b>	<b>19</b>

The Education and placement record produced in our college RMKCET facilitated getting the **Bharatiya Vidya Bhavan** Sponsored National Award for the Best Engineering College having made Best overall performance in the year 2015.

### **Centres of Excellence Initiatives:**

To make the students industry ready, the Centres of Excellence have taken initiatives for students to excel in the following programs.

- ❖ Product Life Cycle Management – PTC
- ❖ Telecom – Wipro
- ❖ Embedded Systems – Wipro
- ❖ Digital Enterprises ( Mobility)
- ❖ Big Data Analytics
- ❖ Automotive Electronics – KPIT
- ❖ Front End Technologies – Virtusa Polaris
- ❖ Information Security – TCS
- ❖ PLC – Factory Automation – Mitsubishi
- ❖ AC & DC Electric Drives
- ❖ CCNA – CISCO

### **Centre for Higher Education:**

The Centre for Higher Education is an integral part of Training and Placement. This is formed exclusively for motivating, counseling and guiding the students to pursue higher studies. The Centre aims at providing systematic and methodical guidance for taking various competitive examinations after B.E. / B.Tech degrees which facilitates them to pursue Master's degree like M.E / M.Tech M.S, M.B.A and Ph.D in India and abroad. The department arranges guidance through Universities / Consulates in making the right choice regarding the subject/courses and Universities for higher studies

- ❖ On-Campus classes for GATE/GRE / TOEFL.
- ❖ Country specific “Education Abroad” programmes by USIEF /Education UK/NESO DESK / Campus France
- ❖ Vantage level of Business English Certification is given to II year students every year.

### **Career Guidance Cell:**

Being a pioneer in the field of Engineering and Technological Education it becomes the bounden duty of our RMK College of Engineering and Technology to guide the students to move in the right direction. This is the purpose for setting up the ‘Career Guidance Cell’ in our college and the student beneficiaries are exposed to the availability of a vast number of careers available to them.

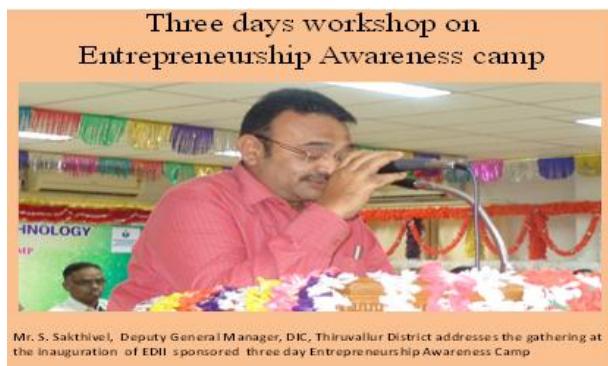
The career guidance cell caters to the needs of each and every student engineer from the prefinal year itself. It invites doyens in every field of higher human activity who tell our students how to meet the challenges posed by competitive examinations. On interacting with the leaders in such fields our students get to know the knack of cracking the nutshell and achieving whatever they desire to achieve.



**Inspirational Talk on ‘Indian Police Service’ by Shri. R. Sudhakar, IPS, Deputy Commissioner of Police, Pulianthope District, Chennai, held on Saturday, 11.07.15.**

### **Entrepreneurship Development Cell:**

Objectives of Entrepreneurship development cell is to induce and enhance the entrepreneurial culture in the nation and to bridge the gap between demand and supply of manpower through self-employment as a feasible option. The cell also aims at developing and maintaining a cordial and healthy relationship between all supporting institutions and organizations promoting entrepreneurship development.



**Mr. S.Sakthivel, Deputy GM, DIC, addressing the gathering**

### **ISTE Staff and Student Chapters:**

ISTE Staff and Student Chapters of RMKCET function as a stimulatory source of setting goals and planning strategies to achieve them. It works for the advancement of the society and the general welfare of mankind. The ISTE chapters conduct regular workshops, seminars and FDPs for the staff and students.



**One day seminar on Defensive Driving Techniques**

### **Extra and Co - Curricular Activities:**

The objective of Education cannot be achieved by confining the students within four walls of the classrooms. They need motivating space to nurture their talents in sports, games, literary activities and other life skills. The Institute focuses on

- ❖ Technical club that helps the students to test and learn their technical skills in the form of paper presentations / project competitions / debugging / model development etc.
- ❖ Sports Club that encourages the students to take part in inter collegiate and intra collegiate sports meets in the District level, Zonal, State level and National level sports meets.
- ❖ Participations in Intra mural Cultural competitions which are conducted once a year and prize winners showcase their talents on stage during the Annual Day celebrations.
- ❖ Organizing a number of outreach programmes, starting from second year, as listed below.

Industrial visits	Two per semester
Guest lectures by experts from industry and academia	One lecture / Semester
In-plant training	During mid-semester holidays
Paper presentation contest (Intra departmental)	II year & III year
Mini projects & Innovative projects contest (Intra departmental)	III year
Symposia	One per year
Association activities	Throughout the year
Inter departmental Sports and Cultural competitions	Once a year



Anna University zone Basket Ball  
Third place in the year 2014-15



Anna university zone Ball Badminton  
Third place in the year 2014-15



Anna university zone Ball Badminton  
Third place in the year 2014-15

### Social Responsibility:

Every inch of the land that the college possesses is well attended to. A number of trees have been planted, old trees are protected, and the area is flourishing with greenery. The subterranean water body is kept intact as only a minimum of water is required for people's use. No one wastes water or food which is indeed a lesson to the students.

A number of scholarships are awarded to indigent but academically outstanding and hardworking students.

During the unprecedented rains and floods of Nov/Dec 2015, the management and the students rose to the occasion and lent a big helping hand by providing food and clothing to thousands of affected people in the nearby villages.

### Youth Red Cross Unit:

The Youth Red Cross Unit of our college has been functioning from the inception of this institution (Academic Year 2008-09). Various events are being conducted through this unit to create awareness on first aid and the importance of proper medication. Blood Donation Camps are conducted on a regular basis. Students and faculty members show their concern for the society by voluntarily donating blood.



Tree Plantation program inaugurated by Principal in 2017



**Students involvement in Blood Donation Camp – 2017**

#### **Research:**

The college gives enormous opportunities to resort to research activities and almost all the staff and students are involved in some kind or the other of the Engineering research activity. Lectures on Research Methodology by eminent academicians to promote research activities are conducted periodically

#### **Trial and error, trial and succeed process leads to obtaining of patents.**

14 patents have been applied and 1 granted .The faculty members and students are encouraged to publish research papers in National and International journals.

For conducting conferences and workshops, a total amount of Rs.15, 80,000/- was received during the past 3 years from various agencies. In addition, three of our faculty have received sponsored research funds to the tune of nearly 30 lakhs.

Dr. C Arun, Professor of ECE Department has received a Rs. 12,98,000 grant from the ISRO for design and implementation of dual blind detection robust water making for multimedia security in FPGA.

Dr. B. Kalidhasan, Assistant Professor of Physics Department has been awarded a grant of Rs 14, 46, 000 by the DST – SERB for Research in Generation and Dynamics of Soliton plus in Resonant Fiber Media.

Dr. GeethaBalachandar, Associate Professor of Mathematics Department has received 1.5 lakhs for her research work “Studies on a new sub class of uniformly spiral like functions” from National Board for Higher Mathematics, Department of Atomic Energy, Mumbai.

### **SWOC Analysis:**

#### **Strengths:**

- ❖ Teachers with very high thinking and positive mind encourage students to innovate, improve and establish solution to all problems.
- ❖ Dedicated teaching and non-teaching staff ready to help the students at all times.
- ❖ Feedback from students through class committee and online
- ❖ External stakeholders feedback taken periodically for continuous improvement
- ❖ Self appraisal by faculty enables them to get recognized for their academic and research activities.
- ❖ The college though young, has reached the top echelons of the university in terms of results, Placements and others positive activities.
- ❖ No ragging at all in the campus or outside.
- ❖ Formal dress and no cell phone criteria have ensured officer like qualities in all.
- ❖ Nonstop power supply to all areas of the college and the Hostels. There is no power cut at all due to the very expensive generators installed.
- ❖ Lush green environment that pleases the mind and comforts the body, lending a calm and pleasant learning atmosphere
- ❖ The college is set on the golden Quadrilateral Highway and can be reached in 40 minutes from Chennai.
- ❖ More than 31 buses 5 air conditioned traveler vans ply to bring the staff and students to college and to take them back home in the evening.
- ❖ Very good food is served to all who enter the campus at no cost. The food is always of high quality.
- ❖ Excels in sports and has two air-conditioned gymnasiums

#### **Weaknesses:**

- ❖ This is a Bilingual area and few number students who are economically backward and have learnt in different states under different syllabi, take time to come into the groove.
- ❖ Research funding is hard to come by, but the management step-in to set right the difficulties.

#### **Opportunities:**

- ❖ Being one of the top level engineering colleges, we attract students from very reputed schools and social backgrounds.
- ❖ Students are encouraged to think on their own, apply their mind and innovate.
- ❖ We have signed number of MOUs with many reputed organizations and Centres of Excellence which is an additional attraction to the parents.
- ❖ Study of foreign languages, particularly of European and other Asian countries are made available.
- ❖ Absolute discipline maintained in the campus gives lots of comfort to the parents to choose our college as they are also rest assured that their wards

will come out successful in education and placement, and overall life skills and discipline.

- ❖ When degree and job is assured, parents make a beeline to admit their wards here.
- ❖ Safety is assured as we run our own buses with responsible drivers
- ❖ Rich and healthy food is provided to all. This makes everyone happy and people prefer this college.

### **Challenges:**

- ❖ As the college situated in the periphery of Chennai, an educational hub with an IIT and other top ranking colleges we have to compete with high profile institutions in order to come within the top 5 or 10 Engineering colleges in the state. We need to work hard and claim our position.
- ❖ Satisfying the needs of different types of students with different class backgrounds is a task to be tackled. To bring them all together is like making the heterogeneous groups yoked together not by violence but by love and discipline.
- ❖ The fast moving industry needs more and more of sharp and innovative executives in the field of Engineering and their expectations from their recruits are very high. Though we are able to meet their expectations to a larger extent, we have to, however, work harder and smarter to present them with the best minds meriting their expectations which at times is insatiable.
- ❖ Obtaining research project funding, patents and intellectual property right is another important aspect to be addressed to.
- ❖ A few students without much knowledge in spoken and written English consume a lot of our time. But we accept the challenge with cheer to make them also reach the higher levels at par with their co students.
- ❖ Our institution has reached this enviable level in a very short period from its inception and we have now learnt how to face challenges and convert them into success.

### **Future plans**

- ❖ To make the students reach greater heights in academics and research to make the college Rank number 1 in the State.
- ❖ To sustain and improve quality in a cost effective way and to meet the stakeholders needs.
- ❖ Inculcating Entrepreneurship through Innovation and Entrepreneurship Development Centre.
- ❖ To increase the Industry required Training programs through Centres of Excellence.
- ❖ To start a Technology Business Incubator promoting start up culture.

## PROFILE OF THE COLLEGE

### 1. Name and address of the college:

<b>Name :</b>	R.M.K College of Engineering and Technology		
<b>Address :</b>	RSM Nagar, Puduvoyal, Gummidiyopondi (T.K)		
<b>City :</b> Off Chennai	<b>Pin :</b> 601206	<b>State :</b> Tamil Nadu	
<b>Website :</b>	www. rmkcet.ac.in		

### 2. For Communication :

<b>Designation</b>	<b>Name</b>	<b>Telephone with STD code</b>	<b>Mobile</b>	<b>Fax</b>	<b>Email</b>
<b>Principal</b>	Dr. T. Rengaraja	O : 044 33303630	94441 42611	044 33303636	principal @rmkcet. ac.in
<b>Vice-Principal</b>	Dr. S.Bhagavathi Perumal	O : 044 33303631	94428 93339	044 33303636	vp@rmkcet.ac.in
<b>Steering Committee Coordinator</b>	Mr.T.G.Log anathan	O:044 33303638	9884310 917	044333036 36	loganatha n@rmkcet. ac.in

### 3. Status of the Institution

: Affiliated Institution

### 4. Type of Institution

- (a) By Gender : Co education
- (b) By Shift : Day

### 5. It is a recognized minority institution

: Yes

**Minority Status** : Linguistic (Telugu Minority)  
**Documentary Evidence** : G.O. (Ms) No: 62 Dated: 01/04/15

### 6. Source of funding

: Self Financing

### 7. (a) Date of establishment of the college:

28.06.2008

### (b) University to which the college is

#### Affiliated

: Anna University, Chennai

#### (c) Details of UGC recognition

: Not Applicable

#### (d) Details of Recognition /

: Letter No: F. No. Southern /

#### Approval by Regulatory Bodies

1 – 3330421337 / 2017 / EOA

#### (AICTE)

Dated: 30 March 2017

<b>Under / section / clause</b>	<b>Recognition/ Approval details Institution / Department Programme</b>	<b>Day, month and year (dd-mm-yyyy)</b>	<b>Validity</b>	<b>Remarks</b>
	CSE	28 – 06 – 2008		First Approval (60)
	EEE	28 – 06 – 2008		First Approval (60)
	ECE	28 – 06 – 2008		First Approval (60)
	IT	28 – 06 – 2008		First Approval (60)
	ECE	30 – 06 – 2009		Increase from 60 to 120
	MECH	23 – 08 – 2010		First Approval (60)
	MECH	01 – 09 – 2011		Increase from 60 to 120
	ECE	10 – 05 - 2012		Increase from 120 to 180
	CSE	10 – 05 - 2012		Increase from 60 to 120
	IT	04 – 06 – 2014		Department Closed

## **8. Does the University Act provide for autonomy of Affiliated / Constituent Colleges?**

Yes \_\_\_\_\_ No ✓

#### **9. Is the college recognized?**

(a) By UGC as a College with Potential for Excellence (CPE)?

No

**(b) For its performance by any other governmental agency?**

Yes

- (i) ISTE: Bharatiya Vidya Bhavan National Award for Best Overall Performance Engineering College – 2015.
  - (ii) ISTE : Best Chapter Award – 2015 (Tamil Nadu and Pondicherry)

**10. Location of the campus and area in sq.mts:**

<b>Location</b>	<b>Rural</b>
Campus area in sq.m	93887.07
Built up area in sq.m	30946.21

### 11. Facilities available on the campus:

#### (a) Seminar hall

Description	Area in Sq.m	Capacity (No of Students)	Facilities
Auditorium / Seminar hall 1	447.9	1000	Air conditioned with ICT Enabled
Seminar hall 2	110.4	150	
Seminar hall 3	322.84	300	
Seminar hall 4	173.76	150	

#### (b) Sports

Sl.No	Description	Details	Total Area in Sq.m
1.	Details of the Outdoor Games available	1.Volley ball 2.Throw ball 3.Tennis 4.Basket Ball 5.Foot ball 6.Ball badminton 7.Cricket 8.Kho Kho 9.Hand Ball	1440 288 900 576 6500 480 2700 400 1250
2.	Details of the Indoor Games available	1.Carom 2.Chess 3.Table Tennis 4.Badminton	500 480
3.	Details of gymnasium available	1.Tumbles 2.Skipping 3.Tread mill 4.Abdomen Machine 5.Butterfly Machine 6.EFX Machine 7.Weight Lift Set 8.Power lift set 9.Squad Machine	172.53

		10.Pull ups	
		11.LAT Machine	
		12.Cycling	
		13.Bench Press	
		14.Shoulder Press	

**(c) Hostels**

S.No	Description	Boys Hostel	Girls Hostel
1.	Number of Hostels	2	1
2.	Number of Rooms	85	56
3.	Capacity ( 4 students per room)	340	224
4.	Facilities	Shuttle Court TV Lounge Air Conditioned Gymnasium Air Conditioned Saloon Sick Room 24 Hours Power backup WIFI Facility Medical Facility Emergency Van Facility	

**(d) Residential Facilities**

Designation	Number Available
Principal	1
Vice Principal	1
Teaching faculty	6
Guest House	1
<b>Total</b>	<b>9</b>

**(e) Cafeteria**

Description	Area in Sq.m
Dinning for Boys and Girls	1244.16
Canteen for Boys	33.44
Canteen for Girls	28.61

**(f) Health Centre**

- (i) First Aid cum sick room is available
- (ii) Full Time Doctor available
- (iii) Ambulance available

**(g) Other facilities**

- (i) ATM Facility inside the campus
- (ii) Bus Facility for Day scholar Students. Air Conditioned Cab for Professors.
- (iii) Generator with the capacity of 250KVA
- (iv) RO Water Plant with the capacity of 4000 lt/hr
- (v) Rain Water Harvesting
- (vi) Waste Water Recirculation Plant

**12. Details of programmes offered by the college (Current Academic year)**

Sl.No	Programm Level	Name of the Programm/ Course	Duration (years)	Entry Qualification	Medium of Instruction	Sanctioned / Approved Student Strength	No. of Students Admitted
1	UG	Computer Science and Engineering	Four	XII (Passed)	English	120	<b>119</b>
2	UG	Electronics and Communication Engineering	Four	XII (Passed)	English	180	<b>176</b>
3	UG	Electrical and Electronics Engineering	Four	XII (Passed)	English	60	<b>58</b>
4	UG	Mechanical Engineering	Four	XII (Passed)	English	120	<b>118</b>

**13. Does the college offer self-financed Programmes?**

Yes ✓

No

**Number of self-financed Programmes: 04**

**14. New programmes introduced in the college during the last five years if any?**

Yes

No ✓

**15. List the departments:**

Faculty	Department	UG
Science	Science & Humanities	1(Service Department)
Arts		Not Applicable
Commerce		Not Applicable
Any Other : Engg	CSE, ECE, EEE,MECH	4
<b>Total</b>		<b>05</b>

**16. Number of Programmes offered under (Programme means a degree course like BA, BSc, MA, M.Com...)**

- (a) Annual System
- (b) Semester System ✓
- (c) Trisemester system

**17. Number of Programmes with**

- (a) Choice based credit system : Nil  
 (b) Inter/ Multidisciplinary approach : Nil  
 (c) Any other : Nil

**18. Does the college offer UG and/or PG programmes in Teacher Education?**

No

**19. Does the college offer UG or PG programme in Physical Education?**

No

**20. Number of teaching and non-teaching positions in the Institution**

Positions	Teaching faculty						Non-Teaching Staff		Technical staff	
	Prof		Associate Professor		Assistant Professor					
	M	F	M	F	M	F	M	F	M	F
Sanctioned by the UGC / University / State Government Recruited	As a self financing colleges it is Not Applicable									
Yet to recruit	9	4	16	10	49	45	16	6	13	6
Yet to recruit	<b>Sufficient Number of Employees Recruited.</b>									

M – Male; F – Female

**21. Qualifications of the teaching staff:**

Highest Qualification	Professor		Associate Professor		Assistant Professor		Total
	M	F	M	F	M	F	
<b>Permanent Teachers</b>							
D.Sc./D.Litt.	-	-	-	-	-	-	-
Ph.D	9	4	2	3	1	1	20
M.Phil	-	-	2	2	3	12	19
PG	-	-	12	6	31	30	79
<b>Adjunct</b>							
D.Sc./D.Litt.	-	-	-	-	-	-	-
Ph.D					1	-	1

M.Phil	-	-	-	-	-	-	-
PG	-	-	-	-	13	1	14
<b>Total</b>							<b>133</b>

**22. Number of Visiting Faculty /Guest Faculty engaged with the College :**  
15

**23. Furnish the number of the students admitted to the college during the last four academic years.**

Categories	2013-2014		2014-2015		2015-2016		2016-2017	
	M	F	M	F	M	F	M	F
SC	32	24	22	25	27	14	24	15
ST	3	-	1	-	-	-	2	-
OBC	216	133	220	119	207	135	187	114
General	71	56	90	52	76	43	86	43
Others	1	1	1	-	1	-	-	-

**24. Details on students enrollment in the college during the current academic year:**

Type of Students	UG	Total
Students from the same state where the college is located	379	379
Students from other states of India	92	92
NRI students	-	-
Foreign students	-	-
<b>Total</b>	<b>471</b>	<b>471</b>

**25. Dropout rate in UG and PG:**

Batch	Description	Dropout rate
2016 – 2020	UG	05 / 476 = 1.05%
2015 – 2019	UG	12 / 515 = 2.33%
2014 – 2018	UG	09 / 539 = 1.67%
2013 – 2017	UG	14 / 551 = 2.54%

**26. Unit cost of Education**

*(Unit cost = total annual recurring expenditure (actual) divided by total number of students enrolled)*

- (a) Including the salary component : Rs. 1,29,363/-
- (b) Excluding the salary component : Rs.70,296/-

**27. Does the college offer any programme/s in distance education mode (DEP)?**

No

**28. Provide Teacher-student ratio for each of the programme/course offered As per Anna University and AICTE norms Faculty – student ratio is maintained as**

1:15

**29. Is the college applying for Accreditation Cycle 1/ Cycle 2/ Cycle 3.....**  
The college is applying for **Cycle 1**

**30. Date of Accreditation:**

Not Applicable as applying for the first time.

**31. Number of working days during the last academic year (2015 – 2016)**  
240days (Including Examination)

**32. Number of teaching days during the last academic year (2015 – 2016)**  
180 days (Excluding Examination)

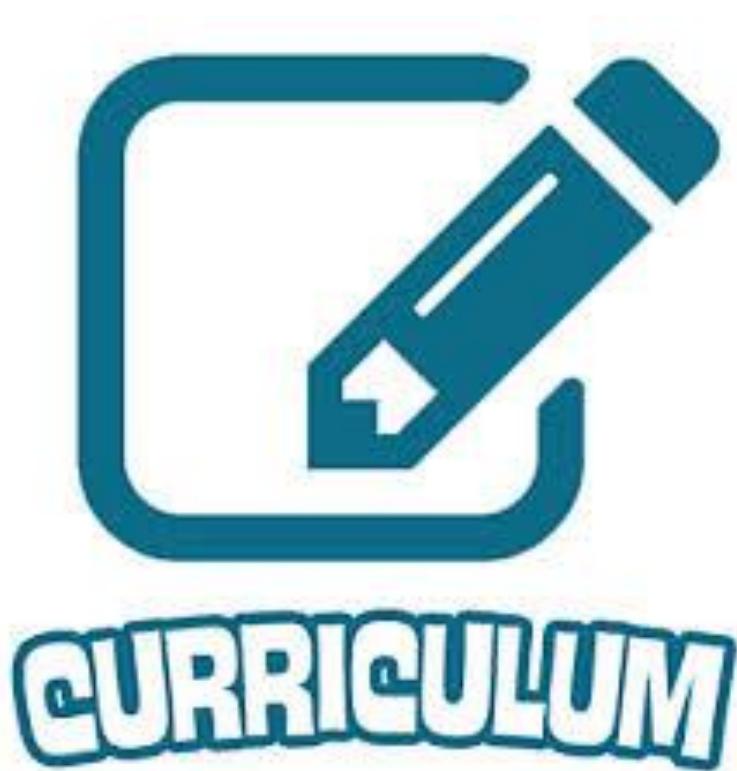
**33. Date of establishment of Internal Quality Assurance Cell (IQAC)**  
IQAC was established on **01.03.2017**

**34. Details regarding submission of Annual Quality Assurance Reports (AQAR) to NAAC.**  
Not applicable

**35. Any other relevant data.**

# **Criterion I**

## **Curricular Aspects**



## CRITERIA – WISE INPUTS

### CRITERION I: CURRICULAR ASPECTS

#### **1.1. Curriculum Planning and Implementation**

**1.1.1. State the vision, mission and objectives of the institution, and describe how these are communicated to the students, teachers, staff and other stakeholders.**

##### **VISION:**

To be knowledge hub of providing quality technical education and promoting research for building up of our nation and its contribution for the betterment of humanity.

##### **MISSION:**

- ❖ To make the best use of state-of-the-art infrastructure to ensure quality technical education
- ❖ To develop industrial collaborations to promote innovation and research capabilities
- ❖ To inculcate values and ethics to serve humanity.

##### **OBJECTIVES:**

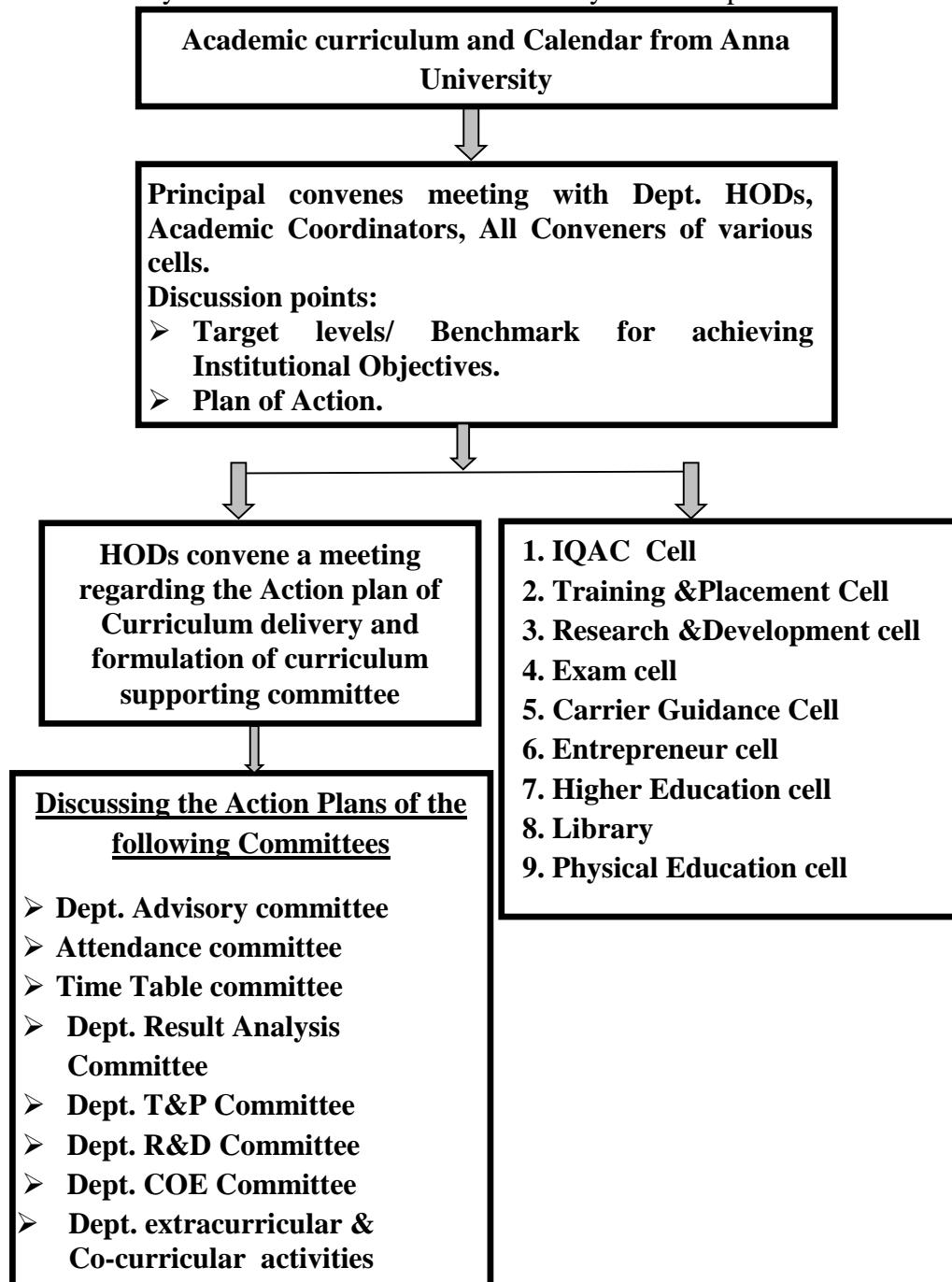
- ❖ To produce globally competent professionals excelling in their professional career through quality technical education.
- ❖ Design solutions for real world problems and provide with technically realistic and efficiently viable solutions.
- ❖ Continuously upgrade their technical knowledge for the work including innovation and adaptation of learning.
- ❖ To instill values and ethics to serve humanity.

##### **MODE OF COMMUNICATION:**

- ❖ The Vision and Mission statement of the Institution is communicated to the students and faculty members through College website, College academic calendar, Student induction program etc. Further communication is extended through Practical Records, Magazines, Brochures and other Information Booklets.
- ❖ The Vision and Mission statement of the Institution is conveyed to the Parents, Alumni, Research Bodies and Industries through College website.
- ❖ The Institution's Mission and Vision are also displayed at the College Office, All the Chambers of Top Management, Notice boards and in the Laboratories.

**1.1.2 How does the institution develop and deploy action plans for effective implementation of the curriculum? Give details of the process and substantiate through specific example(s).**

The curriculum is effectively implemented by the action plans formulated by the academic committee headed by the Principal.



**Fig.1.1 Deployment of Action plans**

- ❖ The Academic Committee headed by the Principal plans the Institution's academic schedule as per the University calendar which includes the details of number of working days, conducting of periodic tests, semester end examinations, evaluation plans, co-curricular / Extra-curricular activities and the same is conveyed to all faculty members through HODs.

- ❖ The HODs conduct meetings with the faculty members and the following has been executed:
  - (i) Workload / Subject allocation
  - (ii) Allocation of the subjects is based on the area of specialization, experience, results, feedback and their willingness.
  - (iii) Books of Standard authors on varied subjects and on different titles and reference manuals are procured for the libraries to meet with the day to day requirements.
  - (iv) Course delivery plan is done in quantum schedule based on the number of working days in the academic schedule.
  - (v) The laboratory necessities are well planned in advance for the forthcoming semester like acquiring new equipment, software's, servicing and calibration of the equipment.
  - (vi) Course files are maintained by each Faculty for the particular subjects allotted, which is reviewed on a regular basis by the HOD and the Principal. The contents of the Course File based on the curriculum is given below:

**Table 1.1 Contents of the Course File**

S.No	Index
1	Syllabus copy
2	Course Outcomes
3	Mapping of Course outcomes vs. program outcomes
4	Course time table
5	Lecture Plan with Lecture outcomes
6	Lecture notes
7	Two Assignment Question papers with Answer scripts
8	Question papers of Internal Examination Tests with Answer scripts
9	Anna University question papers of previous two years
10	Record of attendance and assessment
11	Result analysis

- (vii) Faculty members are encouraged to successfully implement curriculum through innovative teaching methods such as multimedia presentations, seminars, industrial visits, etc. apart from the regular teaching methodologies.
- (viii) Conduct of two Assessment Tests and one model examination in each semester as per the academic calendar.
- (ix) Conduct of remedial classes for the slow learners.
- (x) Students with good attendance and academic record get special recognition from the class coordinators, student counselors and HODs for appreciation and encouragement. Student's performance and attendance details are conveyed to their parents on regular basis.
- (xi) Parents of non-performing students are called for a meeting with the HOD / Principal. The students are counseled in the presence of their parents. If any deficiency is identified, corrective measures are taken with the consent of the parents.
- (xii) The faculty members are assigned with the task of mentoring 20 students for their holistic development.

- (xiii) To plan the different internship programmes for the students based on their core stream.
- (xiv) Seminars, Symposium and Conferences are planned and scheduled based on the Academic Calendar.
- (xv) Organizing suitable guest lectures and industrial visits to places of technical importance.
- (xvi) ISO / IQAC monitor the effectiveness of action plan and curriculum delivery.

### **EXAMPLE OF A PROCESS:**

#### **Laboratory Course Delivery:**

- ❖ Work load assignment for the Laboratory is done by the HODs to the nominated staff-in-charge for the particular semester in advance, based on the syllabus of the Laboratory course.
- ❖ Particular Laboratory will have its own Laboratory time table based on the master time table.
- ❖ Laboratory will also have the centralized time table programme with details of other department utilization of the Laboratory. Both the time tables are judiciously prepared after thorough discussion and understanding in the sharing of the facilities by the time table coordinators.
- ❖ The Laboratory in-charge ensures that all the equipment / Machines are in working condition before the commencement of the semester.
- ❖ List of consumables required for the Laboratory programmes for the semester is submitted to the HOD well in advance and arrangements are made to procure them before the start of the semester as per the purchase procedure.
- ❖ A copy of the list of experiments to be done for the semester is displayed prominently in the Laboratory and are arranged cyclically so that the students could come prepared for the Laboratory to do experiment / exercise in sequence.
- ❖ The students have to do the experiment and record it in the observation and record note books and get it signed within a week's time. Lab evaluation sheet is maintained for all students.
- ❖ To enhance confidence, model examinations are conducted prior to the University practical examinations.

#### **1.1.3. What type of support (procedural and practical) do the teachers receive (from the University and/or institution) for effectively translating the curriculum and improving teaching practices?**

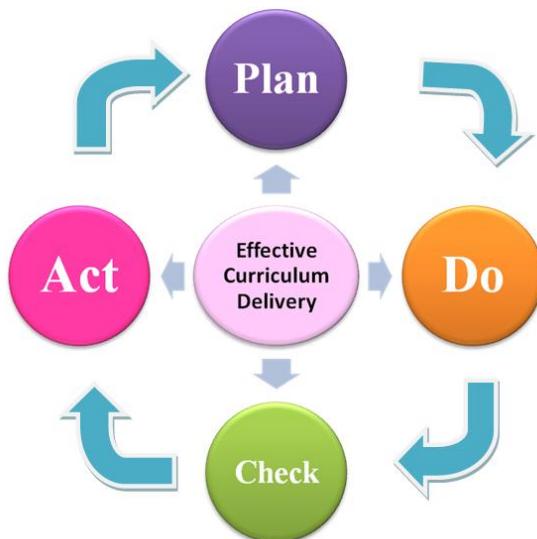
The curriculum designed by Anna University to which the College is affiliated is communicated to the students. Being an affiliated institution we are always in tune with the most modern trends in education and guiding principles.

- ❖ The College encourages the teachers to take part in the FDPs/ Orientation Courses/ Refresher Courses/ Workshops/ Seminars organized by the affiliated University and other reputed institutions to update their knowledge and to improve their teaching practices.

- ❖ The College offers books, other teaching and reference materials like Magazines, online Journals, CDs, Teaching Models and Multimedia, hardware and software to facilitate its teachers to ensure effective delivery of curriculum. The Departments arrange different Faculty Development Programs, Conferences, Workshops, Seminars for the benefit of staff members to update their knowledge with the most recent emerging trends.
- ❖ Industry – Institution interactions are established for networking and knowledge sharing.
- ❖ Teaching aids such as LCD, OHP and computers with Internet facilities are provided for effective curriculum delivery.
- ❖ Central and Department Library, E-learning facilities are provided to all the faculty members of the institution, which help them in delivering good lectures.
- ❖ Guest lectures by eminent personalities / professionals from various reputed institutions and also from industries are organized. This will help the faculty members to keep abreast of the latest developments in their fields of specialization and also to identify critical issues in the teaching / learning processes and effectively implement them for the benefit of the student community.
- ❖ Lectures on research methodologies by eminent academicians are organized to promote the thrust towards Research and applying for Patents in various fields to enrich their potential to guide students' projects.
- ❖ Faculty members are motivated to get funds from various funding agencies to involve students in the areas of research.

**1.1.4. Specify the initiatives taken up or contribution made by the institution for effective curriculum delivery and transaction on the Curriculum provided by the affiliating University or other statutory agency.**

As we are tuned with the ISO 9001:2015 standard, the process approach for Curriculum delivery involves PDCA Cycle with Risk and opportunity management as pictured below



**Fig.1.2 PDCA Cycle for Curricular Planning and Implementation**

The College relies on the Quality concepts in the teaching strategy. Based on the above said process , initiatives have been taken for the effective delivery of the curriculum.

### **Plan**

- ❖ Pre-planned academic calendar which adheres with the Anna University schedule is given at the commencement of the semester.
- ❖ Subject allotment is done based on proficiency matrix, experience and performance in previous years.
- ❖ Time table is framed with provision for Value Added Programmers (VAP), seminar and library hours.
- ❖ Providing study materials, List of prescribed Reference Textbooks, Lab manuals, Question banks and Model question papers in advance to the students.

### **Do**

- ❖ Provision of infrastructure facility (e.g. well established labs and workshops)
- ❖ In addition to the regular classes, the College also schedules special lectures by inviting resource person from various fields to share their knowledge and experiences with the students.
- ❖ Experienced industry Executives are appointed as Adjunct faculty to teach specific subjects for effective curriculum delivery.
- ❖ The College also organizes special Personality Development Programs for the holistic development of students.
- ❖ Encouraging students to do innovative project work of national interest through Department Research Cell.
- ❖ Motivating students for doing research work and present papers in seminars and conferences and publish in journals.
- ❖ The students are also taken out for educational tours and industrial visits of technical importance to enable them gain knowledge of different engineering aspects.
- ❖ Students participate in various internship programs and industry / research oriented projects.
- ❖ Refresher courses, workshops, FDPs for skill up gradation of faculty are also conducted.

### **Check**

- ❖ Monitoring of course delivery and syllabus completion through formal and informal feedbacks.
- ❖ Systematic examination process, standard question papers, proper and prompt evaluation and dispatch of reports to parents.
- ❖ Availability of latest software to monitor students' performance.

### **Act**

- ❖ Slow learners are given special encouragement by conducting remedial classes by the subject experts. Counseling is also given for their academic progress.
- ❖ The placement department takes special care in identifying the training needs of students and faculty to meet the Global standards and organizes campus recruitment training for the students especially to pre-final and final year students

- ❖ Bridging Industry–Institution gap with suitable value added programmes based on the feedback from internal and external stakeholders.

Teaching- learning process and the curriculum supporting processes are been monitored by Quality Assurance cell. Any deficiency or requirements identified through internal and external stakeholders will be rectified in the next academic year aiming at zero deficiency for the effective transmission of the curriculum.

### **1.1.5. How does the institution network and interact with beneficiaries such as industry, Research bodies and the University in effective operation of the curriculum?**

The institution maintains a good rapport with Industries, Research bodies and the Universities by interacting with them for excelling in Curriculum function.

#### **Industry:**

- ❖ The College has set up a Training & Placement cell which enables professional relationship with the representatives of Industries by Institution – Industry interaction.
- ❖ The HR managers of different companies are invited to the College campus to interact with the students about the recent trends in industries with the students on different occasions.
- ❖ The students of different departments of the College are taken for industrial visits from time to time to keep them informed of the most modern developments in the market.
- ❖ Industry sponsored projects are encouraged.
- ❖ The students and the faculty have discussions regarding the emerging trends with the industrialists when they go for industrial visits, internships and on-job training for their projects. This helps in identifying new areas of knowledge that could be incorporated for curriculum strengthening.
- ❖ Industry Personnel are acting as member of Department Advisory Committee to fill the Institution – Industry gap for effective Teaching Learning Process.

#### **Research Bodies:**

- ❖ To promote research activities in the campus, Research Scholars from different fields are invited to the College to motivate the faculty and thereby the students to take up research projects.
- ❖ The Institution has a Research Cell headed by Dr. C. Arun, Professor of Electronics and Communication Engineering department.
- ❖ Students are involved in the external agency sponsored ongoing Projects: **Dr. C.Arun**, ECE received a funding of Rs. 12,98,000/- from ISRO for the project “Design and Implementation of Dual Blind Detection Robust Watermarking for Multimedia security in FPGA”
- ❖ **Dr. B. Kalithasan**, S&H (Physics) received a funding of Rs. 14,46,000/- from DST-SERB for the project “Generation and Dynamics of Soliton Pulse in Resonant Fiber Media”

- ❖ Dr.Geetha Balachandar, S&H (Maths) received a funding of Rs 1,50,000 from NBHM for the project “ Studies on a New Sub Class of Uniformly Spirallike Functions”
- ❖ The Faculty members of the College are also interacting with the affiliating University and other research organizations and companies to improve their research skills.
- ❖ Students are encouraged to apply for TNSCST funded students project.
- ❖ The Department Advisory committee which has industry members who update the demands of the industry which are discussed and taken up as projects.
- ❖ BRNS, CLRI Sponsored seminars and workshops are also conducted in the campus.

### **University and Professional Bodies:**

- ❖ University provides opportunity to conduct FDPs for external and internal faculty of the affiliated institutions.
- ❖ Faculty also participates in various events like Faculty Development Training Programme, Workshops, Seminars organized by Anna University
- ❖ Some of the Faculty members are members of professional bodies like ISTE, IACSIT, SDIWC, IAENG, ISRD, ISTE, IIPE, IET, IEEE, NSPE, IITE, CSI etc., and have interactive collaborations with eminent researchers.

MOU's have been signed with many leading Industries, Research bodies and Universities for a healthy networking with the institution

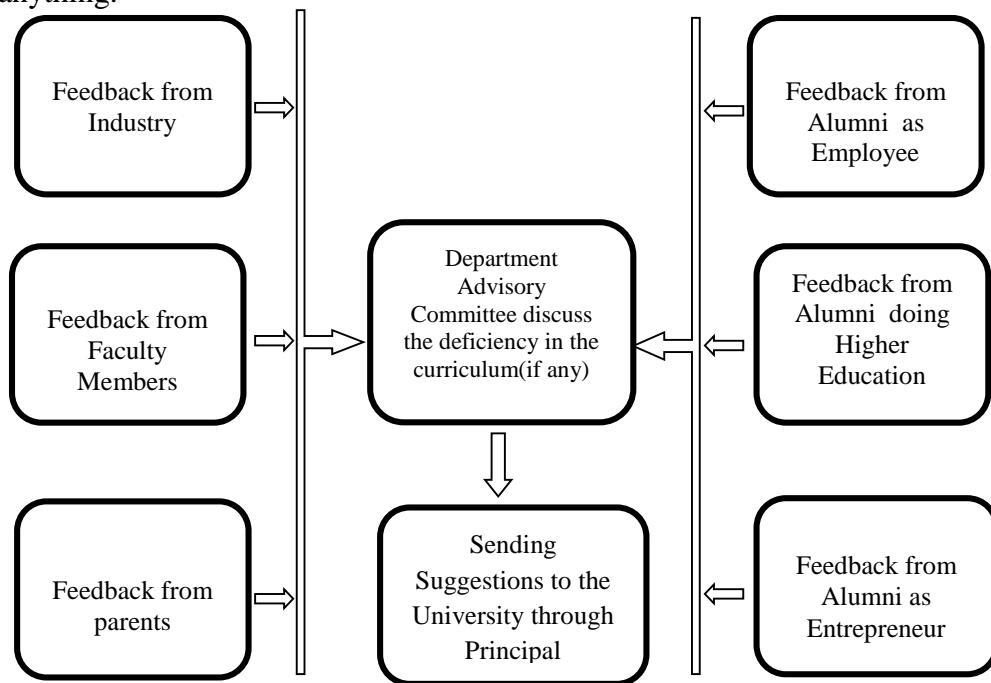
**Table 1.2 Details of MOU's signed**

S. No	Name of the Company	Outcomes
1	Computer Science Corporation	Placement, Internship
2	Soliton Technologies Pvt. Ltd.	Placement, Internship
3	Hitachi Solutions	Placement, Internship
4	Infosys Campus Connect Ltd.	Infosys campus connect, Training, FDP, Webinans, Seminar
5	Mitsubishi Electric India Pvt. Ltd.	AC & DC Electrical Drives, Big Data Analytics
6	The British Council	Higher Education, BEC
7	The Princeton Review, India	Higher Education
8	Cambridge ESOL, University of Cambridge, UK	Higher Education
9	University of Upper Austria, Austria	Higher Education
10	SP Robotics	Hands on training, workshop on Robotics
11	Excel Industries Ltd.	Guest lectures, industrial visits and faculty training

12	Nutech CNC Pvt. Ltd.	Guest lectures, industrial visits and faculty training
13	Metatechgarage	Hands on training, workshop on I.C. Engines
14	Metamorphosis Engg and Skills Development Services Pvt. Ltd	Hands on training, workshop on I.C. Engines
15	Virtusa Polaris Pvt. Ltd.	COE, Placement, Internship
16	iNautix Technologies Ltd.	Placement, Internship
17	Johnson Controls India Pvt. Ltd.	Placement, Internship
18	Poseidon Group of Company	Higher Education
19	Nittan India Tech Pvt. Ltd.	Placement
20	KPIT Technologies Ltd.	COE, Placement, Internship, Projects, PLM
21	SunLite Software Solutions	Guest Lecturers, Placement, Training
22	Parametric Technology Pvt Ltd	Digital Data Management
23	Musorri State University	Placement, Internship

**1.1.6.What are the contributions of the institution and/or its staff members to the development of the curriculum by the University?(number of staff members/departments represented on the Board of Studies, student feedback, teacher feedback, stakeholder feedback provided, specific suggestions etc.**

As the institution is affiliated to Anna University, we have to adhere to their curriculum, but we give our suggestions if the curriculum is in want of anything.



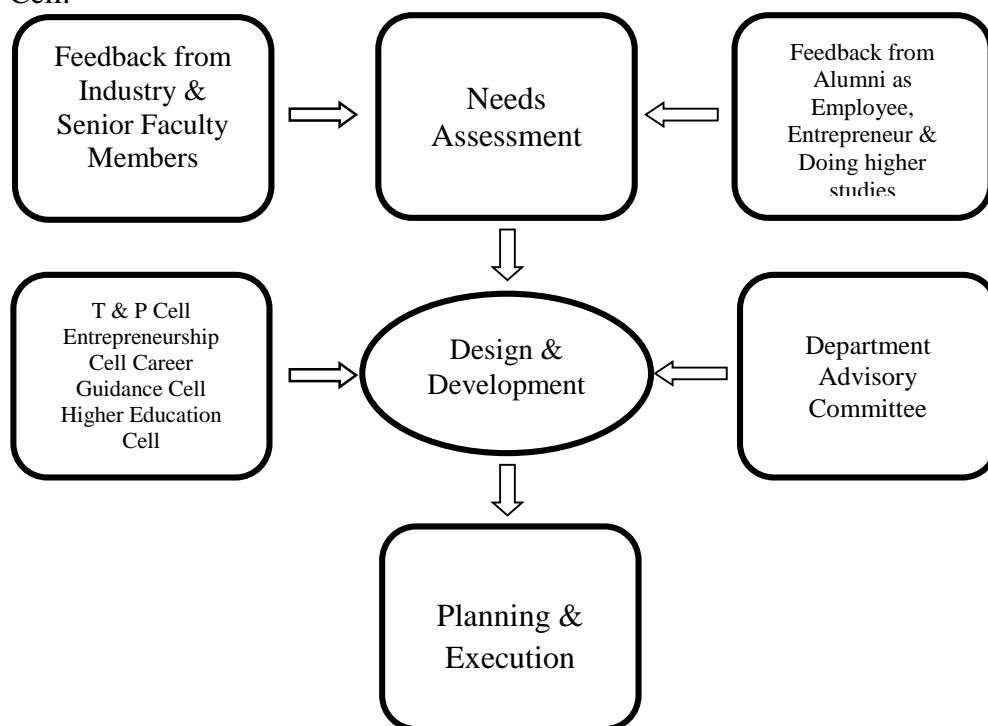
**Fig.1.3 Process of Curriculum Development through Feedback**

The Institution receives feedback from Alumni students (as Employee, Entrepreneur or doing higher education) from industry, Parents and faculty

members. The Department Advisory Committee along with Training and Placement Cell, Entrepreneurship Cell, Career Guidance Cell and submit the suggestions to the Principal for curriculum additions.

**1.1.7. Does the institution develop curriculum for any of the courses offered (other than those under the purview of the affiliating university) by it? If 'yes', give details on the process ('Needs Assessment', design, development and planning) and the courses for which the curriculum has been developed.**

As an affiliated institution, we have to follow University's curriculum. However, wherever we find a gap in the curricula of the University and the requirements of the industries, employability and higher education, suitable training and value added programs are planned and embedded in the curriculum by the Department Advisory Committee together with Training and Placement Cell.



**Fig.1.4 Process of Design and Development of Add-on Courses**

- ❖ “Needs Assessment” is done based on the feedback from Alumni as Employee, Entrepreneur & Doing Higher Studies and Industry and Senior Faculty Members.
- ❖ Department Advisory committee interacts with Training & Placement Cell, Entrepreneurship cell, Research and Development cell, Career Guidance cell, Higher Education cell and design the curriculum for the enrichment courses which reflects the requirements of the feedback obtained from above mentioned sectors.
- ❖ The approved enriched curriculum to be delivered is scheduled amidst the regular academic schedule.

The various enriched curriculum developed for the students are listed below

**Value Added Courses:**

- ❖ Wipro PRP
- ❖ Infosys Campus Connect

- ❖ Java Training ‘CEP’
- ❖ ZOHO Enrich
- ❖ CCNA by CISCO.
- ❖ Power Electronics and Embedded Systems
- ❖ PLC
- ❖ PLM

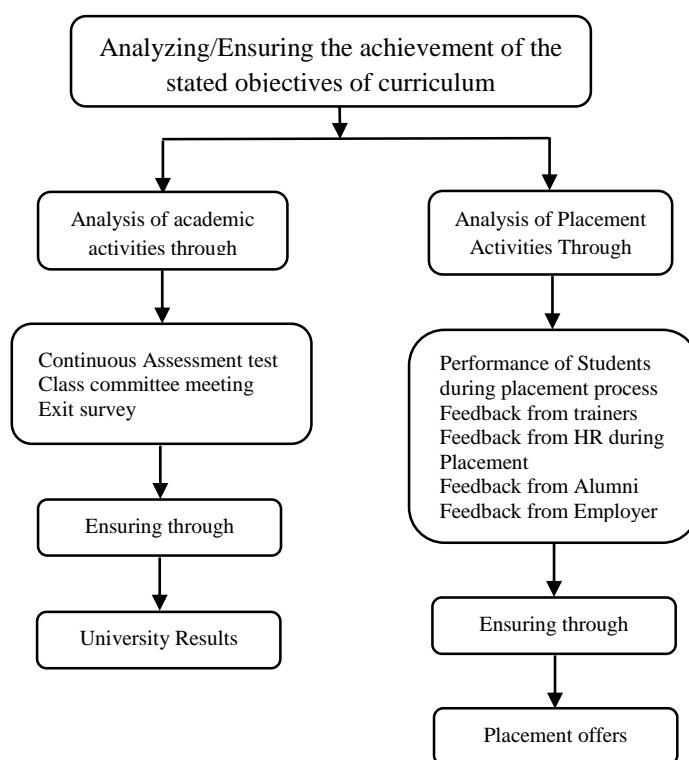
### **Centres of Excellence Initiatives:**

To make the students industry ready, the Centre of Excellence takes special initiatives for students to excel in the following programs.

- ❖ Product Life Cycle Management – PTC
- ❖ Telecom – Wipro
- ❖ Embedded Systems – Wipro
- ❖ Digital Enterprises ( Mobility)
- ❖ Big Data Analytics
- ❖ Automotive Electronics – KPIT
- ❖ Front End Technologies – Virtusa Polaris
- ❖ Information Security – TCS
- ❖ PLC – Factory Automation – Mitsubishi
- ❖ AC & DC Electric Drives
- ❖ CCNA – CISCO

### **1.1.8. How does institution analyze/ensure that the stated objectives of curriculum are achieved in the course of implementation?**

The achievement of the objectives of the curriculum can be analyzed through Academic accomplishments and placement related performance of students.



**Fig.1.5 Method of Analyzing and ensuring the objectives of Curriculum**

This is ensured from University Examination Results and the placement offers. Student feedback during the class committee meetings, exit survey and also Alumni feedback ensures the attainment of the objectives of the curriculum. Feedback from other stake holders also helps in ensuring the accomplishment of curricular objectives.

## 1.2. Academic Flexibility

### 1.2.1. Specifying the goals and objectives give details of the certificate/diploma/skill development courses etc., offered by the institution.

In order to achieve the Vision envisaged, the institution goes extra miles in the academic road. To bridge the gap between the University prescribed syllabus and the Industry requirement, certificate courses and skill development courses are offered to the students to boost their level of employability and research capabilities.

The following is the list of such courses offered

<b>Value Added Course</b>	<b>: Mobility</b>
<b>Course offered to</b>	: Department of Computer Science and Engineering & Information Technology
<b>Goals</b>	: To develop mobile apps and upload in Play/App Store.
<b>Objectives</b>	: Increasing opportunities for students' placement in IT industry, Product companies and Technology projects / groups in Service companies.
<b>Value Added Course</b>	<b>: Big Data Analytics</b>
<b>Course offered to</b>	: Department of Computer Science and Engineering & Information Technology
<b>Goals</b>	: To prepare the students for a successful career in Big Data Analytics Technology.
<b>Objectives</b>	: To create a platform for the students in acquiring the Technology through Industry Internship. To establish a state of the art laboratory collaboration with Industry.
<b>Value Added Course</b>	<b>: Zoho Enrich Programme</b>
<b>Course offered to</b>	: Department of Computer Science and Engineering & Information Technology
<b>Goals</b>	: To make Students get placed in Dream Companies
<b>Objectives</b>	: To make students get trained to meet the requirement of the product companies
<b>Value Added Course</b>	<b>: Virtusa Polaris – Front End Technologies</b>
<b>Course offered to</b>	: Department of Computer Science and Engineering & Information Technology
<b>Goals</b>	: To excel in front end development skills in students.
<b>Objectives</b>	: To make students get trained in front end Technologies

<b>Value Added Course</b>	<b>: Wipro PRP</b>
<b>Course offered to</b>	: Department of Computer Science and Engineering & Information Technology
<b>Goals</b>	: To enhance the programming skills of students.
<b>Objectives</b>	: To fill the gap between academics and industry.
<b>Value Added Course</b>	<b>: Oracle</b>
<b>Course offered to</b>	: Department of Computer Science and Engineering & Information Technology
<b>Goals</b>	: To train the students on database technologies such as Oracle, DB <sub>2</sub> etc.
<b>Objectives</b>	: To enhance the skills of the students thereby increasing the employability of the students
<b>Value Added Course</b>	<b>: PLC</b>
<b>Course offered to</b>	: Department of Electrical and Electronics Engineering
<b>Goals</b>	: To create professionals in the field of factory automation.
<b>Objectives</b>	: To enhance the skills of the students in the field of logic circuits.
<b>Value Added Course</b>	<b>: PLM</b>
<b>Course offered to</b>	: Department Mechanical Engineering
<b>Goals</b>	: To be competent in the Digital Manufacturing and Process industry.
<b>Objectives</b>	: To train the students in the field of Secured Product and Process Data Management.
<b>Value Added Course</b>	<b>: CCNA</b>
<b>Course offered to</b>	: Department of Electronics and Communication Engineering
<b>Goals</b>	: Students will get the knowledge of computer Networking models.
<b>Objectives</b>	: Students will be able to get the knowledge about the Role, features and functions of protocols in Networks. Establish local and remote terminal connections to Networking devices using Terminal Emulation Programs.

**1.2.2. Does the institution offer programs that facilitate twinning /dual degree? If 'yes', give details.**

NO. The college being an affiliated college, it does not have the autonomy to offer twinning / dual degree programs.

**1.2.3. Give details on the various institutional provisions with reference to academic flexibility and how it has been helpful to students in terms of skills development, academic mobility, progression to higher studies and improved potential for employability**

- ❖ Range of Core / Elective options offered by the University and those opted by the College
- ❖ Choice Based Credit System and range of subject options
- ❖ Courses offered in modular form

- ❖ Credit transfer and accumulation facility
- ❖ Lateral and vertical mobility within and across programmes and courses

**Range of Core / Elective options : 1 to 3 Electives offered [UG]**

Depending on the syllabus of the UG programme, students have the flexibility of choosing 1-3 electives subjects. The elective subjects offered are based on the latest technological trends and industrial needs so that, at the end of the Programme, the student is ready to cater to the industry requirements.

Table 1.3 List of Electives offered

No of Elective Courses in the University Curriculum	List of Electives offered in the College	Year / Sem
<b>Department of Computer Science and Engineering</b>		
4	GE6757 Total Quality Management	III Yr / VI Sem
10	CS6007 Information Retrieval	VI Yr / VII Sem
11	MG6088 Software Project Management	VI Yr / VIII Sem
	GE6075 Professional Ethics in Engineering	
<b>Department of Electronics and Communication Engineering</b>		
4	EC6001 Medical Electronics	III Yr / VI Sem
6	IT6005 Digital Image Processing	VI Yr / VII Sem
5	EC6009 Advanced Computer Architecture	
5	EC6014 Cognitive Radio	
6	GE6075- Professional Ethics in Engineering	VI Yr / VIII Sem
6	GE6757- Total Quality Management	
<b>Department of Electrical and Electronics Engineering</b>		
4	EE6002- Power System Transients	III Yr/ VI sem
5	EE6004 Flexible AC Transmission systems	IV Yr/ VII sem
4	EE6008 Microcontroller based system design	
4	EE6010- High Voltage Direct Current Transmission	
7	GE6075- Professional Ethics in Engineering	IV Yr/ VIII sem
<b>Department of Information Technology</b>		
5	GE6757- Total Quality Management	III Yr/ VI sem
5	IT6004- Software Testing	IV Yr/ VII sem

15	GE6075- Professional Ethics in Engineering	IV Yr/ VIII sem
	CS6004- Cyber Forensics	
	MG6088- Software Project Management	
<b>Department of Mechanical Engineering</b>		
5	ME6004 Unconventional Machining Processes	III Yr/ VI Sem
6	ME6005 Process Planning and Cost Estimation	VI Yr / VII Sem
	ME6012 Maintenance Engineering	
6	ME6016 Advanced I.C. Engines	VI Yr / VIII Sem
	MG6071 Entrepreneurship Development	

**Choice based credit system and range of subject options** : As Per Anna University

**Courses offered in modular form** : 1 to 3 courses based on the program

**Credit transfer and accumulation facility** : NA

#### **Lateral and vertical mobility within and across programmes and courses:**

The students are given freedom to move across various disciplines for their project work. The students may choose their project guide from their department of the college and can also use any laboratory equipment available in campus for the purpose of project work/research.

**1.2.4. Does the institution offer self-financed programs? If ‘yes’ , list them and indicate how they differ from other programs, with reference to admission, curriculum, fee structure, teacher qualification, salary etc.**

Yes. The institution is purely a self- financing private Institution. The college is affiliated to Anna University, Chennai and recognized by AICTE, New Delhi.

All programmes offered by our College are under self-financing scheme.

**Admissions:** All admissions will be done by following the guidelines prescribed by the Government of Tamil Nadu, Anna University and by the self-financing consortium Tamil Nadu.

**Curriculum:** Anna University prescribed curriculum is strictly implemented, and beyond the curriculum, the Institute also supplements many add-on courses for the holistic development of students.

**Fee Structure:** Government of Tamil Nadu approved Fees will be charged from students.

**Faculty Qualifications and Salary:** AICTE prescribed faculty qualification is mandatory for appointing faculty in our institution and salary is being given to all faculty members based on AICTE norms.

**Table 1.4 Programs Offered by the Institute with Approved Intake**

<b>Batch</b>	<b>Academic year</b>	<b>B.E – CSE</b>	<b>B.E – ECE</b>	<b>B.E – EEE</b>	<b>B.Tech – IT</b>	<b>B.E - MECH</b>
1	2008 – 2009	60	60	60	60	-
2	2009 – 2010	60	120	60	60	-
3	2010 – 2011	60	120	60	60	60
4	2011 – 2012	120	180	60	60	120
5	2012 – 2013	120	180	60	60	120
6	2013 – 2014	120	180	60	-	120
7	2014 – 2015	120	180	60	-	120
8	2015 – 2016	120	180	60	-	120
9	2016 – 2017	120	180	60	-	120

**1.2.5. Does the College provide additional skill oriented programme relevant to regional and global employment markets? If 'yes' provide details of such programme and the beneficiaries.**

The college offers skill oriented programme to enhance the abilities of students. The Following table provides the list of various skill oriented programs

**Table 1.5 Enrichment Courses**

<b>S.No.</b>	<b>Training Program</b>	<b>Beneficiaries</b>	<b>Objectives</b>
1	Two days Life Skills Workshop By M/s. Ethnus	First Year Students of all department	To develop the essential skills for a successful life.
2	Business English Certification (BEC) Training by M/s FACE,	Second year students of all departments	Enable the students to: ❖ work with international organisations in any part of the world ❖ study business-related subjects taught in English.
3	Infosys Campus Connect Foundation Program Road Show by M/s. Infosys Ltd	Third year students of all department	To get placed in a dream company
4	Aptitude Training and Java Training Programmes	Final year students of department	To develop their programming skills in java

	by M/s. Smart Training Resources		
5	‘Evolve’ - Workshop by M/s. Cognizant Technology Solutions	Final Year Students	To equip the students with the key skills in the areas of Aptitude, IT and Software Engineering relevant to industry needs
6	‘Infosys- Readiness’ programme by M/s. Infosys Ltd	Final Year Students	Making the students getting placed in reputed companies
7	Cognizant Certified Student Program (CCSP), by M/s. Cognizant Technology Solutions	Final Year Students	To equip the students with the key skills in the areas of Aptitude, IT and Software Engineering relevant to industry needs.
8	Pre-Placement Talk by M/s. Infosys Ltd & M/s. Cognizant Technology Solutions	Final Year Students	Making the students to get placed in reputed companies
9	Mission Possible, Interview Skills Improvement Program by Shri.Suresh Punjabi, Corporate Trainer and Graphologist	III Year Students of all departments	Making the students to get placed in reputed companies

**1.2.6 Does the University provide for the flexibility of combining the conventional face-to- face and Distance Mode of Education for students to choose the courses/combination of their choice" If 'yes', how does the institution take advantage of such provision for the benefit of students?**

No. The affiliating University does not offer such flexibility as of now.

### 1.3 Curriculum Enrichment

**1.3.1 Describe the efforts made by the institution to supplement the University’s Curriculum to ensure that the academic programmes and Institution’s goals and objectives are integrated?**

The Institution follows the University Curriculum. Gap analysis is done using assessment tools like exit survey, employer feedback etc., Based on this, the Institution supplements many add on courses for enriching and organizing the curriculum for ensuring Institutional goals and objectives.

**Training:**

**Training in soft skills:** Business English Certificate course is offered and has been made mandatory for the II years and this affirms the enhancement of communication skills of students.

**Training in Quantitative, logic and Analytical skills:** Institute provides training programmes in Quantitative, logic and Analytical skills to develop the ability of the students which help in their employment.

**Training in computer based subjects:** C, C++ and Java Training programmes offered to students from second year onwards for placement as well as (EPS) Enhancing programming skills.

**National Program on Technology Enhanced Learning (NPTEL)**  
This program is offered to both students and faculty to enhance the quality of Engineering education in our college by developing curriculum based videos and web courses.

**Value added Courses:** Value added courses such as Embedded Systems, CCNA by CISCO, PLM, Infosys Campus Connect and EMC<sup>2</sup> are conducted in the campus for the benefit of the students. These courses are offered to supplement the syllabus prescribed by the university and to patch the fissures. These courses give a distinct advantage to the students during employment processes.

**Topics Taught Beyond the Syllabus:**

Apart from the curriculum framed by the university, students are encouraged to learn the topics beyond the syllabus for their awareness in the emerging new technical trends which goes parallel with the syllabus.

**Workshops and Seminars:**

National level seminars and workshops are conducted regularly and eminent academicians, industrialists and corporate heads are invited to deliver lectures and interact with faculty and students. The faculty and students get exposed to and gain knowledge in the current trends in research and application of their discipline.

**Guest Lectures:**

The Guest lectures are delivered by eminent personalities from Industries and reputed Institutions for updating the current happening to the students. This will ensure the fulfillment of our Institutional academic and employability objectives.

**In-Plant Training:**

The students are encouraged to attend in-plant training during their vacation. Students are motivated to undertake industrial projects and mini projects to keep them abreast of the latest developments.

### **Industrial Visits:**

Industrial visits are arranged to students twice in a semester with the leading industries in order to orient themselves in the field of application with the theory learnt.

### **Centres of Excellence:**

Centres of Excellence are special initiatives promoted by the Management of RMK Group of Institutions. The students are trained and involved in activities to develop their skill sets and expertise as necessary to be employable and be job-ready. The Details of 11 COE is mentioned in the section 1.1.7.

### **MOUs:**

Memoranda of Understanding have been signed with 23 leading industries and Universities abroad including Mitsubishi Electric India Pvt. Ltd., Poseidon Solar Services and British council.

### **Career Guidance Cell:**

The Institute provides information about available professional opportunities and conducts career development seminars and workshops.

### **Higher Studies:**

Focusing on the students who wish to take up higher studies, special coaching is offered to students to excel in competitive examinations like GATE, CAT, TOEFL etc. The outcome of this extended help is two-fold- (i) students confidently decide on higher education in reputed Institutions and (ii) an additional merit for entry into MNCs and Central Government undertakings.

### **Entrepreneurship Development Cell:**

The cell focuses on to create an awareness on the need and importance of Entrepreneurship as career option among students and to inspire the students to start small and medium size enterprises, which offer better potential for employment and self-employment.

### **Library:**

The College library is well stocked with books, journals, back volumes, e-books and e-journals. A library hour within the class time table and also beyond college hours is provided to encourage library usage by students. The College Library has 22159 volumes of Books with 4886 titles. The Library subscribes for 54 National Journals, 621 International journals (e-journals) and 9 on-line Journal packages namely IEEE, ASME, SPRINGER LINK, SCIENCE DIRECT, J-GATE, ASTM, McGRAW HILL, IET and ISOJTC and also subscribes for 25 magazines and many News Papers. The Library also has proceedings and 1574 CD ROMS. NPTEL lectures are made available. Library is associated with Anna university library, British Council library, DELNET, IET & IETE through memberships.

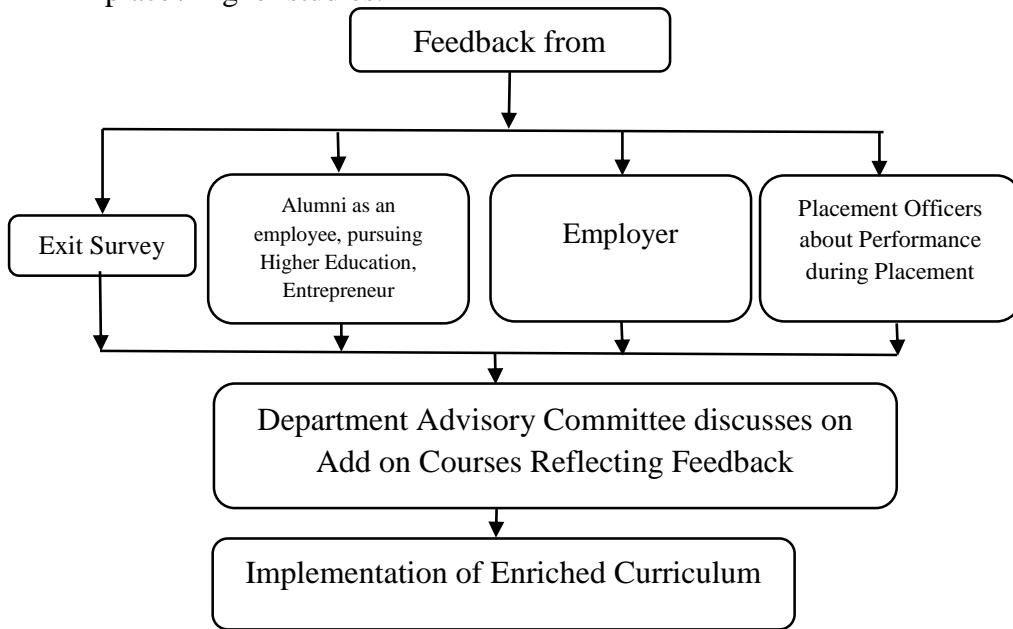
### **1.3.2 What are the efforts made by the institution to enrich and organize the curriculum to enhance the experiences of the students so as to cope with the needs of the dynamic employment market?**

The primary stakeholders of the institution are the students both present and past. Their viewpoints, suggestions and recommendations have always been found to be invaluable in enriching the curriculum. Therefore, obtaining

feedback from the students and alumni in the planning and execution of the program of study plays a vital role.

The direct feedback on the various courses offered is obtained as follows:

- ❖ Exit survey at the end of the program brings out the need for improvement in various aspects of the academic life of the college.
- ❖ The Training and Placement cell of the Institution regularly interacts with the HR and Technical Managers of Companies and collects the information about the demands and expectations of the corporate sector regarding the skill set of students. These demands of the companies are then communicated to the Advisory Committee to formulate value added and skill development programmes, which are then conducted to make up the deficiencies in the curriculum to make students as Industry ready graduate.
- ❖ Feedback is obtained from the employers through direct interaction / emails or during campus placement discussions and Campus Interviews.
- ❖ Alumni Meets help in understanding the recent development in the field of Engineering and the latest market trends. This interaction is valuable as they correlate their theoretical knowledge and the experiences in work place / higher studies.



**Fig.1.6 Process of Implementing Enriched Curriculum**

### 1.3.3 Enumerate the efforts made by the institution to integrate the cross-cutting issues such as Gender, Climate Change, Environmental Education, Human Rights, ICT etc., into the curriculum?

The various cells and forums enlisted below ensure the integration of cross cutting issues into the curriculum.

- ❖ Gender Cell and Women Empowerment Cell
- ❖ Grievance Redressal Committee
- ❖ EVS
- ❖ Youth Red Cross
- ❖ Anti Ragging Committee

### **Women Empowerment Cell:**

To facilitate a gender-sensitive and friendly environment in our campus, the cell takes care of the issues related to gender if any and also specifies gender equality through International Women's Day celebrations. Importance is also given for empowering women Leadership.

### **Grievance Redressal Committee:**

This committee is intended to undertake the processes of attending to the grievances put forth by the students and staff. It focuses on setting proper facilitation procedures for settling the issues in a cordial manner. The committee is expected to submit the minutes of its meetings along with observations, suggestions, if any.

### **Environmental Education:**

- ❖ As per the prescribed syllabus of Anna University, students of all branches undergo a course on Environmental Science and Engineering in the III/ IV/ V semester. The course covers all aspects of environment such as natural resources, biodiversity, pollution, alternate energy sources and human intervention - causes and effects and social ethics.
- ❖ Environmental awareness is given special thrust and prominence in National Science Day project exhibits and in seminars organized in the campus.
- ❖ Research papers published and other paper presentations include “Global Environmental protection and safety” in the conferences organized by the Institution.
- ❖ Rainwater harvesting helps in maintaining a green campus

### **Youth Red Cross:**

The Youth Red Cross Unit of the college regularly does Tree Plantation activities, Blood Donation Camps and Safety Awareness programmes. The Institution is proud that, The Youth Red Cross Unit of our college was the recipient “**Best Performance in Youth Red Cross Unit**” award from the Indian Red Cross Society for the year 2014-15 on 06.01.2015

### **Safety Awareness Programme:**

Awareness programme on the usage of Fire Extinguisher and safety precautions to be followed during emergency times are conducted at regular intervals.

### **Information and Communication Technology Enabled Teaching:**

In the past 10 years, there has been a paradigm shift in the teaching / learning process with the advent of ICT.

- ❖ All departments are provided with ICT tools for enhancing teaching and learning.
- ❖ Use of website, instruction dissemination through group mail IDs are part of the teaching / learning process.
- ❖ Library automation and AUTO LIB 5.2 contribute to time saving and efficient use of library resources.
- ❖ Localized LAN contributes to effective handling of laboratory classes.

- ❖ NPTEL videos are embedded in the teaching learning process for effective delivery of curriculum. Students are writing online NPTEL exams in various subjects like Basic Electrical Circuits, Object-Oriented Analysis and Design, Programming in C++, Fluid Machines, Programming, Data Structures and Algorithms in Python etc.
- ❖ CPT SOFTWARE: Students Personal details, Academic Performance and Attendance details are maintained using the Campus Performance Tracker software.
- ❖ The Institution has ICT enabled four seminar halls with a capacity to accommodate around 1600 students.

#### **Anti – Ragging Committee:**

The cell strictly warns that any kind of ragging practice is a criminal offence and the instructions are displayed in prominent places in the campus.

#### **1.3.4 What are the various value-added courses/enrichment programmes offered to ensure Holistic development of students?**

The college has chalked out several value added courses and motivational programs that equip the students for seeking better employment or initiate their own enterprises and holistic development. We are organizing various programmes such as Guest lectures, National Science Day Program, Conferences, Symposiums, Industrial visits and sports that develop the skills of students in all aspects.

#### **Enrichment Programmes:**

In order to make them become ready to meet with growing demands of the corporates and groom them into a complete human being, the Institute is striving hard to develop the skills of students in current technologies and human relationships. Also to reduce the gap between academic outcome and the industry requirement, the Institution provides many value added courses to improve the employability skills.

**Table 1.6 List of skill enrichment courses**

S.No	Name of the Training Programme	Trained by	Beneficiaries
1	Motivation Program for BEC Vantage Certification	Representatives from University of Cambridge	II year students
2	Business English Certification Examination(BEC)	M/s. FACE	II year students
3	Aptitude Training Programme	M/s. Smart Training Resources Pvt. Ltd.	IV year students
4	Evolve Workshop	M/s. Cognizant Technology Solutions	IV year students
5	Campus Readiness Programme	M/s Ethunus	II & III year students
6	Expectation of Product Companies	Mr. Jayaprakash A Gandhi	III year COE selected students
7	Road Show on Campus Commune Portal and	Tata Consultancy Services Limited	IV year students

	Code Vita Contest		
8	Aptitude Refresher Training	M/s. Smart Training Resources Pvt. Ltd	III year students
9	Workshop on Life Skills	M/s Ethunus	IV year Wipro placed Telecom and PLM students
10	Infosys- Readiness Programme	M/s. Infosys Ltd.	IV year students
11	L&T Infotech Campus Readiness Program	M/s. L&T Infotech Ltd.	IV year students
12	Skill Development Programme	Shri Jayaprakash A Gandhi	I year students
13	Smart Training Resources	FACE	III & IV year students
14	Python Training Program	M/s Infosys Pvt. Ltd.	Infosys recruits students
15	“Infosys Campus Connect Peer Enablement Program”	Infosys Campus Connect Team	Infosys Campus Connect core team faculty members
16	Post Offer Connect Program	Cognizant Technology Solutions India Pvt. Ltd.	IV year CTS recruits students
17	Creative Thinking Workshop	M/s Ethunus	I year students

#### Programme Conducted By Higher Education Cell:

This cell puts in effort for rendering help to students who strive for pursuing higher education and also motivate the culture of undergoing higher education.

**Table 1.7 List of Programme Conducted By Higher Education Cell**

S.No.	Programme	Resource Personnel	Beneficiaries
1.	Cambridge English Orientation Programme	Executives from Cambridge English	II year students
2.	Study Abroad	DAAD, B.C. Trade office Canada, USIEF, Education UK, NESO Desk	IV year students
3.	Effective SoP and LoR writing	Sivakumar D,Illinois Institute of Technology (India) Pvt Ltd	IV year students
4.	GATE Examinations	T.I.M.E.	IV year students
5.	Educational fair	For Education overseas	III Year and IV year students

6.	Education in Technical University of Delft, Netherlands	A Video conferencing programme	III Year and IV year students
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#### Programme Conducted By Entrepreneurship Development Cell:

The Entrepreneurship Development cell in our institution helps in structuring the Institutional mechanism to build entrepreneurial culture in Science and Technology and to promote Techno Entrepreneurship for generation of wealth and employment by students. The cell focuses on to create an awareness on the need and significance of Entrepreneurship as career option among students and to inspire the students to start the small and medium size enterprises, which offer better potential for employment generation and self-employment.

The cell organized various programmes regarding entrepreneurship development as detailed below:



**Fig.1.7 One Day Workshop on “ Skill Development Programme on Machine Tools ”. on 12.09.2014**

**Fig.1.8 Mr. B G Venkatesh, Sr. Trainer, ICTACT interacting with the students at the Entrepreneurship Awareness Camp held on 14.02.2015**

**Table 1.8 List of Entrepreneurship Activities**

S.No	Activity	Target Group	Sponsors
1	One day workshop on Entrepreneurship Awareness	III & IV year students	EDI, Govt of TamilNadu and RMKCET
2	One Day Workshop on “ Skill Development Programme on Machine Tools ”.	Unemployed Youth in and around Puduvoyal and Arani Village.	EDI, Govt of TamilNadu and RMKCET
3	EDC has organized a Three Day Entrepreneurship Awareness Camp	III & IV year students	Entrepreneurship Development Institute of India, Ahmedabad (DST – NIMAT PROJECT) and RMKCET

4	EDC has organized a Half-a- Day Entrepreneurship Awareness Camp	II & III year students	ICTACT, EDI & TNSDC
5	EDC organized awareness camp on National and International opportunities in Clean Technologies	II & III year students	EDC, RMKCET
6	Entrepreneurship Development Program (EDP) - 5 Days Training program	II & III year students	EDC, RMKCET
7	Three day Entrepreneurship Awareness Camp	III Year students	EDII - DST
8	Camp at EDI, Guindy, Govt. of Tamil Nadu	Selected Students	EDI & ICTACT

#### Programme Conducted By Career Guidance Cell:

The objective of this cell is to create awareness about various career options and higher studies opportunities among students. It focuses on widening the job prospects for those students who want to launch themselves in a career. The career guidance cell brings experts to channel the students' efforts and intentions in the desired manner. The Career Guidance Cell functions with the coordination of faculty members and Student coordinators from all streams. This cell organizes various programmes to improve technical, communication and personality development of students.



Fig.1.9 Principal honoring the Chief Guest Shri.G.S.Raman

**Table 1.9 List of Career Guidance Activities**

<b>S.No.</b>	<b>Activity Name</b>	<b>Chief Guest</b>
1	Inspirational Talk on IAS	<b>Shri. R. Sudhakar, IPS</b> , Deputy Commissioner of Police, Pulianthope District, Chennai.
2	Workshop and Hands on Training in Cloud and Big Data	<b>Shri. G.S. Raman</b> , Corporate Consultant Cloud and Big Data
3	Know Your Diesel Engine	<b>Shri. Vijay Tharad</b> , Corporate Trainer, Caterpillar India
4	Success towards CAT exam	<b>Mr. P. Aravind</b> , Alumni, ME/RMKCET
5	Key stone habits for Success	<b>Shri. K. Thanumalaya Perumal</b> , B.Sc., M.B.A., Head Distributions, Tata Teleservices

**Guest Lecture:**

Additional inputs made available to the students to enhance their learning experience by providing current and relevant examples of the practical applications of theory in the form of expert lectures. These lectures provide a picture of advances in different engineering disciplines, computational techniques, modern web programming, transcendental meditation, ethics in engineering profession, and communication skills etc.

**Mini Projects:**

Science day programs and mini project exhibit activities help students to expose their innovative skill in Engineering. This improves their morale and encourages them to become perfect Engineers

**Symposium and Conferences:**

It is organized by all the departments to focus on current learning issues that are related to students' holistic development and also for the professional and academic growth of the Institution.

**Industrial Visit:**

The main aim of industrial visit is to provide students an insight into the internal working of companies. It provides an excellent opportunity to interact with industries and know more about industrial environment. The Industrial visits are arranged for all the students with an objective of providing them functional opportunity in different sectors like IT, Manufacturing and services etc.

**Work Shop and Seminars:**

We organize workshop in order to develop the skills of the students. We encourage the students to attend various workshops conducted by other colleges to improve and share their knowledge in international level.

**Sports:**

Games and sports are made as an integral part of a student's life. The department of Physical Education has made tremendous progress in sharpening and shaping the various skills of the students in sports, increasing their mental strength and inculcating in them an eagerness to excel in their performances.

Well maintained facilities for playing indoor and outdoor games are provided for the students.

### 1.3.5 Citing a few examples enumerate on the extent of use of the feedback from stakeholders in enriching the curriculum?

The Institution gives primary importance to obtain feedback from all the stakeholders in order to incorporate the needs and requirements in the curriculum and thereby enrich the teaching-learning process. Regular feedback is obtained from students during their tenure in the campus. Alumni post their feedback in person during alumni meets. Parents are encouraged to register their opinions either formally during the parent meetings or informally during their visits to the departments. Feedbacks are obtained from the employers / industry people through direct interaction / emails and during campus placement discussions.

A sample of the feedback registered by a parent is as below:

R.M.K.COLLEGE OF ENGINEERING AND TECHNOLOGY  
R.S.M.NAGAR, PUDUVLOYAL-601 206  
Parent Feedback Form

Name of the Parent : S. GOOMA	Year / Session : I II
Name of the Ward : HARISH R	Parvathy/Sec : BG CSE-A
Batch : 2015 to 2016	Date : 17/2/14
Please rate the following on a scale of 1-5, with 1 being the minimum and 5 the maximum.	
<b>I Academic &amp; Laboratory Activities</b>	
1. The institution has an effective learning environment. [1] [2] [3] [4] [5] 2. Your ward benefits technologically from the institution. [1] [2] [3] [4] [5] 3. The institution helps achieve high academic standards. [1] [2] [3] [4] [5] 4. The institution's laboratory infra-structure is good. [1] [2] [3] [4] [5]	
<b>II Training &amp; Placement Activities</b>	
1. Your Ward's personality has improved due to the training imparted. [1] [2] [3] [4] [5] 2. Career-counseling and guidance given by the department was useful. [1] [2] [3] [4] [5]	
<b>III Library</b>	
1. The institution's library is resourceful. [1] [2] [3] [4] [5]	
<b>IV (a) Transport (For scholars only)</b>	
1. The fleet of buses maintains time on all days. [1] [2] [3] [4] [5] 2. The institution's transport system is comfortable. [1] [2] [3] [4] [5]	
<b>IV (b) Hostel (Hostellers only)</b>	
1. The rooms and the toilets are well-maintained. [1] [2] [3] [4] [5] 2. The necessary amenities are provided promptly. [1] [2] [3] [4] [5]	
RMKCE/T/COM/F/09 - RC	
V Mess	
1. The Dining hall is hygienic and the food is nutritious. [1] [2] [3] [4] [5]	
<b>VI Co-curricular/Extra-curricular Activities</b>	
1. Intra-annual/cultural activities conducted identified your ward's hidden potential. [1] [2] [3] [4] [5] 2. Sufficient avenues are available to hone your ward's sporting skills. [1] [2] [3] [4] [5] 3. Your ward's Department's association is active and vibrant. [1] [2] [3] [4] [5]	
<b>VII Any Other Suggestions</b>	
 <small>Signature</small>	

**Fig.1.10 Photocopy of parents Feedback**

R.M.K COLLEGE OF ENGINEERING AND TECHNOLOGY  
R.S.M. Nagar , Puduvoyal 601 206  
ALUMNI FEEDBACK FORM – NOVEMBER 2016

Name of Alumnus: Ravath el	Department: CSE	Year of Graduation: 2012		
Please mention your current status:				
a. Campus placed	Yes – TCS			
b. Name of the Organization/Designation	Software Engineer – fidelity investments			
c. Higher Education/Degree/University				
d. Entrepreneur				
e. Others (Specify)				
Dear Alumnus, Please give your overall assessment of our Institute academics and others. Please rate the following criteria: 1 – Satisfactory (S) 2 – Good (G) 3 – Excellent (E)				
Sl.No	Criteria	SATISFACTORY	GOOD	EXCELLENT
1	Teaching Learning process			✓
2	Faculty		✓	
3	Infrastructure & Lab facilities		✓	
4	Support Material		✓	
5	Library	✓		
6	Examination System	✓		
7	Counseling and Guidance	✓		
8	Training & Placement	✓		
9	Project Guidance	✓		
10	Hospitality & Logistics	✓		
11	Hostel Facilities	✓		
12	Environment	✓		
13	Alumni Association	✓		
14	Relevance of curriculum in your job	2T - Database developer / reporting		
15	Application of acquired engineering concepts in the field of your work	Database / unix / reporting		
16	Need any change/inclusion in curriculum and syllabi	Yes – can include more practical/hands on		
17	Need any improvement in teaching learning process	Confirms the same		
18	Suggestions to improve placement activity	personality development		

**Fig.1.11 Photocopy of Alumni Feedback**

R.M.K. GROUP OF INSTITUTIONS  
R.S.M. NAGAR, KAVARAIPETTAI  
TRAINING AND PLACEMENT CELL  
FEEDBACK FORM

Visitor's Name : Krishnaswami S Date : 28/12/13  
Designation : HR  
Name of the organization : Virtusen Consulting Services

S.No	Parameter or aspect	1	2	3	4	5
1	Infrastructure					
2	Lab facilities					
3	Computer Center				✓	
4	Facilities for presentation written test				✓	
5	Students discipline and interaction				—	
6	Staff interaction				✓	
7	Hospitality					✓
8	Students technical Skills			—		✓
9	Students communication Skills		✓			

1) Very Poor      2) Poor      3) Good      4) Very Good      5) Excellent

Suggestions if any for improvement :

1) More Industrial Knowledge about basic concepts  
 2) Awareness of Gen. IT updates  
 3)  
 4)  
 5)

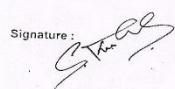
Signature : 

Fig.1.12 Photocopy of Employer Feedback

Table 1.10 Feedback from stakeholders and the significant Action plan

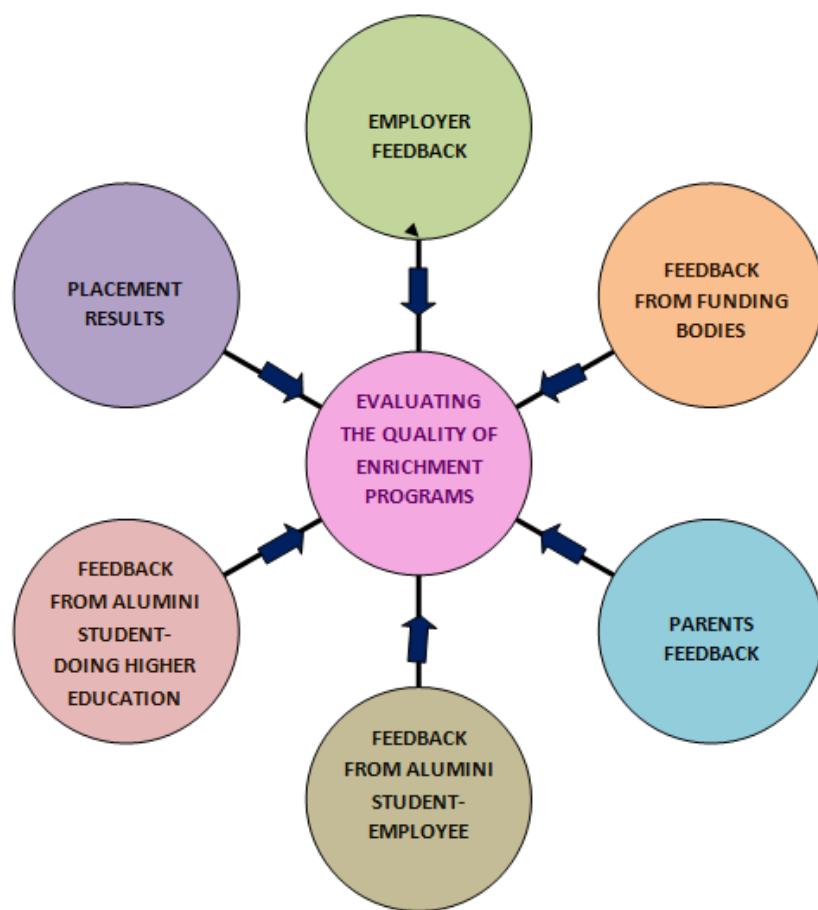
Feedback obtained from	Suggestions given	Action plan
Alumni student as an employee	Exposure on python software is preferred.	Training on python software is Was introduced since 2015.
Alumni student pursuing higher studies	Suggested to lend more support in doing Higher education.	Many training programs on competitive exams like GRE,TOEFL etc., are given.
Employer	Suggestions given to improve student's ability to speak long sentences without Grammar error.	The trainers of BEC Training program were Instructed to give more communication activities.
HR Personnel during Placement Process	Improvement required for students to speak in group discussions.	Group Discussion Activity being practiced in Communication Laboratory was instructed to give more thrust.

### 1.3.6 How does the institution monitor and evaluate the quality of its enrichment programmes?

The value added courses for which certificates are issued on completion are considered as mandatory courses and effective monitoring and assessment are done relevant to the outlook of the course. The other enrichment programs are assessed primarily by the feedback obtained from the participants in the form of interactions, discussions, suggestions and the report is submitted to the Head of the Department. The report will be periodically discussed with the Department Advisory Committee to meet with the desired objectives of the offered enrichment programs.

Academic results and placement results of the institution play a major role in evaluating the quality of the enrichment programs. Feedback from alumni students as employee, pursuing higher education, parents and employers also does a significant role in the assessment of the quality performance of the enrichment courses.

Effective curriculum delivery is monitored and ensured for Quality through IQAC Cell and formal and informal feedbacks.



**Fig.1.13 Quality Evaluation Chart**

## 1.4 Feedback System

### 1.4.1 What are the contributions of the institution in the design and development of the curriculum prepared by the University?

The institution scrupulously follows the curriculum prepared by academic experts of the Anna University. Though the institution has no authority in designing the curriculum, our contribution in the designing is done through recommendations made to the University through the Principal.

The Institution takes much responsibility and care in identifying the needs of the internal and External Stakeholders through a systematic feedback mechanism. The feedback system installed in the Institution facilitates the process of analysis monitored by the College Academic Committee. The various aspects and intricacies of the curriculum are discussed in detail by senior faculty members of our college at the end of every year. The impact factors of the curriculum are analyzed in the College Academic Committee and pertinent suggestions are forwarded to the management. Based on these suggestions and the requirements obtained from the feedback system, the Institute organizes curriculum development programs. Appropriate remedial actions are brought into the academic endeavors of the college under the nomenclature of enrichment or value- added courses.

### 1.4.2 Is there a formal mechanism to obtain feedback from students and stakeholders on Curriculum? If “yes”, how is it communicated to the University and made use internally for curriculum enrichment and introducing changes/new programmes?

Yes, Institute has a formal mechanism to obtain feedback from student, industry, and other eminent personalities in the related areas about the curriculum to know the present need of education that goes parallel with the industrial needs.

The institution takes all possible steps to instill a spirit of enquiry in the minds of young students, which is very essential for understanding and appreciating the prescribed syllabus. The students as well as Alumni of the college are encouraged to express their opinion of the curriculum at the end of their program

These feedbacks are discussed in the Academic Advisory Meetings for introducing and conducting new and innovative programmes to the students in giving them exposure to the industrial trend and need. Sample copies of the feedback form are given in the section 1.3.5

**Table 1.11 Feedback from students and stakeholders and the significant Action plan**

S.No	Suggestions/comments in the Feedback	Suggestion given by	Action taken internally in the institution for curriculum enrichment
1.	Students have to improve Communication.	Employer(TCS)	Suggested BEC trainers to focus more on communication

2.	(i)Improvement required at basics of their streams (ii)Awareness of IT expectations required.	Employer (Tech Mahindra)	Soft skill programs were conducted to improve their ability.
3.	Suggested to include a training on PYTHON software for CSE branch.	Alumni Student as employee	Training on PYTHON is being given since 2015.
4.	Suggested to increase the support given for higher education	Alumni Pursuing higher studies	Higher education Department has taken larger wings in the last two years by conducting GRE, GMAT etc.
5.	Suggested to improve communication skills	Parents	BEC training program is being given intensively.
6.	Suggested to conduct more mock interviews for students	Training and Placement cell	Planned to conduct more number of mock interviews.

With the encouragement of the management, efforts are being taken to teach certain important current topics, beyond the scope of the syllabus, keeping in mind the requirements of the industry. Through well planned Value Added Courses and various co-curricular activities, the institutions strive to improve the employability and overall proficiency of our students who happen to be the principal stake holders.

#### **1.4.3 How many new programmes/courses were introduced by the institution during the last four years? What was the rationale for introducing new courses/programmes?**

No new programs was introduced in the last four years. However many new value added courses were introduced by the institution based on the rationale listed below:

- ❖ To impart diversified knowledge to the society
- ❖ To develop the manpower in the specialized streams of engineering
- ❖ To fulfill local & global industry and social needs
- ❖ To encourage research & development
- ❖ To develop the centre of excellence in related areas

**Table 1.12 List of the new courses and their rationale**

<b>S.NO</b>	<b>Name of the New Courses</b>	<b>Rationale of Introducing</b>	<b>Outcomes of the course</b>
1.	Big Data Analytics	To help the students enhance their knowledge in Data Science.	At the end of this course, students would be able to apply Big Data Analytics techniques on variety of applications.
2.	Cloud Computing	To impart the knowledge about the fundamental concepts of cloud computing	At the end of this course, Students would be able to understand the Protocol for cloud computing and to design applications based on cloud computing.
3.	Digital Enterprise (Mobility)	To impart knowledge in the field of Mobile applications	Students would be able to develop Android or IOS Mobile applications.
4.	Java	To impart the knowledge of java programming language to the students so that they develop web services applications	At the end of this course, students would be able to design apps using java
5.	CCNA	This course helps the students to develop working knowledge of routing, switching, network applications, protocols and services.	At the end of the course, students could build simple LAN topologies by applying basic principles of cabling; performing basic configurations of network devices, including routers and switches; and implementing IP addressing schemes.
6.	Factory Automation (PLC)	To know how to control automated system in industries. They are most advanced and simplest form of control system which are now replacing hard wired	At the end of this course, students would be able to explain the concepts of basic digital electronics and manipulation.  Students would able to design and program basic

		logic relays at larger scales	PLC circuits for entry level PLC- applications.
7.	PLM	To build the project team around people in the product lifecycle who are looking to improve product	At the end of this course, students know how solve the problems and design. Apply the systematic approaches to the conduct and the management of engineering projects.
8.	ZOHO Enrich	Able to learn the basics of programming.	To enrich the programming skills of students.
9.	Wipro PRP	To help the students enhance their knowledge in Java Programming Language.	To train the students in JAVA through 3 milestones.  Milestone 1: Basics of JAVA  Milestone 2:Advanced JAVA  Milestone 3:Web designing.
10.	Information Security	To enrich the Security Management skills for students	Select appropriate techniques to tackle and solve problems in the discipline of information security management
11.	Virtusa Polaris	To familiarize the students with recent front end technology	To enhance the esthetic skills of the students on front end technologies
12.	Wipro Telecom	To provide the foundation for the students to be successful in Telecom Engineering Services.	To enrich the programming skills of the students towards the telecommunication

			application development and practice.
13.	KPIT	To develop the skill set of the students in the field of Automotive Electronics	Students are able to design and analyze the various modules of Automotive
14.	AC & DC Electric Drives	To develop the automation skills	Students are able to control and monitor of machines.

**Any other relevant information regarding curricular aspects which the college would like to include**

The Institution longs for the development of curriculum from the basic program level and feels that it is absolutely essential that the program learning outcomes stand in congruence with the credential framework, existing program standards and the needs of the working place. In other words, the Courses and learning experiences in the program need to be aligned to synchronise with the program learning outcomes. The gap between the course learning outcomes and the program outcomes are to be identified and the requirements rightly resourced and insulated for flawless delivery through enriched curriculum.

# **Criterion II**

## **Teaching-Learning and Evaluation**



**CRITERIA II - TEACHING –LEARNING AND EVALUATION****2.1 STUDENT ENROLMENT AND PROFILE:****2.1.1 How does the college ensure publicity and transparency in the admission process?**

1. R.M.K. College of Engineering and Technology was established in the academic year 2008-2009 by LakshmiKanthammal Educational Trust. RMKCET is a self-financing Engineering College approved by AICTE and affiliated to Anna University, Chennai. It is an ISO 9001: 2015 certified Institution. The Institution offers 4 UG programmes.
2. The admission process through the Government quota as well as the Management quota is completely transparent. TNEA (Tamil Nadu Engineering Admission) is based on merit cum reservation basis through single window system. 50% of the seats are filled in this process as Government Quota. Remaining 50% seats are filled by the Management through self-financed consortium. In the second year 20% of the actual intake is added as lateral entry. TNEA notification is uploaded in the Anna university website and published in all the leading newspapers in Tamil and English at the time of admission process.
3. The Institution ensures the publicity in the following ways.  
Our students who are extremely happy with the way the college is run voluntarily become ambassadors for our college. Besides them the Alumni and Parents of the students too act as advertisers for our college and disseminate through word of mouth.
4. Courses offered by the Institution, admission intake and eligibility criteria are uploaded in the college website for publicity.
5. College prospectus containing the details of the admission process is distributed to the public who sought admission.
6. Anna University publishes the rank list of all affiliated colleges based on the university exam pass percentage every year. Our college continuously maintains its merit by being one among the first 10 top rankers, which gives wide publicity to our college.
7. Our college organizes Zonal level, Inter Zonal level Sports events. This ensures publicity to the Institution amidst the visitors to our campus on these occasions.

**2.1.2 Explain in detail the criteria adopted and process of admission (Ex. (i) merit (ii) common admission test conducted by state agencies and national agencies (iii) combination of merit and entrance test or merit, entrance test and interview (iv) any other to various programmes of the Institution.**

#### **Eligibility:**

#### **For Admission to B.E./ B.Tech Degree Courses:**

The candidate should have passed Tamil Nadu H.S.C (Academic) or an equivalent examinations recognised by Anna University with Mathematics, Physics and Chemistry. Also, candidates who have qualified in H.S.C (Vocational) are eligible for admission in first year. The Candidate should have passed the Diploma examination in Engineering / Technology of the State Board of Technical Education and Training, Tamil Nadu or an equivalent examination for direct admission to second year (Lateral Entry). The candidates with under graduate degree in Science (B.Sc) are also eligible for admission in direct second year. The number of appearances, minimum marks and other criteria for admission to B.E / B.Tech courses are as per AICTE and State Government norms.

#### **Minimum Marks:**

**Table 2.1 Eligibility Criteria for Admission**

	SC/ST	MBC/DNC	BC	OC
<b>H.S.C (Academic) or Equivalent</b>				
a. Mathematics	40%	40%	45%	50%
b. Physics				
c. Chemistry				
<b>H.S.C (Vocational) or Equivalent</b>				
a. Related Subjects	40%	40%	45%	50%
b. Vocational Subjects				
<b>Diploma Holders (Direct Admission in II year)</b>				
a. Pre-Final Semester	40%	40%	45%	50%
b. Final Semester				
<b>Under Graduate (B.Sc)</b>				
a. Pre-Final Semester	40%	40%	45%	50%
b. Final Semester				

#### **Process of Admission:**

1. In all UG programmes 50% of the admissions are filled under Government Quota through single window system. As per the guidelines of Government of Tamil Nadu, Anna University monitors the UG admission for the affiliated colleges based on the marks scored in the H.Sc. Examination.

2. Remaining 50% of the admissions are filled under management quota through another single window system monitored by the consortium of self-financing colleges in Tamil Nadu.
3. Government of Tamil Nadu is not conducting any Common Entrance Test for admission.
4. Candidates from other states will be considered as belonging to OC only, irrespective of their community for the purpose of considering minimum eligibility marks.
5. Application for admission should be made in the prescribed form available along with prospectus. Filled in application forms along with a non-refundable registration fee as stipulated should be sent to the office of the Principal, R.M.K. College of Engineering & Technology, R.S.M. Nagar, Puduvoyal, Pin-601206, Gummidipoondi Taluk, Thiruvallur District.
6. Tuition and other fees prescribed by the college should be paid in full or in instalments before the stipulated date. Due to unavoidable circumstances, if the students discontinue the course, fee paid will be refunded according to AICTE norms.

The decision of the Management will be final in all matters relating to admission, training & discipline and will be binding on all the stakeholders concerned.

**Table 2.2 List of Courses Offered**

Courses	Annual Intake
<b>B.E. Degree Courses</b>	
Computer Science and Engineering	120
Electronics and Communication Engineering	180
Electrical and Electronics Engineering	60
Mechanical Engineering	120

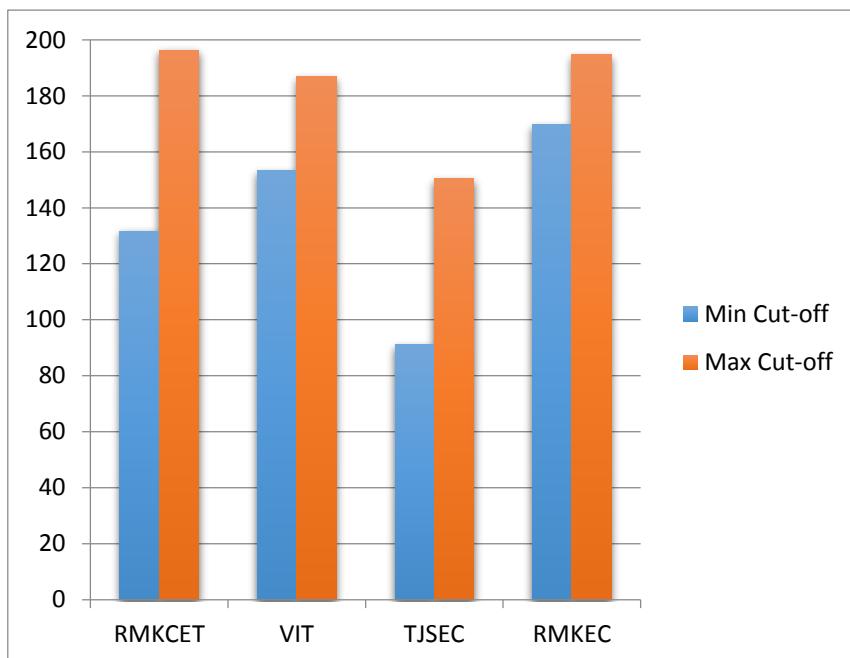
**2.1.3 Give the minimum and maximum percentage of marks for admission at entry level for each of the programmes offered by the college and provide a comparison with other colleges of the affiliating university within the city/district.**

Our Institution offers four UG programmes . The following table gives the Minimum and Maximum Cut off marks for admission at entry level for UG programmes. The cut off marks of the nearby colleges are also provided.

### Minimum and Maximum Cut of Marks for UG Programmes:

**Table 2.3 Minimum and Maximum Cut of Marks for UG Programmes**

Academic Year	Cut Off marks	CSE	ECE	EEE	MECH
<b>2016 – 2017</b>	<b>Max</b>	190.00	186.66	187.00	189.66
	<b>Min</b>	133.00	80.66	128.34	128.34
<b>2015 – 2016</b>	<b>Max</b>	196.3	195.66	195.66	192.34
	<b>Min</b>	131.66	132.66	132.66	129.34
<b>2014 – 2015</b>	<b>Max</b>	193.00	198.34	198.34	196.66
	<b>Min</b>	119.34	122.00	101.34	97.34
<b>2013 – 2014</b>	<b>Max</b>	188.34	191.66	193.34	195.34
	<b>Min</b>	93.00	91.66	103.00	145.34



**Fig. 2.1 Comparison of cut-off percentage for CSE (year 2015-2016)**

### Minimum and Maximum Cut of Marks of RMK Engineering College:

**Table 2.4 Minimum and Maximum Cut of Marks for RMK Engineering College**

Academic Year	Cut off Marks	CSE	ECE	EEE	MECH
<b>2016-2017</b>	<b>Max</b>	197	193.25	195.25	195.50
	<b>Min</b>	153.75	153.25	127	134.75
<b>2015-2016</b>	<b>Max</b>	194.75	195.75	194.75	195.75
	<b>Min</b>	169.75	158	151.5	162.25
<b>2014-2015</b>	<b>Max</b>	195.25	196.25	195.5	196.25
	<b>Min</b>	111.75	159	130	165

### Minimum and Maximum Cut of Marks of Velammal Institute of Technology:

Table 2.5 Minimum and Maximum Cut of Marks for Velammal Institute of Technology

Academic Year	Cut off Marks	CSE	ECE	EEE	MECH
2015-2016	Max	187	188.5	187.25	188
	Min	153.25	109.5	160.5	99
2014-2015	Max	184.5	187	187	186
	Min	118.75	80.25	118.75	81

### Minimum and Maximum Cut of Marks of T.J.S. Engineering College:

Table 2.6 Minimum and Maximum Cut of Marks for T.J.S. Engineering College

Academic Year	Cut off Marks	CSE	ECE	EEE	MECH
2015-2016	Max	150.5	163.25	150.75	169.25
	Min	91.25	97.25	111	110.5
2014-2015	Max	147.5	167.25	160.75	166.5
	Min	84.25	101.25	116.25	128

### 2.1.4 Is there a mechanism in the institution to review the admission process and student profiles annually? If “yes” what is the outcome of such an effort and how has it contributed to the improvement of the process?

Every year the college's top level administration which consists of Principal and HODs meet to analyze the strategy in teaching, setting up of the maximum and minimum cut off marks in each branch, gender wise admission and students with rural and urban background.

More number of indigent students with high marks from economically weaker sections gets opportunity to avail management scholarship. This process improves the academic results and placement.

Due to the admission review process held annually, we are able to plan and attain high pass percentage and retain our rank within top 10 position among the affiliated colleges in Tamil Nadu.

### 2.1.5 Reflecting on the strategies adopted to increase/improve access for following categories of students, enumerate on how the admission policy of the institution and its student profiles demonstrate/reflect the National commitment to diversity and inclusion

- ❖ SC/ST
- ❖ OBC
- ❖ Differently abled
- ❖ Economically weaker sections
- ❖ Minority community
- ❖ Any other

#### SC/ST/OBC:

The reservation policy for the students of SC/ST/OBC is as per the Tamil Nadu Government norms. For each branch of Engineering the

reservations for all the categories are made by the Anna University during the Tamil Nadu Engineering Admissions process through single window system.

### **Differently Abled:**

There are reservations for the differently abled students in single window counseling as per the Tamil Nadu Government norms. The college provides special arrangements like ramps, wheel chairs, toilets for the differently abled student's convenience. The differently abled students feel comfortable in the campus like other students.

### **Economically Weaker Sections:**

For the economically weaker sections, government and other organizations are providing scholarships. Besides that our college is providing scholarship to the economically weaker and meritorious students. **At present 131 students in our campus are availing management scholarships.** The following table gives details of the management scholarship provided during the last four years.

### **Scholarship provided by the Management:**

**Table 2.7 Details of Scholarship provided by the Management**

<b>Sl. No.</b>	<b>Academic Year</b>	<b>No. of Students Availed Management Scholarship</b>	<b>Scholarship Amount</b>
1)	2013 – 2014	31	1,55,000
2)	2014 – 2015	33	1,65,000
3)	2015 – 2016	34	1,70,000
4)	2016 – 2017	33	1,65,000
<b>TOTAL</b>		<b>131</b>	<b>6,55,000</b>

### **Minority Community:**

As per the Tamil Nadu Government norms, reservations are provided to the students belonging to the minority community during the single window counseling.

### **Any Other (First Generation Graduates)**

To encourage the first generation graduate students from rural family, Government of Tamil Nadu has introduced 20000/- Tuition Fee waiver scheme for them. This amount is paid by Tamil Nadu government to the college for the students admitted in this category. As per AICTE and Anna University norms the college admits the students through fee waiver scheme.

**2.1.6 Provide the following details for various programmes offered by the institution during the last four years and comment on the trends. i.e. reasons for increase / decrease and actions initiated for improvement**

The students select our college by considering the infrastructure facilities available, academic results in university examination, discipline, parental care and placement activities. The seats under management quota are filled through another single window system through the consortium of self-financing colleges in Tamil Nadu.

**Table 2.8 Details of Student Application, Admission and Demand Ratio**

S.No	Prog.	2013 – 2014			2014 – 2015			2015 – 2016			2016 – 2017		
		X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z
1	CSE	120	119	1:1	120	120	1:1	120	119	1:1	120	119	1:1
2	ECE	180	175	1:1	180	179	1:1	180	180	1:1	180	176	1:1
3	EEE	60	58	1:1	60	58	1:1	60	58	1:1	60	58	1:1
4	ME	120	118	1:1	120	115	1:1	120	119	1:1	120	118	1:1

**X – No of Applications**

**Y – No of Students Admitted**

**Z – Demand Ratio**

ST category seats remain vacant due to non-availability of the students. During the academic year 2013-14, the trend for CSE admissions was declining due to job opportunity in software sectors. In the subsequent years, care was taken to enhance training and placement activities. The college has created many Centres of Excellence (COE) to upgrade the students to meet the requirements of Industries.

## 2.2 CATERING TO STUDENT DIVERSITY

**2.2.1 How does the institution cater to the needs of differently- abled students and ensure adherence to government policies in this regard?**

Special care is taken for differently- abled students to make their stay in the institution comfortable and conducive for their learning. The college has provided well - laid roads within the campus. The class rooms, where the differently- abled students are attending are normally provided in the ground floor. The institution aims at creating a friendly environment for this category of students. They are provided front-row seating arrangement and comfortable furniture. Library staff helps them in their library hours for book borrowing etc. Food will be provided to them in the classroom. Examination hall is provided in ground floor. They are allowed to use their own transport for their convenience. They are also provided support in laboratory and workshops. Such students are entrusted to the faculty counselors who take care of their

specific requirements. There is a separate reservation for the physically challenged students as per the Anna University norms. Moreover, tuition fee waiver scheme given by government is applicable to all differently-abled students.

**2.2.2 Does the institution assess the students' needs in terms of knowledge and skills before the commencement of the programme? If "yes", give details on the process.**

Yes, an orientation / induction programme is organized by the Institution at the beginning of the I<sup>st</sup> year. The induction Programme begins with a formal inauguration, with motivational speech by Corporate Trainer & Graphologist and Career Consultant & Analyst. This orientation Programme provides information to the students about the facilities and features of the institution and the present scenario in the Corporate World. The students are also motivated in various aspects such as exposure to placement, higher studies etc. The institution conducts bridge courses to the First year students to enrich their knowledge in specific basis required for engineering stream.

Based on these results, the students are divided into various groups to impart the following skills and knowledge programmes.

- ❖ Bridge courses are conducted for the subjects like Mathematics, Physics, Chemistry, English and Engineering Graphics for the student concerned

The faculty members interact formally as well as informally with the students during the first week of the programme to make the students get acquainted with the new environment.

**Materials Distributed:**

The following materials are distributed to the students on the day of orientation:

- ❖ Academic Calendar
- ❖ Prescribed Text Books
- ❖ All materials relevant to First year Programme (like drafter, chart holder, lab uniform, etc.)

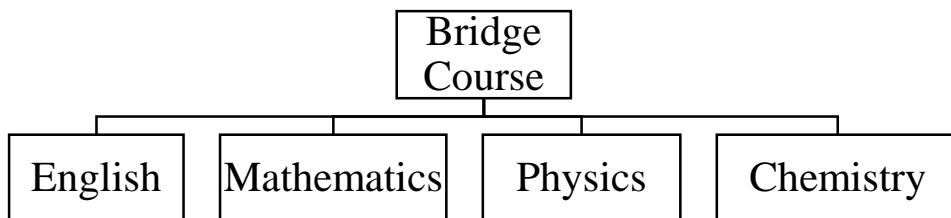
**2.2.3 What are the strategies drawn and deployed by the institution to bridge the knowledge gap of the enrolled students to enable them to cope with the programme of their choice? (Bridge/Remedial/Add-on/Enrichment Courses, etc.)**

Yes, the College provides Bridge / Remedial / Add - on courses / Enrichment Courses.

**Bridge Courses:**

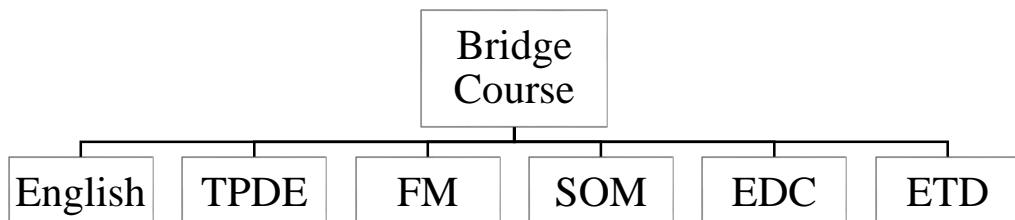
Bridge courses are conducted for the first year students and second year lateral entry students to enable smooth transition into college environment from school and polytechnic level respectively. Most of the students getting admitted to the institution who come from various disciplines particularly from vernacular medium have major problem in English, the medium of instruction in the college. Remedial course is conducted for Vocational students on the

subjects like Physics and Chemistry. The flow chart given below shows the type of bridge course conducted for first year.



**Fig. 2.2 Bridge Course for Fresher's**

For lateral entry students, this remedial course is conducted for providing fundamentals of mathematics. At the end of the course, tests are conducted to evaluate the acquired knowledge. Based on the feedback, subject faculty plans the teaching process. At the end of the course, tests are conducted to evaluate the acquired knowledge. Based on the feedback, subject faculty plans the teaching process. The flow chart below is a bridge course conducted for the lateral entry students of Mechanical Engineering Branch.

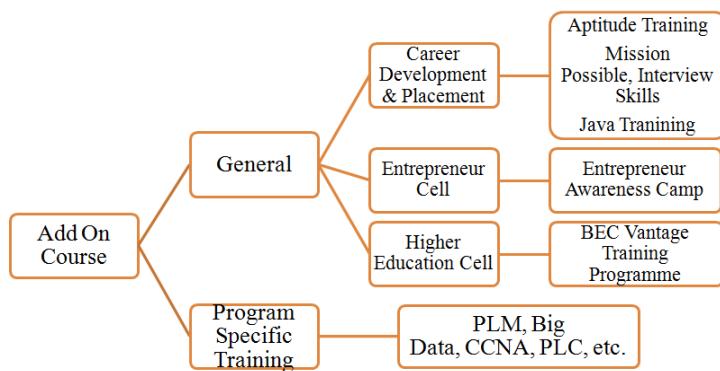


**Fig. 2.3 Bridge Course for Lateral Entry Mechanical Engineering Students  
Remedial Classes:**

The institution conducts remedial classes for slow learners to increase their skills and competence. The slow learners are identified on the basis of their academic performance in the previous semester, classroom performance and regularity in submission of class works and assignments and personal interactions. Class-in-charges assigned for every class takes special care to monitor, guide and help the slow learners and for the improvement of the studies. Internal Assessment tests are conducted to assess their subject knowledge. After the completion of every Internal Assessment test, the slow learners are counseled by the Year Coordinator, Class- in-charge, Counselor and senior faculty to guide them by providing necessary suggestions to ensure improvement in studies and any other personnel issues.

#### **Add on Courses:**

The college organizes a meeting exclusively for the Second Year students of all Branches, explaining the advantage of BEC Vantage Training and other placement training program. Third year students are made to attend programmes conducted by Entrepreneurship, Placement, Career guidance and Higher education Cell. The students are given additional training in the area of their choice to achieve their future goals. The flow chart shows different types of Add-on Course for our students

**Fig. 2.4 Add – on Course Chart**

**Add on Programme:** Students are equipped with value added courses and programme specific courses for improving their technical skills.

**Table 2.9 Details of Add – on Course**

SL. No	Department	Add-on Course	About Course
1.	Computer Science	COE – Mobility, Big Data,	<p>Big Data and Mobility are the two booming platforms in the Software industries. Our Centre of Excellence helps to achieve the following:</p> <p>To provide Big Data Analytics Course to the students in collaboration with iNautix</p> <p>To create a platform for the students in acquiring the technology trends in the field of Big Data Analytics through Industry Internship</p> <p>To prepare the students for a successful career in Big Data Analytics technology as expected by the Industry</p>
2.	Electronics and Communication	CCNA	<p>The CCNA certification has been devised by CISCO and stands for Cisco Certified Network Associate. The certificate validates a professional's ability to understand, operate, configure and troubleshoot medium-level switched and routed networks and also includes the verification and implementation of connections via remote sites using WAN. The broad sets of topics covered under CCNA certification include: WAN and LAN design</p> <ul style="list-style-type: none"> <li>❖ OSI models</li> <li>❖ IP addressing</li> <li>❖ VLAN and WLAN</li> </ul>

			<ul style="list-style-type: none"> <li>❖ Routers / routing protocols (includes EIGRP, RIP and OSPF)</li> <li>❖ Network security and management (ACL included).</li> </ul> <p>The onetime CCNA certification is valid for three years after which candidates need to re-establish their qualification. This is in view of the constantly changing technology and software upgrades. Thus to enhance knowledge in networking domain this course has been added as a value added program for our students.</p>
3.	Electrical and Electronics	Programmable Logic Controller (PLC)	PLCs are evolving and continue to be the best option for a variety of industrial automation applications. Greater programming flexibility and ease, scalability, more memory, smaller sizes, very high-speed (Gigabit) Ethernet, and built-in wireless are among evolving programmable logic controller features. Considering the demand and the requirement a PLC course has been added as a value added program to train our students.
4.	Mechanical	Product Life Cycle Management (PLM)	<b>“Product Life Cycle Management” (PLM)</b> as the present digital platform for mechanical industries to handle CAD and manufacturing data. This PLM has wide implementation in all type of industries, which includes process, manufacturing etc. Considering the demand and the requirement a PLM course has been added as a value added program to train our students.

#### 2.2.4 How does the college sensitize its staff and students on issues such as gender, inclusion, environment etc.?

Separate entrance and staircases are provided for boys and girls in every block. Girls and boys are seated in separate benches in class rooms. Male and female faculty members are given separate faculty rooms with required facilities. Women's day is celebrated every year which highlights their specialty. During PET hours separate staff is assigned for girl students. The girl students are given equal role in various activities such as class committees, YRC and so on. However, equal representation is given to the students while formulating class committees.

#### 2.2.5 How does the institution identify and respond to special educational/ learning needs of advanced learners?

The advanced learners are identified based on

- ❖ Their interest in presenting papers in conference and coming out with innovative ideas
- ❖ Performance in internal tests and University examinations
- ❖ Regular attendance to classes
- ❖ The performance in lab and monthly tests
- ❖ Their participation in competitions organized by various colleges and agencies
- ❖ Their performance in Co-Curricular and Extra-Curricular Activities
- ❖ Their learning skills, aptitude for advancements in technologies and leadership qualities

### **The following are the initiatives**

- ❖ Advanced learners are motivated to take part in discussion forum and self-learning through quality video materials like NPTEL
- ❖ They are guided to take part in programming contest, project contest such as Infosys Campus Connect, Design projects and paper presentation.
- ❖ They are supported for getting internship with leading Companies such as Infosys, Wipro, iNautix.
- ❖ They are led to participate in Value added courses, Certification courses like, JAVA, PLM Certification and so on.
- ❖ They are encouraged to prepare for GATE, GRE tests and the like for their higher studies
- ❖ They are involved in consultancy work along with the faculty members to get good work exposure.
- ❖ Students along with faculty members involve in their research work thereby enhancing their knowledge
- ❖ Institution itself conducts Workshop, Seminar, Hands on training, Conference and other programmes in all the departments at periodic intervals and encourage students to participate.
- ❖ Faculty handle classes covering recent and advanced topics related to the subject, beyond the syllabus to cater to the needs of advanced learners.
- ❖ Best performing Students are encouraged to apply for various awards

#### **2.2.6 How does the institute collect, analyze and use the data and information on the academic performance (through the programme duration) of the students at risk of drop out (students from the disadvantaged sections of society, physically challenged, slow learners, economically weaker sections etc. who may discontinue their studies if some sort of support is not provided)?**

The dropout number or number of students at risk of drop out is very less every year. Those few students who leave the institution, do so only join to in Medical or other professional streams. One or two students leave because of their inability to cope up with studies even after regular counselling by counselors. The drop out details are presented in table below.

**Table 2.10 Dropout Student Details**

<b>Batch</b>	<b>Department</b>	<b>Total No of Students</b>	<b>No of Drop Out Students</b>	<b>% of Dropout</b>
<b>2016 – 2020</b>	CSE	120	01	0.83
	ECE	180	04	2.22
	EEE	58	-	-
	MECH	118	-	-
	<b>TOTAL</b>	<b>476</b>	<b>05</b>	<b>1.05</b>
<b>2015 – 2019</b>	CSE	121	02	1.65
	ECE	183	05	2.72
	EEE	72	01	1.38
	MECH	139	04	2.87
	<b>TOTAL</b>	<b>515</b>	<b>12</b>	<b>2.33</b>
<b>2014 – 2018</b>	CSE	121	01	0.82
	ECE	202	04	1.98
	EEE	72	02	2.77
	MECH	144	02	1.38
	<b>TOTAL</b>	<b>539</b>	<b>09</b>	<b>1.67</b>
<b>2013 – 2017</b>	CSE	114	03	2.63
	ECE	191	05	2.61
	EEE	60	-	-
	MECH	138	05	3.62
	IT	48	01	2.08
	<b>TOTAL</b>	<b>551</b>	<b>14</b>	<b>2.54</b>

### 2.3 TEACHING-LEARNING PROCESS

#### 2.3.1 How does the College plan and organize the teaching, learning and evaluation schedules? (Academic calendar, Teaching plan, Evaluation blue print, etc.)

1. The College frames the academic calendar at the beginning of each semester. The academic year comprises of two semesters: the first semester from June to November and the second semester from December to April. The calendar is prepared in compliance with the University academic schedule. The academic activities like practical and theory examinations are conducted according to the schedule framed by the University. A hard copy of the calendar is given to all the students and faculty and also available in the college website.

RMK COLLEGE OF ENGINEERING AND TECHNOLOGY					
Higher sem Calendar for Even Semester (Academic Year 2016 - 17)					
DECEMBER 2016			JANUARY 2017		
Date	Day	No. of Working Days	II / III YEAR / B.E.	Remarks	
1	THU				
2	FRI				
3	SAT				
4	SUN		Holiday		
5	MON		Holiday		
6	TUE				
7	WED				
8	THU				
9	FRI				
10	SAT				
11	SUN		Holiday		
12	MON		Holiday		
13	TUE				
14	WED				
15	THU	1	<b>Commencement of Training &amp; Placement Activities</b>		
16	FRI	2			
17	SAT	3			
18	SUN		Holiday		
19	MON	4	Tuesday Day Order		
20	TUE	5			
21	WED	6			
22	THU	7			
23	FRI	8			
24	SAT	9			
25	SUN		Christmas - Holiday		
26	MON	10	Thursday Day Order		
27	TUE	11			
28	WED	12			
29	THU	13			
30	FRI	14			
31	SAT	15			
No. of Working days : 15			Cumulative : 15		
FEBRUARY 2017					
Date	Day	No. of Working Days	II / III YEAR / B.E.	Remarks	
1	WED		First Internal Assessment Subject 1		
2	THU		First Internal Assessment Subject 2		
3	FRI		First Internal Assessment Subject 3		
4	SAT		First Internal Assessment Subject 4		
5	SUN		Holiday		
6	MON		First Internal Assessment Subject 5 - Thursday Day Order		
7	TUE		First Internal Assessment Subject 6		
8	WED	32			
9	THU	33			
10	FRI	34			
11	SAT	35			
12	SUN		Holiday		
13	MON		Holiday		
14	TUE	36			
15	WED	37			
16	THU	38			
17	FRI	39			
18	SAT	40			
19	SUN		Holiday		
20	MON	41	Friday Day Order		
21	TUE	42			
22	WED	43			
23	THU	44			
24	FRI	45			
25	SAT		Holiday		
26	SUN		Holiday		
27	MON		Holiday		
28	TUE	46			
No. of Working days : 15			Cumulative : 46		
MARCH 2017					
Date	Day	No. of Working Days	II / III YEAR / B.E.	Remarks	
1	WED	47			
2	THU	48			
3	FRI	49			
4	SAT	50			
5	SUN		Holiday		
6	MON	51	Saturday Day Order		
7	TUE	52			
8	WED		Second Internal Assessment Subject 1		
9	THU		Second Internal Assessment Subject 2		
10	FRI		Second Internal Assessment Subject 3		
11	SAT		Second Internal Assessment Subject 4		
12	SUN		Holiday		
13	MON		Holiday		
14	TUE		Second Internal Assessment Subject 5		
15	WED		Second Internal Assessment Subject 6		
16	THU	53			
17	FRI	54			
18	SAT	55			
19	SUN		Holiday		
20	MON	56	Thursday Day Order		
21	TUE	57			
22	WED	58			
23	THU	59			
24	FRI	60			
25	SAT	61			
26	SUN		Holiday		
27	MON	62			
28	TUE				
29	WED		Telugu New Year - Holiday		
30	THU		Model Examination Subject 1		
31	FRI				
No. of Working days : 16			Cumulative : 62		
APRIL 2017					
Date	Day	No. of Working Days	II / III YEAR / B.E.	Remarks	
1	SAT		Model Examination Subject 2		
2	SUN		Holiday		
3	MON		Model Examination Subject 3 - Tuesday Day Order		
4	TUE				
5	WED		Model Examination Subject 4		
6	THU				
7	FRI		Commemoration Day of Smt. Manjula Munirathnam Founder - Chairperson		
8	SAT		Model Examination Subject 5		
9	SUN		Holiday		
10	MON		Model Examination Subject 6 - Wednesday Day Order		
11	TUE				
12	WED				
13	THU				
14	FRI		Tamil New Years Day, Dr.B.R.Ambedkar's Birthday and Good Friday - Holiday		
15	SAT		Holiday		
16	SUN		Holiday		
17	MON		<b>Commencement of University Practical Examinations</b>		
18	TUE				
19	WED				
20	THU				
21	FRI				
22	SAT				
23	SUN		Holiday		
24	MON				
25	TUE				
26	WED				
27	THU		Commencement of University Theory Examinations		
28	FRI				
29	SAT				
30	SUN		Holiday		
No. of Working days : 1			Cumulative : 1		
MAY 2017					
Date	Day	No. of Working Days	II / III YEAR / B.E.	Remarks	
1	MON			May day - Holiday	
2	TUE				
3	WED				
4	THU				
5	FRI				
6	SAT				
7	SUN		Holiday		
8	MON			Holiday	
9	TUE				
10	WED				
11	THU				
12	FRI				
13	SAT				
14	SUN		Holiday		
15	MON			Holiday	
16	TUE				
17	WED				
18	THU				
19	FRI				
20	SAT				
21	SUN		Holiday		
22	MON			Holiday	
23	TUE				
24	WED				
25	THU				
26	FRI				
27	SAT				
28	SUN		Holiday		
29	MON			Holiday	
30	TUE				
31	WED				
No. of Working days : 1			Cumulative : 1		

Fig. 2.5 Academic Calendar

2. The Academic Calendar also carries important information about the institution like, its Vision, Mission, POs, PSO, College Governing Council members, details regarding library, hostels, transport facilities, Rules and Regulations to be observed in the college and hostel.
3. The class time table is also prepared well before the commencement of classes in discussion with the overall time table coordinator. A sample of time table is attached.

**R.M.K. COLLEGE OF ENGINEERING AND TECHNOLOGY**  
RSM NAGAR, PUDUVLOYAL-601206  
**CLASS TIME TABLE FOR THE ACADEMIC YEAR 2016 – 2017**  
**ODD SEMESTER**

<b>YEAR: II</b>	<b>SEMESTER: III</b>	<b>BRANCH: MECH - A</b>	<b>ROOM NO: ME 202</b>					
<b>WITH EFFECT FROM 27/08/2016</b>								
DAY	1	2	3	4	5	6	7	8
TUE	CE6451	MA6351	ME6311 / CE6461			EE6351	CE6451	Sports / Internet *
WED	CE6451	CE6306	CE6306	ME6302	CE6451	Library	MA6351	ME6301
THU	ME6301	CE6306	MA6351	ME6301		EE6365		ME6302
FRI	ME6302	CE6306	CE6306	EE6351	MA6351	ME6301 / CE6451 (T)	EE6351	
SAT	EE6351		CE6461 / ME6311		ME6301	MA6351	ME6301	-

S.NO	SUBJECT CODE	SUBJECT NAME	STAFF NAME	NO.OF PERIODS
1	MA6351	Transforms & Partial Differential Equations	Mr. J. Leo Amalraj	05
2	ME6301	Engineering Thermodynamics	Mr.C.Bibin	06
3	ME6302	Manufacturing Technology – I	Mr.T.G.Loganathan	03
4	CE6306	Strength of Materials	Dr. S.Bhagavathi Perumal	05
5	CE6451	Fluid Mechanics & Machinery	Mr.N.Sadasivan	05
6	EE6351	Electrical Drives & Controls	Mr. L.UmaSankar	04
7	ME6311	Manufacturing Technology Lab – I	Mr.M.Saravanan	03
8	CE6461	Fluid Mechanics & Machinery Lab	Mr.K.Rajesh	03
9	EE6365	Electrical Engineering Lab	Mr.Dilvar Basha Ms.B.Nagarani	03
10	-	Library / Placement Activities	Mr.S.Senthil Gavaskar	01
11	-	Internet / Sports	Mr.C.Bibin	01
<b>TOTAL</b>				<b>39</b>

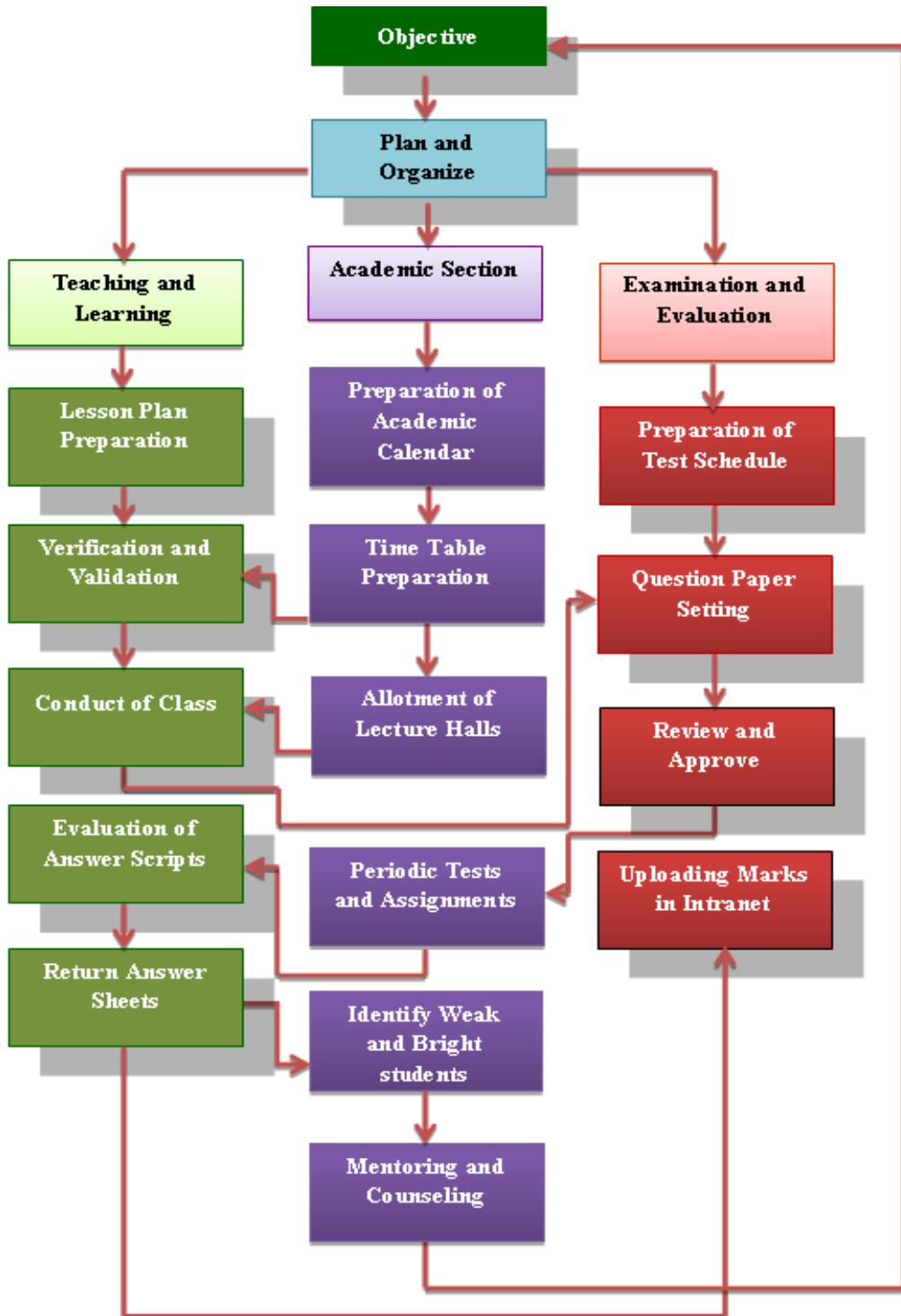
Lunch Timing: 12.50P.M - 01.20 P.M      T – Tutorial      \*Alternative Week  
Class in-Charge: Mr. S. Senthil Gavaskar      Class Counselors: Mr. S. Senthil Gavaskar  
Mr. C. Hemadri  
Ass Committee Chairperson: Dr.P.K.Devan

TTC      HoD      AC      PRINCIPAL

Fig. 2.6 Class Time Table

4. Tutorial classes are conducted for analytical subjects. A separate period is allotted for tutorial classes in regular time table.
5. To improve communication and presentation skills, every week a seminar period is included in the regular time table.
6. Before the start of semester, faculty members are requested to fill the subject willingness form for the upcoming semester. Based on the experience and the specialization subjects are allotted to faculty by Head of Department.
7. Detailed lesson plan is prepared by each faculty based on the academic calendar and their respective time table. Based on the lesson plan the faculty completes the syllabus in order to adhere to the academic calendar. Notes of lesson, two mark questions with answer, question bank and lab manuals are prepared and distributed to the students. The classroom learning and laboratory practice continue as per the plan.
8. There are three cycle of tests spread evenly over the entire period of the semester namely the Internal Assessment Test I (IAT-I), Internal Assessment Test II (IAT-II) and Model exam. The time table for the tests is given at least a week ahead of commencement of tests.

9. In order to ensure foolproof exams, questions are picked randomly from question bank by using software and the access is given only for exam cell. This question bank is prepared by the subject handling faculty and sent to the exam cell at least a week in advance. The key for the question paper is prepared by the subject coordinator in discussion with the subject teachers, on the day of exam, and is submitted to the exam cell on the same day.
10. The tests are conducted centrally, for 3 hours and the answer scripts are evaluated and given back to the students within two working days. The end semester examinations are conducted by the Anna University.
11. After each test, the student's performance is analyzed and an assessment is made for each subject. Then a result analysis meeting is conducted by Principal with HODs and Faculty members. The performances of students are discussed, and steps are initiated to overcome the inadequacies if any in the teaching-learning process. Suitable special classes are planned for the average and poor performers.
12. Class Committee meetings are conducted by Year Coordinator with student representatives from each class. Students share their grievances in teaching and learning in class room, also specify any difficulties in understanding subjects
13. The marks for every cycle test are communicated to the parents through SMS. Parents of poor performing student's are invited to meet the HOD and the Principal for the betterment of the students.
14. Each faculty acts as counselor for a group of 20 students and they monitor and counsel the students for their academic and personal problems. Slow and average performers are given extra care.



**Fig. 2.7 Flowchart for Planning and Organizing related to Teaching, Learning and Evaluation**

### **2.3.2 How does IQAC contribute to improve the teaching learning process?**

IQAC takes care of continuous monitoring of teaching learning process. The IQAC develops a system for consistent improvement of the academic and administrative performance of the Institution. It also helps the management in achieving the Quality Objectives. IQAC assists the institute for applying and complying to the National/ International Accreditation

**2.3.3. How learning is made more student-centric? Give details on the support structures and systems available for teachers to develop skills like interactive learning, collaborative learning and independent learning among the students?**

- 1) The teaching learning process is designed in a student-centric way by providing an interactive, collaborative and independent learning atmosphere.
- 2) Faculty members encourage students to take part seminars in their classes and students deliver papers in the seminar on a pre-assigned topic which promotes their self-learning capability.
- 3) A separate Seminar period is allocated in the timetable during which the student presents their topics in front of the class and an evaluation sheet is filled based on the content, communication and quality presentation by the corresponding faculty in the class.
- 4) Alumni of the institution working in various reputed companies visit our college and interact with the students on a regular basis. This provides an update about the recent trends of the industry, to the student as a result of which the student understands the need of the industry and to take-up additional courses apart from curriculum.
- 5) Every semester two industrial visits are arranged for students to keep them on par with the industrial needs.
- 6) Tutorial classes for analytical subjects are conducted regularly which are part of the regular timetable. During that hour, students solve the problem independently and faculty clarifies their doubts individually.
- 7) Students work on mini-projects and projects by interacting with faculty members, who guide them in making innovative working models, which creates a healthy learning opportunity for the students.
- 8) Students are encouraged to undergo in plant training in various industries to have a collaborative learning.
- 9) Once in a year every department conducts technical symposium for outside students. The symposium is organized by the students under the guidance of the faculty members, which creates a good team spirit and self-learning atmosphere among the students
- 10) The central library has a huge collection of books on various titles, journals, CDs etc. Also NPTEL videos are available for various subjects which promote the self-learning capability of the students.
- 11) The students projects are converted into papers and students are encouraged by the faculty members to present their papers in various conferences, which provide them a good exposure.
- 12) Students are encouraged to attend seminar, workshops, conferences, etc to have knowledge on developments in various fields of engineering.
- 13) Internet period is allocated in the timetable during when the students surf the internet regarding their project ideas.
- 14) Faculty Members encourage the students to become members of various professional bodies SAE, IIP, ISTE, IET, IEEE, CSI, etc. By becoming members the students are the direct beneficiaries enabling them to attend various programmes arranged by the societies.(Professional Bodies of various departments)

Apart from the technical societies, students interested to pursue business as their career are enrolled as members of the Entrepreneurship Development Cell (EDC). The EDC arranges regular guest lecturers addressed by well accomplished entrepreneurs who serve as a source of motivation for the students

**2.3.4 How does the institution nurture critical thinking, creativity and scientific temper among the students to transform them into lifelong learners and innovators?**

- 1) Students are motivated to work on innovative mini projects and projects under the guidance of the faculty members, which enhances their critical thinking
- 2) Students work along with faculty in research projects and they are directed to do surveys, conduct experiments and to validate the results.
- 3) Faculty pursuing Ph.D, engage students in their area of study, which sows the seed of critical thinking
- 4) Students entering the department from 1<sup>st</sup> year are enrolled into the department association, which provide them a wide opportunity to actively participate in various technical events of the department
- 5) Students are encouraged to undergo in plant training and Industrial visits which are arranged regularly to impart industrial awareness to the students.
- 6) To cultivate the habit of reading among the students, a separate period for library is allocated in the regular timetable.
- 7) Students often participate in events conducted by various professional societies conducted at various places, which create a good exposure for them enabling lifelong learning
- 8) Adjunct faculty visiting the college regularly kindle the creativity of students community creating a scientific temper among them, paving way for the process of lifelong learning
- 9) MOUs are signed with various industries for providing hands on industrial training for the students, which nurtures a habit of learning
- 10) Student projects are reviewed by a team of well experienced faculty and prizes are awarded to the batch of students who come out with best project.
- 11) Socially relevant projects, App development are recognized and based on the scale of innovation, Patents are applied
- 12) To cultivate innovation among students, various journals such as Science Direct, Springer, ASME etc., are subscribed by the college.
- 13) To motivate students in the path of academics and research, student with best academic and research record is honoured with the best outgoing student award and cash reward.
- 14) National science day is organized every year and students are encouraged to participate in project exhibition. Prizes are awarded for the best project of that exhibition.
- 15) Apart from the technical societies, students interested to pursue business as their career are enrolled as members of the Entrepreneurship Development Cell (EDC). The EDC arranges regular guest lecturers addressed by well accomplished entrepreneurs who serve as a source of motivation for the students

**2.3.5 What are the technologies and facilities available and used by the faculty for effective teaching? Eg: Virtual laboratories, e-learning - resources from National Programme on Technology Enhanced Learning (NPTEL) and National Mission on Education through Information and Communication Technology (NME-ICT), open educational resources, mobile education, etc.**

Innovative practices in teaching methodologies are added to assure the enhancement of our academic quality. The use of modern multimedia teaching aids like OHP, LCD projectors, internet enabled computer systems are used in classroom instructions as well as in other students learning activities. Faculty uses the following teaching aids in addition to the lecture method:

- 1) Faculty members prepare detailed power point presentations on various topics for their respective subjects for effective teaching
- 2) Faculty members use OHP and LCD projectors for multimedia presentation. All the seminar halls are furnished with AV facility to provide video lectures and webinars.
- 3) All the departments have the latest software in their laboratories. Faculty members utilize this facility for the innovative teaching and research.
- 4) NPTEL video courses for many subjects, video lectures by the experts, e- journal facilities are available in our library for knowledge enrichment.
- 5) Our campus has high speed internet facility for the advanced learning of the students and for accessing open e- sources, free software, e- books etc. Hostel has Wi Fi facility with a speed of 115 Mbps internet facility for hostel students to prepare for assignment, seminar, competitive examinations, projects, etc.,
- 6) Working prototype models are also shown in the classrooms, field visits, and demonstrations are also incorporated in teaching methodology
- 7) National Programme on Technology Enhanced Learning (NPTEL):

Our faculty is keen on introducing the e-learning online Web and Video courses to our students. All departments use NPTEL course content as a teaching tool. Lecture videos, handouts and assignments of various NPTEL courses are made available to students. Also some students and faculty have registered and written the NPTEL exams conducted by the IITs in various subjects. The subjects are shown below.

**Table 2.11 List of NPTEL Course**

<b>Sl.no</b>	<b>Department</b>	<b>Course Name</b>
1.	Computer Science	<p><b>NPTEL Courses List:</b></p> <ul style="list-style-type: none"> <li>1. Programming, data structures and algorithms in python</li> <li>2. Object oriented analysis and design</li> <li>3. Programming in C++</li> <li>4. Introduction to modern application development</li> <li>5. Design and analysis of algorithms</li> <li>6. Machine learning</li> <li>7. An introduction to Haskell programming</li> </ul>

		<ul style="list-style-type: none"> <li>8. Algorithms for big data</li> <li>9. Theory of computation</li> <li>10. Mobile computing</li> <li>11. Privacy and security in online social media</li> </ul>
2	Electronics and Communication	<p><b>NPTEL online Course</b></p> <ul style="list-style-type: none"> <li>1. Programming in Data Structures &amp; Python</li> <li>2. Basic Electric Circuits</li> <li>3. Basic Electronics</li> <li>4. Antennas</li> <li>5. Analog Circuit Design</li> <li>6. Principles of Communication Systems II</li> <li>7. Digital VLSI Testing</li> <li>8. Programming in C++</li> <li>9. Embedded Systems Design</li> <li>10. Medical Image Analysis</li> <li>11. RF and Microwave filters and Amplifier Design</li> </ul>
3	Electrical and Electronics	<p><b>NPTEL online Course</b></p> <ul style="list-style-type: none"> <li>1. Basic Electrical Circuits</li> <li>2. VLSI Design Verification and test</li> <li>3. Introduction to Electromagnetic Theory</li> <li>4. Digital Switching – I</li> <li>5. Fiber Optics</li> <li>6. Discrete Time Signal Processing</li> <li>7. Design and Simulation of DC-DC Converters</li> <li>8. Digital VLSI Testing</li> <li>9. Basic Electronics</li> </ul>
4.	Mechanical	<p><b>NPTEL online Course</b></p> <ul style="list-style-type: none"> <li>1. Fluid Mechanics</li> <li>2. Thermodynamics</li> <li>3. Basics of Finite Element Analysis</li> <li>4. Nature and property of materials</li> <li>5. Fluid dynamics and turbo machines</li> <li>6. Joining Technologies for Metals</li> <li>7. Steam and Gas Power Systems</li> <li>8. Manufacturing Process Technology I &amp; II</li> <li>9. Engineering Mechanics: Statics and Dynamics</li> <li>10. Introduction to Mechanical Vibration</li> <li>11. Introduction to Fluid Mechanics</li> <li>12. Product Design and Development</li> <li>13. Convective Heat Transfer</li> <li>14. Non Traditional Abrasive Machining Processes- Ultrasonic, Abrasive Jet and Abrasive Water Jet Machining</li> <li>15. Engineering Thermodynamics</li> </ul>

		16. Waste to Energy Conversion 17. Principles of Vibration Control 18. Programming in C++
5	Science and Humanities	1. Speaking English Effectively 2. Probability and Stochastics for Finance

**2.3.6 How are the students and faculty exposed to advanced level of knowledge and skills (blended learning, expert lectures, seminars, workshops etc.)?**

- 1) Faculty Development Programmes, Conferences, Workshops, Refresher Course etc. are arranged by the college for the faculty members.
- 2) The College also sponsors the faculty members to attend FDP, Conferences, Seminar, and Workshop outside the college for interacting with experts in their field and help them update with recent global developments.
- 3) Faculty members are sponsored for doing Ph.D. degree in different university such as Anna University, IIT, NIT etc. and to publish papers in reputed journals.
- 4) R&D is promoted and efforts are made to obtain sponsored R&D and consultancy projects.
- 5) Faculty members undergo industrial trainings, which enrich their knowledge, skills and give hands-on experience to them.
- 6) Senior faculty become members on board of various industries, which also serves as a platform to bring knowledge and skill to students
- 7) Guest lectures by eminent people from industries/other academic institutions like IIT, NIT and Anna University are arranged at regular intervals for the students and faculty.
- 8) IEEE, Science direct access is available. There are good collections of recently published books in the main/department libraries.
- 9) The institute encourages students to register online courses for promoting continuous learning programmes, academic enhancement programmes, conferences and workshops by providing attendance on duty.
- 10) Professional bodies like SAE, IIP, ISTE, IET, IEEE, CSI, etc., organize events such as Guest lecturers/seminars and conferences in order to create awareness of advances in technology specific to their branches.
- 11) Value added courses are conducted in the departments to inculcate advanced skill in the students.

**Events Organized:**

Faculty Development Programmes / Seminars / Workshops are arranged by the college for enhancing the technical skills of the faculty and student members. In the last four years our college organized many programmes in various department and details are shown in the table.

Table 2.12 Particulars of Events Organized by the Department

Sl.No	Department	Programme	No of Events Organized				
			2013	2014	2015	2016	2017
			—	—	—	—	—
1	CSE	Conference	1	1	1	1	1
		Workshop	1	2	2	1	1
		FDP	1	-	1	-	-
		Refresher Course	-	-	-	-	-
		Seminar	-	-	-	-	-
		Symposium	1	1	1	1	1
2	ECE	Conference	1	2	1	1	1
		Workshop	-	4	3	4	4
		FDP	-	1	-	1	1
		Refresher Course	1	2	2	-	-
		Seminar	1	-	1	-	-
		Symposium	1	1	1	1	1
3	EEE	Conference	1	1	1	1	1
		Workshop	1	-	-	-	-
		FDP	-	-	-	-	-
		Refresher Course	1	-	-	-	-
		Seminar	-	-	-	-	-
		Symposium	1	1	1	1	1
4	MECH	Conference	1	1	1	1	1
		Workshop	1	2	1	1	1
		FDP	-	2	-	-	-
		Refresher Course	1	2	2	-	-
		Seminar	-	-	1	-	-
		Symposium	1	2	2	2	2
5	S&H	Conference	-	-	-	-	-
		Workshop	-	-	-	-	-
		FDP	-	-	-	-	-
		Refresher Course	1	-	-	-	-
		Seminar	-	3	-	1	1
		Science Day	1	1	1	1	1

**Events Attended:**

The faculty members are encouraged to participate in training, faculty development programmes and orientation programmes outside the college. The programmes attended by faculty members are shown in the table.

**Table 2.13 Particulars of Events Attended by the Faculty**

Sl.No	Department	Programme	No of Events Attended				
			2013 – 2014	2014 – 2015	2015 – 2016	2016 – 2017	2017
			2014	2015	2016	–	–
1	CSE	Conference	3	3	22	13	
		Workshop	15	20	30	15	
		FDP	4	3	6	3	
		Refresher Course	1	1	1	1	
		Seminar	-	-	-	-	
2	ECE	Conference	26	22	59	59	
		Workshop	18	20	13	07	
		FDP	12	06	21	13	
		Refresher Course	01	02	02	-	
		Seminar	05	03	03	04	
3	EEE	Conference	09	06	03	02	
		Workshop	18	12	10	03	
		FDP	07	09	12	06	
		Refresher Course	24	24	-	-	
		Seminar	06	-	04	-	
4	MECH	Conference	06	09	10	34	
		Workshop	23	17	34	64	
		FDP	15	45	13	31	
		Refresher Course	12	45	33	03	
		Seminar	-	07	25	06	
5	S&H	Conference	2	-	-	3	
		Workshop	-	-	-	-	
		FDP	-	-	-	2	
		Refresher Course	15	20	19	-	
		Seminar	3	-	-	5	

**Guest Lectures:**

Each department in our college frequently organizes guest lectures by eminent people from industries/other academic institutions. Our college organized various guest lectures in the last four years. Department wise guest lecture details are shown in the table below

**Table 2.14 Particulars of Guest Lectures Organized by the Department**

Sl.No	Department	No of Guest Lectures Conducted			
		2013 – 2014	2014 – 2015	2015 – 2016	2016 – 2017
1	CSE	10	10	10	10
2	ECE	11	12	13	10
3	EEE	8	12	11	10
4	MECH	09	10	10	10

## Industrial Visits

Industrial visits are arranged to give exposure to the students on advanced machineries, equipment, processes and technology practiced in the industries. Department wise Industrial visit are shown in the table below

**Table 2.15 Particulars of Industrial Visits Organized by the Department**

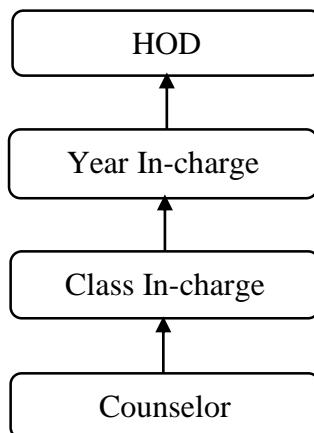
Sl.No	Department	No of Industrial Visits			
		2013 – 2014	2014 – 2015	2015 – 2016	2016 – 2017
1	CSE	9	13	10	10
2	ECE	12	24	21	17
3	EEE	08	10	10	10
4	MECH	09	10	10	09

### 2.3.7 Detail (process and the number of students benefitted) on the academic, personal and psycho-social support and guidance services (professional counseling/ mentoring/academic advise) provided to students?

The Class in Charge identified for every class, monitors student activities and also does counseling on leave availed by the students.

#### Counseling/Mentoring:

- 1) A counselor/mentor is available for every 20 students who monitors the students throughout the entire programme and gives academic counseling whenever necessary.
- 2) The counselor identifies the student's need for psychological counseling, interacts with him / her and guides him / her in the right path.
- 3) It has been observed that counseling is found necessary for students, who are first generation learners, students who could not express themselves in English and those with large number of backlogs.
- 4) The Year Coordinator and counselor together identify slow learners from each class based on their academic performance. These students are given special coaching and tutorial classes for betterment in academics.



**Fig. 2.8 Hierarchy of Counselling Responsibility**

**2.3.8 Provide details of innovative teaching approaches/methods adopted by the faculty during the last four years? What are the efforts made by the institution to encourage the faculty to adopt new and innovative approaches and the impact of such innovative practices on student learning?**

The institution believes that innovation is the only way to survive. This applies to our teaching approaches/methods as well. The following Innovative teaching approaches/methods are adopted

- 1) NPTEL, Simulations, PPTs, videos and Charts are extensively used to augment conventional black board teaching. Working prototype models are also shown in the classrooms, field visits, and demonstrations are also incorporated in teaching methodology.
- 2) To enhance their technical knowledge in core subjects, students and faculties are encouraged to join online courses conducted by IIT
- 3) In the laboratory oriented courses students are given the freedom to conduct certain experiments, to strengthen the theoretical concepts they are taught in the classroom, under the supervision and guidance of the laboratory instructor.
- 4) Variety of software tools, systems with internet are made available to students to enable them to learn certain topics through extensive simulation techniques.
- 5) Faculty encourages student to take up seminar in their classes which motivates them to have deep knowledge about those topics.
- 6) Apart from classroom interactions, the students undergo in-plant training, visit industries, present papers, carry out in-house projects, and take up paper presentation etc., and faculty give them guidance in all such activities so that the classroom learning is effectively and innovatively supplemented.
- 7) Class committee meetings are held after commencement of classes and students share their view on subjects and teaching methods. Feedback on lectures by the faculty for individual subjects is obtained from the students near the end of the semester to evaluate the faculty. This helps to change the method of teaching if the feedback is not satisfactory.
- 8) The college supports the faculty community to adopt new ways, approaches and methods such as organizing conferences, workshop, seminars etc.,
- 9) In order to impart more innovative approaches in the teaching-learning process, the institution motivates all the faculty members to attend FDPs and Training programs, National and International Seminars, Conferences/Workshops organized by reputed institutions like Anna University, IITs, etc.
- 10) Faculty members are encouraged to attend industrial training programmes to have hands on experience.

The institution also takes care of the needs of the faculty community and strives to keep them at the top notch of current technologies and latest developments in their connected fields.

**Impact:****Table 2.16 List of Accolades**

S.No	Accolades	Count
1	Awards Received by Students	33
2	Student Publications	383
3	Patents Filed by Students	03
4	Prize in Competitions	229

**2.3.9 How are library resources used to augment the teaching-learning process?**

- 1) The Library resources serve as a crucial component in augmenting teaching learning process. The institution has a well-stocked centralized library with Institute and department-wise division to ensure easy, quick and efficient access to desired data.
- 2) At the end of every semester faculty members are requested to suggest text books and reference books which may not be available in the library. This helps the student to refer different books for clarification and exam preparation
- 3) In essence, the Library has truly become what we intends it to be; a great place for acquiring new knowledge, enriching existing skills and knowledge and being exposed to newer fields of study and research in addition to being "connected" to the outside world through the internet.
- 4) The faculty encourage student to visit library regularly to update their knowledge on the current scenario.
- 5) The faculty and students can make use of Demo CD's, NPTEL videos, etc to enrich their knowledge and to clearly understand the concepts apart from class learning
- 6) The Central library functions on all days except Sundays and government holidays so that the students can use all the facilities of library.
- 7) E-resources are hosted through Local Area Network to different departments. The e-journal packages subscribed are IEEE, ASME, Science Direct, Tata McGraw-Hill.
- 8) Students doing their project work refer books and journals available in the library of their respective field.
- 9) Faculty for presenting papers in conferences and pursuing Ph.D uses library resources for their research work.
- 10) Library has Institution Membership in the Libraries of Anna University, British Council, and DELNET (Developing Library Network, New Delhi), IITE and IEI facilitating the use of their resources.

**2.3.10 Does the institution face any challenges in completing the curriculum within the planned time frame and calendar? If „yes“, elaborate on the challenges encountered and the institutional approaches to overcome these.**

YES

- 1) The Institution has a planning committee which prepares academic calendar of the institution well ahead of time based on the academic calendar prescribed by Anna University and ensures that there are sufficient number of working days to cover the syllabus and to carry out the evaluation process.

- 2) However any unexpected holidays declared will be compensated. This information is discussed in HODs meeting to plan suitable additional hours/days for completing the syllabus and train the students and prepare them to take up the end-semester exams.
- 3) Special classes are conducted for slow learners and lateral entry students to make them gain required confidence for writing the exam.

### **2.3.11 How does the institute monitor and evaluate the quality of teaching learning?**

- 1) Class committee meetings are conducted thrice during a semester. In this meeting, the students share their views and queries. Also the difficulties associated with the subjects are discussed in the class committee meeting which is presided over by the Year Coordinator and the Head of Department. The course delivery methods, evaluation methods, additional care required for slow learners and any other facility required from the management are elaborately discussed. The solutions will be provided by consulting with the Head of the institution as the earliest.
- 2) The counselors regularly counsel the students based on their academic performance to improve their learning through suggestions, providing study materials, interacting with parents, etc., He/She also keeps a complete record of the student's accomplishments, his attitudes, interests, weakness etc.
- 3) Principal, and HOD regularly monitor the classes and provide necessary suggestions for the improvement of the teaching- learning process. The syllabus coverage, quality of the question papers, exam invigilation and evaluation process are also monitored by HOD
- 4) Student feedback is collected at the middle of each semester for all subjects of all departments and the report is forwarded to Principal and HOD's.
- 5) The result analysis meeting is conducted after the completion of every Assessment test and University Examination by the Principal to evaluate the performance of the students and the teachers and corrective measures are planned and executed.
- 6) Self-appraisal of Faculty Members: All the faculty members are required to submit Faculty Performance Appraisal report every year in the prescribed format and the same is assessed by HOD and submitted to the principal.
- 7) This in turn is analyzed by the Principal and the score sheet of each faculty member is prepared and forwarded to the management. The consolidated strength and weakness of the faculty along with the HOD and Principal's feedback is informed to the faculty in a one to one meeting for further improvement.

## 2.4 TEACHER QUALITY

**2.4.1 Provide the following details and elaborate on the strategies adopted by the College in planning and management (recruitment and retention) of its human resource (qualified and competent teachers) to meet the changing requirements of the curriculum.**

Table 2.17 Details of Faculty

Highest Qualification	Professor		Associate Professor		Assistant Professor		Total
	M	F	M	F	M	F	
<b>Permanent Teachers</b>							
D.Sc./D.Litt.	-	-	-	-	-	-	-
Ph.D	9	4	2	3	1	1	20
M.Phil	-	-	2	2	3	12	19
PG	-	-	12	6	31	30	79
<b>Adjunct</b>							
D.Sc./D.Litt.	-	-	-	-	-	-	-
Ph.D					1	-	1
M.Phil	-	-	-	-	-	-	-
PG	-	-	-	-	13	1	14
<b>Total</b>							<b>133</b>

### Screening:

Recruitment is normally done once in a year during the month of April/May. The number of vacancies in different cadres shall be communicated by the Principal based on student strength / existing faculty / resignations or terminations of staff members, to the management for approval / information. Vacancies shall be advertised in leading English newspapers.

Screening of applications shall be done by the respective Screening Committee. Shortlisted candidate's shall be informed through call letters and over telephone by the HR Department.

### Interview:

Interview Committee consist of the Principal, Academic Council members and the respective Heads of the department and Subject experts.

The applications received will be short listed either through a written test or based on qualification and experience and the short listed candidates will be called for personal interview and selection will be made on merit.

Direct interview will be conducted for senior posts. Selection Committee shall be constituted by the Chairman as per the guidelines approved by the Governing Council.

### Pay Fixation:

Pay for the selected candidates shall be fixed by the Selection Committee as per the AICTE norms for the respective post, and as approved by the Governing Council based on the qualification and experience of the

candidate and other achievements.

Higher Pay Packages for exceptionally meritorious and well experienced candidates will be fixed by the Selection Committee subject to the approval of the Chairman of the Trust.

#### **Promotion:**

Promotions are based on the vacancy and merit only. In the case of promotion to a higher post, the appointment and fixation of initial pay in the higher scale will be done as per the prescribed norms and as given in TABLES I, II, III & IV annexed. A Committee constituted especially by the Chairman of the Trust will consider the cases of such promotions and obtain the approval of the Principal and the Chairman of the Trust.

#### **Probation:**

Every person appointed initially to a post, shall be put on probation for a period of one year. If the performance of the person appointed is not satisfactory during the period of probation, he will be issued a notice of warning at the end of the ninth month, and if his work continues to be unsatisfactory, his services will be terminated at the end of the one year period.

**2.4.2 How does the institution cope with the growing demand/ scarcity of qualified senior faculty to teach new programmes/ modern areas (emerging areas) of study being introduced (Biotechnology, IT, Bioinformatics etc.)? Provide details on the efforts made by the institution in this direction and the outcome during the last three years.**

- 1) The best and qualified teachers are appointed in the Institution. To attract the new faculty and to retain the existing teachers the college provides requisite facilities like research facilities, library and internet.
- 2) The Institution offers higher pay scales to better qualified teachers or resource persons.
- 3) More guest lectures, workshops, seminars, FDP and conferences are arranged in the identified and specific fields.
- 4) In addition to this the college has subscribed to various journals which keep the teachers updated on the latest developments in their field of interest.
- 5) Faculty are encouraged to pursue Ph.D and more benefits are provided by the management for their research.
- 6) During the last three years most of our faculty has participated in number of national and international level conferences and workshops. The college encourages the faculty members to attend orientation and refresher courses and other training programmes that would improve their teaching and knowledge.
- 7) Senior teaching faculty members are also involved in mentoring junior faculty in subject preparation.
- 8) As stated earlier, the college has more than sufficient number of qualified and competent teachers to handle the courses offered. In addition the college invites experts to deliver guest lecturer in the selected areas of interest.

- 9) Adjunct faculty members are invited on a regular basis to update the knowledge of faculty and students in each and every department.
- 10) The institution has in place policies to attract and retain highly qualified faculty members. The institute offers benefits like management funding for projects, research facilities, and academic freedom.
- 11) The faculty members are provided with benefits like PPF, gratuity which encourage them to continue in the college
- 12) The college also encourages faculty with appreciating and awards for their better performance in producing results.
- 13) Faculty working in our college can avail fee concession for their children to pursue studies in RMK group of schools and colleges.
- 14) College offers free transportation, food and accommodation for the faculty members
- 15) The college presently offers courses in core branches and the courses like Biotechnology, IT, Bioinformatics etc. are not offered by the college right now but may be offered in future.

**2.4.3 Providing details on staff development programmes during the last four years elaborate on the strategies adopted by the institution in enhancing the teacher quality.**

**a. Nomination to Staff Development Programme**

- ❖ A teacher will have to be a lifelong learner and only with constant updating, he will be able to teach the current trends to the students.
- ❖ The policy of the institution is to arrange faculty Development program on various topics to cater the needs of teaching learning process.
- ❖ The Institution offers Faculty development Program for all faculties with three years of experience.
- ❖ Periodic refresher course is conducted for all faculty to enhance the teaching learning process.
- ❖ The faculty are given opportunity to participate in seminars, conference, workshops, FDPs organized by university and other institutions

**O – Organized; A – Attended by Internal & External Faculty**

**Table 2.18 Particulars of Programme Organized and Attended by the Department**

Sl.No	Department	Programme	No of Events Organized							
			2013 – 2014		2014 – 2015		2015 – 2016		2016 – 2017	
			O	A	O	A	O	A	O	A
1	CSE	Conference	1	3	1	3	1	22	1	13
		Workshop	1	15	2	20	2	30	1	15
		FDP	1	4	0	3	1	6	0	3
		Refresher Course	-	1	-	1	-	1	-	1
		Seminar	-		-		-		-	
2	ECE	Conference	1	26	2	22	1	59	1	59
		Workshop	-	18	4	20	3	13	4	07

		FDP	-	12	1	06	-	21	1	13
		Refresher Course	01	01	02	02	02	02	01	-
		Seminar	01	05	-	03	1	03	-	04
		Symposium	01	-	01	-	01	-	01	-
3	EEE	Conference	01	09	01	06	01	03	01	02
		Workshop	01	18	-	12	-	10	-	03
		FDP	-	07	-	09	-	12	-	06
		Refresher Course	01	24	-	24	-	-	-	-
		Seminar	-	06	-	-	-	04	-	-
		Symposium	01	-	01	-	01	-	01	-
4	MECH	Conference	01	06	01	09	01	10	01	34
		Workshop	01	23	02	17	01	34	01	64
		FDP	-	15	02	45	-	13	-	31
		Refresher Course	01	12	02	45	02	33	-	03
		Seminar	-	-	01	07	01	25	-	06
		Symposium	01	-	02	-	02	-	02	-
5	S&H	Conference	-	2	-	-	-	-	-	3
		Workshop	-	-	-	-	-	-	-	-
		FDP	-	-	-	-	-	-	-	2
		Refresher Course	1	15	-	20	-	19	-	-
		Seminar	-	3	3	-	-	-	1	2
		Science Day	1	-	1	-	1	-	1	-

**b. Faculty Training Programmes organized by the institution to empower and enable the use of various tools and technology for improved teaching – learning.**

- ❖ Teaching learning methods/approaches
- ❖ Handling new curriculum
- ❖ Content/knowledge management
- ❖ Selection, development and use of enrichment materials
- ❖ Assessment
- ❖ Cross Cutting issues
- ❖ Audio Visual Aids/multimedia
- ❖ OER"s
- ❖ Teaching learning material development, selection and use

**Teaching learning methods/approaches**

- ❖ Institution provides opportunities to faculty for upgrading themselves in various computer aided programs and tools

**Handling new curriculum**

- ❖ The faculty members are allowed to attend FDPs, workshops and seminars conducted by various agencies like University, Professional Societies and Institutions to upgrade their knowledge to handle new curriculum

### **Selection, development and use of enrichment materials and Teaching Materials**

- ❖ The faculty develop materials for various subjects and those materials are issued to students.
- ❖ As a social responsibility our faculty also upload the study materials in the web.
- ❖ Few of the study materials have also been published as books.

### **Assessment**

- ❖ The faculty are encouraged to prepare key for the questions papers readied for the assessment test.
- ❖ The faculty are interested to accessing the answer scripts based on the key prepared, so that the correction will uniform across all the faculty
- ❖ A CPT Tracker is available with every department to upload the internal assessment marks. All the faculty are trained to use the software

### **Audio Visual Aids/multimedia**

- ❖ Faculty has the facilities to access the computer with internet facilities to prepare their teaching materials.
- ❖ NPTEL resources are made accessible in Library.
- ❖ Faculty is well trained by the department in making power point presentations.

### **OER's**

- ❖ Open Educational Resources are available in central library.
- ❖ The faculty members share the course materials with students.
- ❖ Open source software like Auto Cad, SCI LAB which is available in AICTE website is also made available to students.

### **c. Percentage of faculty invited as resource persons in Workshops / Seminars /Conferences organized by external professional agencies**

Faculty who were invited as resource persons, participated and presented papers in workshops / seminars / conferences as against the total number of faculty of 133 during 2013 – 17

**Table 2.19 Faculty Invited as Recourse Person**

<b>Sl. No</b>	<b>Department</b>	<b>Invited as Resource Persons</b>			
		<b>2013 – 14</b>	<b>2014 – 15</b>	<b>2015 – 16</b>	<b>2016 – 17</b>
1	CSE	12.5	10	8.33	8.33
2	ECE	10.71	9.3	16.67	26.67
3	EEE	27.27	18.18	18.18	18.18
4	MECH	29	12.5	20.83	14.28

**2.4.4 What policies/systems are in place to recharge teachers? (eg: providing research grants, study leave, support for research and academic publications teaching experience in other national institutions and specialized programmes industrial engagement etc.)**

**RESEARCH / PUBLICATIONS:**

**National Events:**

Deputation only for presenting papers that are accepted for both presentation in the event and for publication in the proceedings. Selection is based on peer review of full paper. Evidence to this effect should be produced. Event registration fee and TA/DA as applicable will be provided. Absence will be treated as on duty.

A maximum of two times per teacher per year, subject to availability of budgeted funds, on first come, first serve basis, can be considered. Preference will be given to those invited to chair sessions.

When two members of the faculty get their papers accepted for presentation in the same conference, preference will be given to the one who is below 35 years of age.

**International Events:**

Deputation would be considered only after getting peer review of full paper for such presentation and publication in the proceedings. Evidence to this effect must be produced.

Registration fee, 75% of economy class return air fare and DA of Rs.4000/- per day for a maximum of three days will be given to each of the deputed teachers subject to a maximum of Rs.20, 000/- per person. After such deputation, the paper presenters should return back and serve the institution for at least two years. Otherwise the sanctioned amount should be refunded to the Institution. One can avail of this facility only once in three years.

Preference will be given to those below 45 years of age on first come, first served basis and subject to availability of budgeted funds. Only in exceptional circumstances those above the age of 60 would be deputed for the conferences at the discretion of the Management.

Here again preference will be given to those below 45 years of age on first come, first served basis and subject to availability of budgeted funds. Only in exceptional cases, those above the age of 60 would be deputed for the conferences solely at the discretion of the Management.

**Funded Projects:**

An incentive of 10% of the value of funded projects (excluding MODROBS) will be given to the staff for meeting travel and other expenditure related to the Project

**Publication of Text Books:**

For every well received text-book published in the relevant subjects, the author of the book will be given an incentive of Rs.10, 000/-.

### **Deputation for Higher Studies:**

Not more than 2 members of faculty of any department will be deputed for post-graduate studies in the part-time mode in any one year. Those deputed will be relieved from academic work for not more than 2 days in a week including holidays except Sunday till the 5<sup>th</sup> semester.

Those deputed for the PG studies as mentioned above will be required to execute a service bond for 3 years from the date of obtaining the provisional certificate. If they leave the service before the end of the bond period, they will pay the salary for the reminder period not served.

Not more than one member of the faculty of any department will be deputed for Ph.D programs with a relief of 2 days in a week in terms of work – load in the department. They will also be reimbursed the tuition fee remitted for the course work. Such candidates have to execute a bond with the conditions stipulated therein.

All persons deputed for Ph.D programs will execute a service bond to serve for 3 years from the date they complete their viva – voice examination. If they leave the service before the expiry of such bond period, they will have to pay the reminder of salary of such period of default.

Deputations for all the above programs will be based on merit, contribution made in the college and also the seniority position of the staff in the department.

### **Cash Incentive for Ph.D. Degree Holders:**

Assistant Professors Grade I and II and Associate Professors in Grade I in Engineering and Assistant professors Grade I and II and Associate Professors Grade – I possessing Ph.D. Degree in S&H will get monetary benefit of Rupees 8000/- and Rupees 5000/- per month respectively

### **2.4.5 Give the number of faculties who received awards/recognition at the state, national and international level for excellence in teaching during the last four years. Enunciate how the institutional culture and environment contributed to such performance/achievement of the faculty.**

Awards / recognition are received at the state, national and international level for excellence in teaching during the last four years.

**Table 2.20 Awards Received by Faculty**

Name of the Faculty Member	Award / Recognition	Name of the Society / Organization	Year
<b>Department of Computer Science and Engineering</b>			
Dr. Paulraj D	National Level Award Coordinator	Dr.Kalam Educational Trust, Chennai	2017
Mr. K. ChittiBabu	Bronze Partner Faculty – Inspire	Infosys	2016
Ms. T. SuriyaPrabha	Distinguished Facilitator	Infosys	2016

Mr. K. ChittiBabu	Content Guru – First Prize	Infosys	2016
Ms. T. SuriyaPrabha	Content Guru – First Prize	Infosys	2016
Mr. M. Shanmugasundaram	Certifies Master Trainer in FSIPD	NASSCOM	2016
Mr. Karthik E	Bronze Partner Faculty – Inspire	Infosys	2016
Mr. Chittibabu K	JAVA Trainer	Wipro Certified PBL	2016
<b>Department of Electronics and Communication Engineering</b>			
Dr.C.Arun & Mr.S.Muthumanick am	Best Project Work	Dr.APJ Abdul Kalam Educational Trust for Tribal Chennai	2017
Dr.K.G.Shanthi	Young Women Scientist Award	Dr.APJ Abdul Kalam Educational Trust for Tribal Chennai	2017
Ms.V.Kannagi	Best Teaching Faculty Award	Dr.APJ Abdul Kalam Educational Trust for Tribal Chennai	2017
Dr.T.M.Inbamalar	Best Achievement Award	Top Engineers Students &Faculty Award(TESFA- 2017)	2017
Ms. S. Poovizhi	Best Women Engineer Award	IET Professional Society	2016
Dr.C.Arun	Young Faculty Award	Venus International Foundation, Centre for Advanced Research and Design, VIFFA 2015	2015
Dr.T.V.Padmavathy	CTS Best Teacher Award	CTS (Cognizant Technology Solutions)	2014
Dr.N.Gangatharan	IET CLN Man Engineer Award	IET Professional Society	2014
Ms.V.Kannagi	Best Teacher Award	Lions Club of Madras Green Park	2014
Ms.R.Shimila	Best Project Award	Engineering Students Innovation	2014

		Challenge 2014(ISSRD)	
Dr.C.Arun	Er.D.A.Rajan Ambition Award	IET Professional Society	2013
<b>Department of Mechanical Engineering</b>			
Dr.M.Balasubraman ain	Best Administrator	Dr.APJ Abdul Kalam Educational Trust for Tribal Chennai	2017
Ms.K.RenugaDevi	Young Woman in Engineering	Venus International	2017
Dr.M.Balasubramani an	Best Teacher Award	CTS	2016
Mr.R.Ashokkumar	Best Teacher Award	IIPE	2016
Mr.S.Gopinath	Best Overall Performer Award	IIPE	2016
Mr.K.Krishnakumar	Training and Placement Activities	IIPE	2016
Mr.C.Hemadri	Training and Placement Activities	IIPE	2016
Mr.A.BalajiKrishana Bharathi	Training and Placement Activities	IIPE	2016
Mr.N.Aravindhan	Certifies Master Trainer in FSIPD	NASSCOM	2016
<b>Department of Science and Humanities</b>			
Ms.G.Vasukidevi	Gold Partner Faculty – Inspire	Infosys	2016
Dr. Geetha Balachandar	Women of the year	Venus International	2017

**2.4.6 Has the institution introduced evaluation of teachers by the students and external Peers? If yes, how is the evaluation used for improving the quality of the teaching learning process?**

Yes, at the middle of each semester every faculty member is assessed by all the students of the class by filling a feedback form available as a software. We also have the following evaluation methods to monitor Teaching – Learning Process:

- ❖ Student Feedback System
- ❖ Class Room Observation by HOD and Professors
- ❖ Faculty Performance Appraisal & Development System
- ❖ Class Committee Review
- ❖ The analysis shows a clear idea of the positives and negatives of the faculty in handling the class during the semester. This information is given to the respective faculty for further correction if required.

## 2.5 EVALUATION PROCESS AND REFORMS

### 2.5.1 How does the institution ensure that the stakeholders of the institution especially students and faculty are aware of the evaluation processes?

- ❖ The stake holders of the institution i.e students and parents are informed about evaluation process by giving general instructions as mentioned in the prospectus of the institution.
- ❖ In the beginning of every semester, the faculty meeting is conducted and they are informed about the slip test schedule, unit test schedule, internal assessment test schedule, Revision test schedule, Model Examination schedule, Weightage, Question paper pattern, and schedule of marks entry in campus performance tracker the Anna University web portal.
- ❖ Orientation programme is conducted for freshers at the time of admission. During the programme, the details of syllabus, curriculum, attendance requirements as well as the pass percentage, grading systems and evaluation process are explained in detail.
- ❖ The academic calendar is prepared and it is displayed in the college website and issued to students and faculty members of all the departments.
- ❖ The university regulations, curriculum and syllabus are available in the Anna University website and college website. The regulations contain the details of the evaluation process. The syllabus copy is issued to the students.
- ❖ The periodic instructions issued by the university are promptly communicated to the students. The faculty members read the instructions in the classrooms and copy of the same is also displayed on the notice board.
- ❖ The previous university examination question papers and model papers are made available to the students in the department library and central library.
- ❖ Time to time staff meetings are also conducted concerning evaluation process. The details of the evaluation system are explained to the students in the Class committee meetings. During the Class Committee meeting the students are informed about the evaluation process.
- ❖ The students and faculty are informed about tests and exams through circular both hardcopy and e-mail.
- ❖ Students are clearly made aware of the eligibility conditions required to appear in the final exams. They are informed of the criterion of the internal assessment through circulars in college website, notice board and incorporation of the schedule in the college Calendar. Hard copies of the records are maintained, and the students and the faculty can access the same when required.
- ❖ The University publishes the semester examination marks and internal marks in the Anna University websites.
- ❖ Marks obtained by the students in the Internal examination and university examination are intimated to the parents through SMS.
- ❖ The evaluation is the integral part of teaching learning process. So, the institution makes effective arrangements for the smooth application of the rules about the evaluation processes.

**2.5.2 What are the major evaluation reforms of the university that the institution has adopted and what are the reforms initiated by the institution on its own?**

Reforms by College:

- ❖ The subject teacher prepares question Bank which contains 5 numbers of questions for each question numbers out of which the exam cell uses software to select a question paper for examination. This is done to avoid any bias towards setting of question paper. The Model examination question papers are set by the experts from our group of Institutions. Dummy numbers are generated for the answer scripts before distribution for valuation. The answer papers are distributed to the students within two days after the exam and the answers are discussed. Special coaching classes are conducted for students who fail to secure the minimum percentage of marks. All the test marks are informed to parents through SMS.
- ❖ The college examination cell conducts internal Assessment tests and University Examinations as per the guidelines of the University.
- ❖ The institution continuously reviews the evaluation process done internally and necessary changes as and when required are implemented. There are three tests which form part of internal evaluation for every subject. The institute encourages the teachers to experiment with various evaluation techniques to test learning of students.
- ❖ In addition to the above, regular assignments are also part of the evaluation process.
- ❖ Implementation of outcome based education.

**2.5.3 How does the institution ensure effective implementation of the evaluation reforms of the university and those initiated by the institution on its own?**

- ❖ The Institution strictly follows the guidelines given by the university from time to time.
- ❖ University is the sole authority for implementation of reforms in examination and evaluation process. The institution adopts all the methods of evaluation as formulated by the Anna University, Chennai.
- ❖ The institution has structured an Exam Cell which coordinates the conduct and evaluation of internal and external examinations.
- ❖ The answer scripts are evaluated by the faculty members concerned and it is distributed to the students. Any discrepancy in the evaluation is brought to the notice of the subject teacher. This evaluation process is monitored and the marks are verified by the HOD concerned and the result analysis is submitted to the Principal.
- ❖ The exam cell organizes to update the attendance and Internal assessment test marks in the web portal of Anna University every month as directed by the University. At the end of every internal assessment examination, a meeting is convened by the principal to analyze the performance of the students.
- ❖ Attendance Proforma containing the details of shortage of attendance is also sent to the university by the Exam Cell.

- ❖ Student's grievances with respect to University question paper, if any, are forwarded to the controller of examination for rectification, through the Principal.
- ❖ As per AU norms, if needed, candidates are instructed to apply for revaluation of his/her semester examination answer paper in a theory course through Principal. All the necessary help in this regard are extended to the students by the college examination cell.
- ❖ The respective exam cell coordinators from the department will coordinate all the activities related to the conduct of Internal Assessment Tests. The cell collects Question bank for every subject and selects question paper randomly on the day of the Test and given to students. The Cell will take care of seating arrangement and allocation of invigilators for the exam halls.
- ❖ The course coordinator verify the pattern, quality and correctness of the question papers prepared for the unit tests and ensure that the question papers are sent to the examination cell in time, the answers are valued and handed over to the students within two days from the conduct of the examination and marks are entered in the CPT software
- ❖ The evaluation is fairly by shuffling the booklets along the different section handling faculty and the students go through the evaluated answer scripts. Any doubt about evaluation is made clear to the students. All the records are maintained i.e. answer Booklet, mark lists etc.
- ❖ Whenever Internal Assessment tests are taken the results of the student performance are shown to the students to encourage them or counsel them for better future performance. Regular assignments are given and solutions are discussed in the class.
- ❖ There is a provision in the University for obtaining the photocopy of the answer scripts and reevaluating it. The same will be evaluated by the respective teacher based on the recommendations of the HOD and Principal. The answer scripts are evaluated by the university. In case the students is not satisfied with reevaluation process, the university provides an opportunity to go for challenge. The fees for the challenge valuation will be refunded if there is any improvement in the grade.

#### **Reviewing Performance of the Students:**

- ❖ The mentors review the performance of individual students and suggest ways to improve their performance in the forthcoming examinations.
- ❖ The HODs will review the performance of the students in examinations and take necessary steps to improve teaching-learning process accordingly.
- ❖ The Principal reviews the performance of the students with all the HODs and initiates further improvements in teaching-learning process.
- ❖ Maintenance of Records
- ❖ All results will be updated in counseling books and the same will be intimated to parents.

**2.5.4 Provide details on the formative and summative assessment approaches adopted to measure student achievement. Cite a few examples which have positively impacted the system.**

The various formative and summative approaches adapted to measure student's achievement are:

**Formative Assessment:**

- ❖ Formative evaluation is made through class tests, unit tests, Project, Group discussions, Seminars etc, the scheduled for which is made in the beginning of the semester itself.
- ❖ All the faculty members follow the formative approach to measure students achievements and performance through:
- ❖ Assignments, Tutorial Session, Seminar
- ❖ Overall attendance
- ❖ The faculty counselors and the class advisors monitor the performances of the students in these processes. Two internal assessment tests and model examination are conducted for the assessment and calculation of internal marks.

**Summative Assessment:**

- ❖ The objective of summative assessment is to evaluate learning developed by a student towards the end of semester.
- ❖ The university conducts theory, practical examination and project viva voce at the end of each semester in the following forms.
- ❖ Theory and practical examination question papers are set by the university and the evaluation of theory examination is carried out by the university. Practical examination and project viva voce are evaluated by the external examiners duly appointed by the university. Finally, the university conducts a summative evaluation at the end of each semester through the following.

1. End Semester Examination

2. Project work Viva-Voce

**Table 2.21 Impact of continuous Assessment**

<b>Department : Mechanical Engineering</b>						
<b>Register number</b>	<b>Name</b>	<b>Semester</b>	<b>IAT 1</b>	<b>IAT 2</b>	<b>MOD EL</b>	<b>University</b>
111615114077	Raghunath B	III	75.33	71.5	70.8	9.12
111614114042	Immanuel J	V	74.66	77	75.16	8.88

**Table 2.22 Allocation of Assessment Marks**

<b>Assessment Details</b>	<b>Theory</b>	<b>Practical</b>	<b>Project work</b>
Internal	20	20	20
External	80	80	80
Total	100	100	100

**2.5.5 Detail on the significant improvements made in ensuring rigor and transparency in the internal assessment during the last four years and weightages assigned for the overall development of students (weightages for behavioral aspects, independent learning, communication skills etc.**

- ❖ As per the university guidelines, there is a transparency in the internal assessment. In accordance with 2013 regulation, there is no weightage for the attendance. 3 internal assessment tests conducted by the college are considered for the total 20 marks. The college adopts the system specified by the Anna University for internal mark determination. The internal marks are automatically generated by the system and published in the Anna University website.
- ❖ Our college encourages the students to take up mini project, paper presentation, and independent learning and also strictly enforces discipline in the campus. The college has communication lab for developing language skills and students are encouraged to take seminar during seminar hours allotted in the time table. As an outcome of these encouragements, our college holds 10th rank in the University exam results among the 539 Engineering Colleges.
- ❖ Every year the best outgoing student of the college is selected based on the academic performance, co-curricular activities, extracurricular activities and placements.
- ❖ Students' attendance is informed to parents through Phone call.
- ❖ Every day, attendance of the students is monitored and an undertaking is obtained from the students having shortage of attendance in that period.
- ❖ After every unit test, reports and attendance are sent to the parents via SMS.
- ❖ A good pass percentage of about 85% is maintained in the last four years and numbers of university ranks have also substantially increased for all the UG programmes.

**Project Evaluation:**

Right from the initial stages of defining the problem, the candidate has to present (Three reviews) the progress in the form of presentations in-front of the review committee members in addition to the regular discussion with the guide and the Project coordinator.

**Placement training:**

Placement training is provided to the students beyond curriculum. Behavioral aspects, aptitude and communication skills are comprehensively addressed in the placement training provided to the students. Communication skills are tested through report writings, presentations and group discussions.

**Result Analysis:**

For the internal tests, the results are declared within 3 days after the last examination.

For end semester examination, the results are declared within 30 days after the last examination by Anna University.

**2.5.6 What is the graduate attributes specified by the college/ affiliating university? How does the college ensure the attainment of these by the students?**

The Graduate Attributes are specified by the affiliating university in the form of Programme Outcomes (PO) specific to each and every programme offered by the University. These Pos are aligned with the Engineering Graduate attributes, viz:

- 1. Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- 2. Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- 3. Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- 4. Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- 5. Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- 6. The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- 7. Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- 8. Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- 9. Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- 10. Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- 11. Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

**12. Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

#### Attainment of graduate attributes by the students

From the PO and PSO, the curriculum is framed with the set of courses.

- ❖ Each course and in turn its course outcomes are set using Blooms Taxonomy in a way to achieve the programme outcomes
- ❖ Each course outcome (CO) is annotated with the cognitive level of teaching/learning
- ❖ In the detailed Instructional System Design of each course the details such as PO-PSO mapping, CO, CO-PO mapping, are given.
- ❖ The assessments of PO and in turn the PSO are directly done through the assessment of CO. Hence much emphasize is given in the preparation of course plan. The assessment of the courses is done with different methods and weights such as:
  - ❖ Internal Assessment Tests
  - ❖ Assignments
  - ❖ Course Seminars
  - ❖ Record Works
  - ❖ Lab Model Exam
  - ❖ Mini Project Report
  - ❖ Project Review Report
  - ❖ Lab Observations
  - ❖ In-Plant Training Reports
  - ❖ Industrial Visit Reports

#### 2.5.7 What are the mechanisms for redressal of grievances with reference to evaluation both at the college and University level?

##### College Level:

- ❖ The evaluation procedure is transparent in the internal examinations. The subject teacher prepares the answer key of the question paper and it is discussed in the class room. The evaluated answer scripts are distributed to the students within two days after the exam in the classroom by the staff concerned. The students can go through the answer scripts and express their grievances to the teachers in the classroom.
- ❖ Any change in the marks of evaluated answer scripts will be updated by the faculty after getting permission from Head of Department.
- ❖ To some extent, the feedback given by the students in the class committee meetings is also helpful to conclude as to what extent the evaluation serves as an indicator of achieving the stated objectives.
- ❖ Viva questions are asked in the laboratory to enable the students to correlate the theory with the lab experimentation.

### **University level:**

- ❖ Any discrepancy in the university examination question paper is brought to the notice of the Controller of Examination by the Principal.
- ❖ In the university level, a procedure is followed to apply for revaluation if the student is not satisfied with the results published. Students can apply for revaluation for getting the photocopy of the answer script by paying fees prescribed by the university.
- ❖ The Photocopy of the answer script is evaluated by the subject teacher and recommend for revaluation. The university appointed examiner reevaluate the answer script and results will be published.
- ❖ There is also a provision in the university to apply for challenge revaluation by paying the prescribed fee if the student is not satisfied with the revaluation results. If the student secures a pass mark in the challenge revaluation the fee paid by the student will be refunded.

## **2.6 STUDENT PERFORMANCE AND LEARNING OUTCOMES**

### **2.6.1 Does the college have clearly stated learning outcomes? If yes give details on how the students and staff are made aware of these?**

- ❖ Yes, as the Institution is practicing the Outcome Based Education, all the programmes have clearly defined their learning outcomes for all the courses. The students after the completion of the programme would become intellectually and technically equipped with well-defined knowledge, skills, and ethics who are creative thinkers, inspiring leaders and contributing citizens.
- ❖ Also, the college has clearly stated the vision and mission statement (includes the Learning Outcomes) and it is mapped to the vision and mission statement of the department.
- ❖ The Vision, Mission statements of the Institution and department are disseminated to the staff and students through college website, Prospectus, academic calendar and also displayed in different locations of college.
- ❖ The students and faculties are well focused in these lines as the academic programmes and the college activities are oriented towards achieving these learning outcomes.
- ❖ The students are expected to carry out study, projects for each of the courses that helps them apply the concepts they have learned to real life problems. These activities help them to achieve the learning outcomes associated with the programme.
- ❖ The students are made aware of the learning outcomes in the classrooms, in the Class committee meetings and the meetings conducted by the HOD and Year Coordinator from time to time.
- ❖ The faculty is made aware of the learning outcomes for each course which is clearly indicated in the curriculum provided to the students.
- ❖ The course objective and outcomes are part of course file. The learning outcome for each subject is specified in the syllabus copy. The course delivery plan is prepared based on the Blooms Taxonomy
- ❖ Lesson plans are reviewed by the subject expert and HOD once in every month to ensure that the objectives are met.

- ❖ Programme Specific Objectives (PSOs) are set for each programme, which visualizes the accomplishments of the students after 5 to 10 years of students' graduation.
- ❖ Each PSO is mapped to Programme Outcomes (POs) which would be assessed at the different stages of the programme.

POs and PSOs associated with B.E. Mechanical Engineering is as follows:

#### **PROGRAM OUTCOMES (POs):**

The Graduate attribute is nothing but the program outcome which is already discussed in 2.5.6

#### **PROGRAM SPECIFIC OUTCOME (PSOs):**

The Mechanical Engineering Graduates should be able to

- ❖ Demonstrate principles of thermodynamics and gas dynamics in the field of automobiles, power plants and aircraft industry.
- ❖ Design various machine elements, transmission systems; model, simulate and analyze the same for the safe and comfortable use of mankind.
- ❖ Identify suitable components, materials and manufacturing processes for producing high quality consumer goods at affordable price.
- ❖ The formation of the PSOs and POs are done in a series of meeting with the stakeholders and faculty members.
- ❖ POs and PSOs are displayed and made available in prominent places like:
  - ❖ All notice boards
  - ❖ Laboratories
  - ❖ College bulletins
  - ❖ College website

From the PSO and PO, the curriculum is framed with the set of courses.

- ❖ Each course and in turn its course outcomes are set in a way to achieve the programme outcomes
- ❖ Each course outcome (CO) is annotated with the cognitive level of teaching / learning
- ❖ In the detailed Instructional System Design of each course the details such as PSO, PO, PSO-PO mapping, CO, CO-PO mapping, are given.
- ❖ The assessments of PO and in turn the PSO are directly done through the assessment of CO. Hence much emphasize is given in the preparation of course plan. The assessment of the courses is done with different methods and weights such as:
  - ❖ Internal Assessment Tests
  - ❖ Assignments
  - ❖ Course Seminars
  - ❖ Record Works
  - ❖ Lab Model Exam
  - ❖ Mini Project Report
  - ❖ Project Review Report
  - ❖ Lab Observations
  - ❖ In-Plant Training Reports
  - ❖ Industrial Visit Reports

**2.6.2 Enumerate on how the institution monitors and communicates the progress and performance of students through the duration of the course/programme? Provide an analysis of the students' results/achievements (Programme/course wise for last four years) and explain the differences if any and patterns of achievement across the programmes/courses offered.**

- ❖ Student's evaluation is based on three internal examinations, university theory examinations, practical examinations and project viva voce. The institution conducts the result analysis meeting at the end of every terminal and model examinations and corrective measures are taken.
- ❖ Performance of students in the university exams is an indicator of students' learning outcomes.
- ❖ The absenteeism of the students to regular classes is intimated daily to the parents by the class advisor over phone.
- ❖ The performance of the students in the terminal/university examinations is communicated to the parents through post and cell-phone message.
- ❖ Every semester, counselors will call parents about the performance of their ward after the publication of university exam results. The performance and progress of the students are discussed individually with the parents.
- ❖ Faculty counselor monitors the individual student's performance and maintains their records. The entire process is monitored by the HOD.

The student's performance in the university examination is analyzed in the micro level like single arrear students, two arrears students and more than two arrears students. Based on this analysis, the necessary steps are taken to improve their performances. The class toppers, college toppers and the students who received "S" grade in every subject are appreciated and awarded prizes.

### Result Analysis for Last Four Years

Table 2.23 Details of Result and University Ranks

Batch	Course	Overall Pass %	Students with First class	Students with Distinction	University Ranks
<b>Department of Computer Science and Engineering</b>					
2012 – 2016	B.E.	92.18	95	7	3
2011 – 2015		92.42	50	11	9
2010 – 2014		91.66	57	4	4
2009 – 2013		88.52	45	7	6
<b>Department of Electronics and Communication Engineering</b>					
2012 – 2016	B.E.	92.4	143	21	10
2011 – 2015		89.5	98	14	4
2010 – 2014		88.5	106	9	7
2009 – 2013		89.2	98	22	14
<b>Department of Electrical and Electronics Engineering</b>					
2012 – 2016	B.E.	85.29	42	8	4

<b>2011 –2015</b>	90	56	2	2
<b>2010 –2014</b>	87.32	52	5	3
<b>2009 –2013</b>	87.88	46	8	5
<b>Department of Mechanical Engineering</b>				
<b>2012 –2016</b>	<b>B.E.</b>	95	110	9
<b>2011 –2015</b>		94.96	111	18
<b>2010 –2014</b>		86.36	50	01

The performance of both student and faculty members are assessed periodically.

**The assessment of the students to ensure the achievement of learning outcomes is as follows:**

**Table 2.24 Assessment Tools and Evaluation Methods**

S.No	Assessment Tools	Evaluation Methods
<b>Direct Measures</b>		
1)	Internal Test	<ul style="list-style-type: none"> <li>❖ The internal tests are conducted periodically by the examination cell of the college. Three internal tests each carrying 100 marks, put together out of 100 (Average of internal test1, test2, Model Exam) shall be reduced to 20 marks for an Internal Mark.</li> <li>❖ The questions are taken at different cognitive levels based on the Blooms Taxonomy(RUALEC) and is reviewed by HOD</li> <li>❖ The weightage of the cognitive levels of the marks for questions of each category is also analyzed for improvement</li> <li>❖ Each Subject Question Paper is Mapped with Course Outcome.</li> </ul>
2)	Laboratory Exercises	<ul style="list-style-type: none"> <li>❖ The students are given Laboratory exercises according to the curriculum to encourage application, translation and interpretation of concepts learnt.</li> <li>❖ The Laboratory exercises are given in such a way they cover all concepts of a course</li> <li>❖ One or two additional exercises on an advanced topic apart from curriculum is also given</li> <li>❖ Oral viva questions are asked to the students by the faculties before they logon to the system to check whether they have knowledge on the exercise.</li> <li>❖ Model Lab exams are conducted in laboratory courses to assess the lab course.</li> </ul>
3)	Assignment	<ul style="list-style-type: none"> <li>❖ Through this student are able to solve critical issues.</li> <li>❖ This will help students for Lifelong learning. (unsolvable issues)</li> </ul>

		<ul style="list-style-type: none"> <li>❖ It provides an opportunity to develop capacity to interpret, translate, apply and evaluate Peer Reviewed by the Faculty Members</li> </ul>
4)	Mini Project	<ul style="list-style-type: none"> <li>❖ In 6<sup>th</sup> Semester as per the curriculum the students are engaged to do a design and fabrication project to enhance their hands on experience in the field of Mechanical Engineering</li> <li>❖ The students in a group of 2 or 3 or 4 apply their theoretical knowledge to solve the problems. This enables the students to have practical experience on theoretical knowledge they have gained and ability to work in a team.</li> <li>❖ During the 7<sup>th</sup> semester, four best projects are selected and are awarded with prize during the valedictory functions of the Mechanical Engineering Association(MEA).</li> <li>❖ This enriches the level of understanding in the lab course and help the students to gain additional skills in the concerned domain</li> </ul>
5)	Main Project	<ul style="list-style-type: none"> <li>❖ In 8th semester as per the curriculum the students are encouraged to select and solve any real world problem or problem selected from a research journal paper. The faculty members are allotted as project guide for the students to help them in doing the projects</li> <li>❖ Two to four members in a team is formed among the students</li> <li>❖ A team of faculty members review the projects periodically once in a month to make the students proceed in the right direction</li> <li>❖ There will be five reviews. The zeroth review is on the title proposal which will be held in the end of seventh semester. The first review focuses on the problem statement and identification of the methodologies at the beginning of the eighth semester. The students are made to present the concrete ideas about their work, design procedures, implementation and performance tuning during these consecutive reviews. The Fourth review is scheduled on a common day to enable every faculty member to participate in the review process.</li> <li>❖ The review process considers the following parameters for the assessment: <ul style="list-style-type: none"> <li>➢ Originality/Innovation</li> <li>➢ Technical Knowledge</li> <li>➢ Deliverables</li> <li>➢ Presentation</li> <li>➢ Social Impact and Applicability</li> <li>➢ Economic Aspects</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>❖ During the fourth review, the projects are evaluated by a team of faculty members, coordinated by the Project coordinator and Head of the department for short listing four projects to be considered for the best project selection</li> <li>❖ A team of experts (two numbers) from industries (Adjunct Faculties) for assessing the shortlisted four projects and one project is selected as best project from each class. The best project is awarded with cash award in the next academic year during Alumni Day function.</li> <li>❖ The final year students showcase their core project in the form of poster presentation. The presentations are viewed by the pre-final year students for having an understanding on the final year project</li> <li>❖ Most of the Final Year projects are converted to a Technical Paper Published in a reputed journal.</li> </ul>
6)	University Examination	<ul style="list-style-type: none"> <li>❖ The end semester examination is conducted by the affiliating university with the questions set by the experts from the domain</li> <li>❖ There is a system for the review of assessment and challenge the assessment also in the university body</li> <li>❖ It gives an assurance that the students have attained knowledge, skills and dispositions</li> <li>❖ Exam Results are analyzed and root cause analysis for any deviation from objective set are done by Faculty handling the course.</li> <li>❖ Root cause analyzed by faculty members are reviewed by HOD</li> </ul>
<b>Indirect Measures</b>		
1)	Alumni Feedback	<ul style="list-style-type: none"> <li>❖ Alumni feedback form is used for collecting the feedback from the students after leaving the college.</li> <li>❖ The feedback given by the students are taken into consideration and is used for the improvement of the programme outcome</li> <li>❖ Feedback analyzed by alumni association faculty members</li> </ul>
2)	Graduation rates	<ul style="list-style-type: none"> <li>❖ The number of students clearing all courses is maintained by the faculty members.</li> <li>❖ The graduation rates are analyzed and any issues regarding it are taken care. Faculty Member in-charge for mark analysis keep track of the number of students graduating and number of students having arrear.</li> </ul>

3)	Number Students progressing Higher Studies	<ul style="list-style-type: none"> <li>❖ Students are encouraged to do higher studies and needed information is provided to them through higher education cell.</li> <li>❖ The marks scored by the students in exams such as GATE, CAT, TANCET, GRE, TOEFL, etc., are maintained. Based on the observation improvements are made.</li> <li>❖ The details of the students opting for higher studies are maintained by faculty members.</li> </ul>
4)	Association Activities	<ul style="list-style-type: none"> <li>❖ The MEA, ISTE, SAE association activities enable the students to exhibit their technical as well as soft skills.</li> <li>❖ There are various events are conducted by various associations in every semester.</li> <li>❖ The activities are monitored and facilitated by the faculty members.</li> <li>❖ Active members in the MEA, ISTE, SAE will be awarded in the Association Valedictory function.</li> </ul>
5)	Student Portfolio (Counselling Book)	<ul style="list-style-type: none"> <li>❖ The portfolio of the students (from the entry of the students and during the programme) including students grade, backlogs if any are used to demonstrate progress towards and achievement of course objective.</li> <li>❖ The student's details including their HSC marks, university marks, and number of arrears in each semester, reason for their failure and their class attendance are maintained by the faculty advisors and mentors.</li> </ul>
6)	Mock Interview	<ul style="list-style-type: none"> <li>❖ It simulates the interview conducted by companies.</li> <li>❖ Conducted to II, III, IV year students which make them comfortable while attending interviews during campus placement and off-campus placement. Enable to assess individual performance and knowledge</li> </ul>
7)	Students Feedback System	<ul style="list-style-type: none"> <li>❖ In periodical manner the feedback from students (twice in a semester) are obtained for each course through web enabled intranet form, Class room feedback form and the consolidated statistical evaluation for each class course wise is analyzed by HOD.</li> <li>❖ The evaluation is made known to the concerned course instructor by the HOD for any feedback and corrective actions.</li> <li>❖ In case of any issues related to a specific course necessary actions are taken to rectify it</li> <li>❖ The evaluation takes the following parameters with sub parameters: <ul style="list-style-type: none"> <li>➢ Planning and Organization</li> <li>➢ Presentation/Communication</li> <li>➢ Students Participation</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>➤ Class Management/Assessment of Students</li> <li>➤ Approach of student</li> </ul>
8)	Academic Auditing	The course file and its contents are audited by a team of academic audit members to look in the details of course plan, test questions, assignments, course material and relevant documents

**Assessment of class proceedings of the courses:**

S.No	Assessment Tools	Evaluation Methods
1)	Class Committee Meeting	<ul style="list-style-type: none"> <li>❖ The class committee members comprise of the student members (students from high profile to lower profile, lateral entry students), faculty members handling the course, faculty advisors, Mentor and HOD</li> <li>❖ Class committee meetings are conducted every month to discuss about the internal test performance, university examination result and any other issues.</li> <li>❖ Minutes will be prepared considering collecting course coverage, level of understanding by the students in percentage, difficult topics if any.</li> <li>❖ Based on information collected through this minutes steps to be followed in case of any issues are formulated.</li> <li>❖ Minutes will be Reviewed by Principal, HOD, Class Committee Chairman, Faculty Advisor, Faculty Members handling the course</li> </ul>
2)	Class representative meeting with the Principal	<ul style="list-style-type: none"> <li>❖ The representatives of each class meet the Principal once in a semester to have a interaction about the class and general proceedings.</li> <li>❖ Group of Students are also can meet the principal periodically, to know about the class room handling.</li> </ul>

Table 2.25 Result Analysis Last Four Years

**(a) Department of Computer Science Engineering**

S.No.	Year	% of Pass (2010-2011)		% of Pass (2011-2012)		% of Pass (2012-2013)		% of Pass (2013-2014)		% of Pass (2014-2015)		% of Pass (2015-2016)	
		Odd	Even	Odd	Even	Odd	Even	Odd	Even	Odd	Even	Odd	Even
1.	I	75.4	76.66	96.4	92.5	85.71	80.67	85	94.50	95.76	97.47	98.31	95.79
2.	II	91.22	85.96	70.4	73	83.58	79.1	75	76.56	73.21	73.87	90	83.33
3.	III	71.21	65.66	85.96	59.67	75	70.83	80.59	92.42	65.62	68.75	83.78	86.48
4.	IV	-	-	46.15	89.23	77.41	74.19	52.77	95.83	78.78	95.45	81.25	99.21
<b>Number of Students Successfully Completed the Course within 4 years.</b>													
5.			-	42 / 65	54 / 61	66 / 72	61 / 67	118 / 128					

**(b) Department of Electrical and Communication Engineering**

S.No.	Year	% of Pass (2010-2011)		% of Pass (2011-2012)		% of Pass (2012-2013)		% of Pass (2013-2014)		% of Pass (2014-2015)		% of Pass (2015-2016)	
		Odd	Even	Odd	Even	Odd	Even	Odd	Even	Odd	Even	Odd	Even
1.	I	94.96	84.03	91.5	78.8	95.3	90.69	87.5	93.5	84.12	94.3	89.9	86.5
2.	II	73.03	54.5	63.3	68.3	73.4	62.9	73.5	82.5	80.85	77.6	79.5	85.5
3.	III	77.2	74.2	64.8	69.2	75.8	75.8	71.3	85.3	77	73.5	84	87.2
4.	IV	-	-	63.63	90.9	80.76	89.23	62.8	94.28	79.5	93	76.38	97.49
<b>Number of Students Successfully Completed the Course within 4 years.</b>													
5.		-		63 / 66		108 / 130		124 / 140		128 / 143		184 / 199	

**(c) Department of Electrical and Electronics Engineering**

S.No.	Year	% of Pass (2010-2011)		% of Pass (2011-2012)		% of Pass (2012-2013)		% of Pass (2013-2014)		% of Pass (2014-2015)		% of Pass (2015-2016)	
		Odd	Even	Odd	Even	Odd	Even	Odd	Even	Odd	Even	Odd	Even
1.	I	.	85	91.38	91.38	94.73	89.47	87.27	94.55	98.31	93.22	96.49	77.19
2.	II	84.85	77.2	74.64	56.33	70.83	77.77	67.64	76.47	85	68.33	70	75.71
3.	III	77.27	81.8	62.12	72.72	67.61	66.12	68.57	81.43	75	67.65	80	88.33
4.	IV	NA	NA	86.36	95.45	78.78	90.9	63.38	90.14	52.86	94.29	83.82	86.76
<b>Number of Students Successfully Completed the Course within 4 years.</b>													
5.		NA		60 / 66		58 / 66		62 / 71		63 / 70		58 / 68	

**(d) Department of Mechanical Engineering**

S.No.	Year	% of Pass (2010-2011)		% of Pass (2011-2012)		% of Pass (2012-2013)		% of Pass (2013-2014)		% of Pass (2014-2015)		% of Pass (2015-2016)	
		Odd	Even										
1.	I	65.52	31.03	93.28	84.03	90.83	81.67	83.2	93.81	94.12	84.75	93.91	85.22
2.	II			22.73	33.33	81.12	86.01	57.45	90.0	60.29	72.79	82.39	80.28
3.	III					63.64	62.12	75.89	90.71	85.61	79.86	72.18	71.43
4.	IV							54.55	86.36	86.33	96.40	87.14	97.14
<b>Number of Students Successfully Completed the Course within 4 years.</b>													
5.		-		-		-		57 / 66		133 / 139		133 / 139	

Following are the data of the student achievements in university examinations UG and PG Programme

### University Rank List for the Past Four Years (Nos) – UG and PG

Table 2.26 University Rank List Last Four Years

Department	2008 – 2012	2009 – 2013	2010 – 2014	2011 – 2015	2012 – 2016
CSE	4	6	4	9	3
ECE	4	14	7	4	10
EEE	8	5	3	2	4
IT	6	4	4	9	2
MECH	NA	-	-	9	3
<b>TOTAL</b>	<b>22</b>	<b>29</b>	<b>18</b>	<b>33</b>	<b>22</b>

### Overall College UG Result and Ranking

Table 2.27 College Ranking among Affiliated Colleges

Month / Year	Apr / May 2013	Nov / Dec 2013	Apr / May 2014	Nov / Dec 2014	Apr / May 2015	Nov / Dec 2015	Apr / May 2016	Nov / Dec 2016
Ranking	27	22	6	19	27	9	Yet to publish	Yet to publish
Student based pass %	81.21	73.73	89.43	81.51	83.97	85.55	88.01	86.28

Looking at the data of UG results, the overall achievement of the college has been commendable and the achievement of the students and faculty has placed the college as one among the top Engineering Colleges in Tamil Nadu. The number of University rank holders is showing academic achievements by our students

#### **2.6.3 How are the teaching, learning and assessment strategies of the institution structured to facilitate the achievement of the intended learning outcomes?**

- ❖ Faculty post their study materials in social networks for the welfare of student community
- ❖ The Learning Outcomes can be achieved through the classroom teaching and supplemented by tutorials and practicals.
- ❖ The classroom interactions encourage the presenting and arguing of their technical ideas through project submissions and presentations.
- ❖ The various assessment tests are ensuring that applications and concepts are learned and worked upon. They also provide feedback to the faculty and students
- ❖ Outcomes are usually expressed as knowledge, skills, or attitudes. Through a series of lectures and practical classes, he tends to absorb the knowledge that is ‘spread’ in the class.
- ❖ The syllabi of every programme are updated once in five years with inputs from the experts from industry and academia.

- ❖ Frequent exposure and interaction with the industry by way regular industrial visits, carrying out industry defined projects and consultancy works.
- ❖ Organization and participation in seminar/workshop/conferences in the national and international levels.
- ❖ The faculty and students have access to e-resources in addition to the print text books and journals available with library
- ❖ The students are given with challenging homework problems and group assignments.
- ❖ Students are encouraged to present papers in symposiums, attend seminars and workshops to enrich their knowledge in their specific field.
- ❖ Industrial visits and internships are arranged for the students to learn the industrial atmosphere, advanced technology, team work, solution for the problems faced in the industry and to learn about the opportunities.
- ❖ Students take up the mini projects and participate in the project contests which improve their critical thinking and applications of the theoretical concepts taught to them.
- ❖ Guest lectures, motivational lectures and workshops are arranged to augment the students' caliber in the technical field and to develop their leadership skills.
- ❖ Training and Personality development programmes are conducted to enhance their interpersonal skills. Communication skills of the students are shaped through effective training with the help of the communication laboratory.
- ❖ At the end of the course, through the examination and the indirect assessment tools the learning outcomes are measured.
- ❖ Various Centre of Excellences, Academic and research programmes, library, labs, seminar hall etc., facilitate the teaching learning process.
- ❖ The faculty plan their lecture and prepares question papers based on the outcome based learning.

**2.6.4 What are the measures/initiatives taken up by the institution to enhance the social and economic relevance (student placements, entrepreneurship, innovation and research aptitude developed among students etc.) of the courses offered?**

- ❖ The Institution sponsors to conduct national level technical symposium and conference. This helps to develop technical aptitude and organizational abilities.
- ❖ Spirit of entrepreneurship is inculcated among the students by the Entrepreneurship Development Cell (EDC). The EDC organizes events and talks by eminent entrepreneurs.
- ❖ Students participate in projects of social relevance through the Youth Red Cross.
- ❖ The Placement cell takes care of the placement activities for the students. The Training and Placement Cell consists of a Placement officer, Placement Coordinators (faculty members) and student placement coordinators from each department and takes care of training the students towards on campus and off campus recruitment.

- ❖ Additional classes on soft skills, personality development, aptitude, and communication skills are conducted regularly by our experienced and expert trainers, by allotting hours in the regular class time table.
- ❖ The college offers Business English Certificate course which is made compulsory for the second year students. Online tests, Personality development programme, Soft skill training programme have been conducted periodically to develop their interpersonal skills to make the students industry-ready.
- ❖ The Placement Cell every year organizes the Career Guidance Programme through experts from different field to guide the students to choose the right career prospects and frame their development plans.
- ❖ Testing students in the technical and aptitude through comprehension test to enable students appear for recruitment and competitive examinations like GATE, CAT, GRE, and GMAT
- ❖ Students are encouraged to take up mini projects and final year projects related with social and economic relevance.
- ❖ To encourage the students, Management Scholarships are awarded on merit basis to economically weaker sections. College arranges for various scholarship schemes to reach the students.
- ❖ Guest lectures by industry experts, Professors from IIT and Anna University assist students to gain good knowledge in the relevant courses.

**2.6.5 How does the institution collect and analyze data on student performance and learning outcomes and use it for planning and overcoming barriers of learning?**

**The Institution has specified procedure to collect and analyze data on student learning outcome; the following points are adopted by the institute in this context:**

- ❖ Continuous evaluation comprising internal assessments exam and assignments.
- ❖ Tutorials, class tests, viva in the lab
- ❖ Mini and Main projects
- ❖ Anna university semester examination.

The college analyzes the data based on the performance of previous year or semester result of the department and also with results of neighbor colleges. Accordingly the institute plans for further improvement

**The Institute has taken the following steps to overcome the barriers:**

- ❖ Providing Question bank of various subjects to the students.
- ❖ Distributing answer books to students to make them understand their relative strengths and weaknesses.
- ❖ Conducting classes other than regular classes for slow learners to improve their performance.
- ❖ Class committee meeting is conducted thrice in a semester.
- ❖ Result of Internal Assessment Exam is analyzed by the faculty Advisor of the class and it provides room to conduct coaching class for the slow learners.
- ❖ Employers feedback registers are maintained regularly.

- ❖ Every department maintain experts opinion register (about the college and department)
- ❖ Alumni feedback is collected on the alumni meet conducted every year and whenever the alumni visit our college.
- ❖ The feedback is also discussed in the department advisory committee meetings
- ❖ Feedback on teaching methodologies, course delivery, attitude, strengths and weaknesses, difficulties faced in the subject give a clear idea about the problems faced by the students which helps to overcome the barriers of learning. These issues are then addressed by the HOD in regular meetings and the corrective measures/ suggestions are implemented under the guidance of the Principal.
- ❖ Additional coaching classes, NPTEL video presentation for the underperformed subjects and additional simplified materials are provided to the students to overcome the barriers of learning.
- ❖ Feedback on the attainment of Program Outcomes collected from the graduands (exit feedback) also helps in identifying the short comings and taking steps to rectify them for the subsequent batch of students.

#### **2.6.6 How does the institution monitor and ensure the achievement of learning outcomes?**

The institute monitors the achievement of learning outcomes in the following ways

- ❖ Through continuous assessment (unit tests, Internal Assessment tests, assignments, seminars, etc.,)
- ❖ Class committee meeting reports
- ❖ Internal and external academic audits
- ❖ Feedback from stakeholders
- ❖ Class committee meeting is conducted thrice in every semester and grievances are collected from students related to the syllabus completion and the staff performance in the class.
- ❖ The student's participation in co – curricular and extra – curricular activities is encouraged to achieve the learning outcomes.
- ❖ The students interested in placement, higher studies and entrepreneurship are identified and the trainings are provided to them accordingly.
- ❖ The college ensures the outcomes by analyzing the university exam results, the student's placements, university ranks and the prizes won in the co – curricular and extra – curricular activities, awards won and Patents filed by faculty and students.

#### **2.6.7 Does the institution and individual teachers use assessment/ evaluation outcomes as an indicator for evaluating student performance, achievement of learning objectives and planning? If “yes” provide details on the process and cite a few examples.**

Yes, the Institution uses assessment / evaluation as an indicator for evaluating student's performances. The course wise objectives, course plans are prepared before the commencement of classes and Bar Chart is used to analyze the performance at the end of the course by the subject teacher.

For example, continuous assessment tests are used for accessing the course outcomes. The questions answered by the students are used for assessing a particular CO of the subject in turn it is used to assess the PO. An excel sheet has been formulated for easy calculation of CO. The subject faculty enters the marks in the excel sheet to the respective question answered. By this the CO attainment is evaluated easily. This is being done for past one year.

**Any other relevant information regarding Teaching-Learning and Evaluation which the college would like to include.**

The institution achieves its goals and objectives through well prepared academic calendar which is distributed well in advance to the students and staff before the commencement of the semester classes.

- ❖ The teacher raises questions after completion of each topic to check whether the students understood the concept.
- ❖ For every 20 students a faculty member is assigned to monitor the performance, guide them for their betterment and individual care
- ❖ Year Coordinator and Class-in-charge are allotted for continuous monitoring of students, to arrange extra classes for syllabus completion, organize retest, to pass information about department activities, etc.
- ❖ Orientation programmes, bridge courses, Smart Training, BEC, program specific training, etc., are arranged for the students
- ❖ Encouraging advance learners and eager-beaver students to participate in various curricular and co-curricular activities.
- ❖ Coaching classes for slow learners are regularly conducted in order to improve their performance in internal and university examinations.
- ❖ Continuous evaluation and corrective measures pave way for the best performance of the students.
- ❖ Industrial trainings are arranged for the faculties at the end of each semester. Faculty delivers guest lecture in industries to share knowledge
- ❖ Faculty adopt students for their own research work thereby imparting knowledge to the students in their advanced learning as well.

# **Criterion III**

## **Research, Consultancy and Extension**

*Research, Consultancy  
& Extension*



### CRITERIA III

#### RESEARCH, CONSULTANCY AND EXTENSION

##### **3.1 PROMOTION OF RESEARCH**

###### **3.1.1 Does the institution have recognized research center/s of the affiliating University or any other agency/organization?**

Once PG courses are started, the Institution will apply for recognized research Center. In our college eleven faculty members have been recognized as Ph.D. supervisors with affiliated university and other universities.

###### **3.1.2 Does the Institution have a research committee to monitor and address the issues of research? If so, what is its composition? Mention a few recommendations made by the committee for implementation and their impact.**

Yes. Our institution has a “Research Cell” to monitor and address the research issues. The research cell comprises the Convener, Coordinator and members from various departments to provide support and guidance to the faculty members and students for their research activities in the thrust area. The names of the nominated research cell members are given below:

**Table 3.1 Details of Research Cell Committee**

S.No .	Name of the Faculty Member	Designation	Dept.	Committee
1.	Dr.T. Rengaraja	Principal	S&H	Convener
2.	Dr. S.Bhagavathi Perumal	Vice-Principal	S&H	Co Convener
3.	Dr. C.Arun	Professor	ECE	Research Cell Coordinator
4.	Dr.D.Paulraj	Professor & Head	CSE	Member
5.	Dr.N.Gangatharan	Professor & Head	ECE	Member
6.	Dr.N.Kalaiarasi	Professor & Head	EEE	Member
7.	Dr.M.Balasubramanian	Professor & Head	MECH	Member
8.	Dr.R.Patturaj	Professor & Head	S&H	Member

9.	Dr.P.K.Devan	Professor	MECH	Member
10.	Dr.A.Selvakumaran	Professor	S&H	Member
11.	Dr.T.Inbamalar	Professor	ECE	Member
12.	Dr.K.G.Shanthi	Professor	ECE	Member
13.	Dr.Farithabalu	Professor	CSE	Member

Every year around 80 proposals are submitted to various government funding organization out of which only 5 to 10 Proposals get funded and also to improve the number of publications the research cell committee provides the following recommendations

### **Recommendations of Research Committee**

- ❖ Formulate norms for faculty members to pursue Ph.D.
- ❖ The committee constantly encourages the faculty members to register for Ph.D. in their field of interest.
- ❖ Encourages faculty members and the students to attend and organized National/International conferences, seminars, workshops, FDPs etc., to update/share their knowledge in the recent research areas.
- ❖ Motivates the faculty members and students to publish their research works in the reputed international journals of good impact factor.
- ❖ Encourage the faculty members and students to apply for patents.

### **Impacts of Research Committee Recommendations**

- ❖ Centre of Excellence is developed in all the departments based on suggestions from the Research Committee.
- ❖ Sixty four Faculty members are pursuing their Ph.Ds
- ❖ The number and quality of research publications have been increased.
- ❖ Three Faculty members have completed their Ph.D in the academic year 2015-2016.
- ❖ The number of patents filed has increased considerably.
- ❖ Approval of proposals from funding agencies like ISRO, AICTE, TNSCST, DST, DRDO, etc have been increased
- ❖ EDC cell is developed and students are encouraged to do small startups enterprises.

**3.1.3 What are the measures taken by the institution to facilitate smooth progress and implementation of research schemes/projects?**

- ❖ Once the Principal investigator received the funding projects, principal investigator can act independently to carry out their projects. Institution offers complete freedom to utilize institution infrastructure, electricity, lab equipment and internet connectivity for successful completion of the project on time..
- ❖ Faculties with funding projects are offered with reduced and adjustable workload. Institution also offers special permission and On-Duty leave to the faculty members for their project work.
- ❖ The Institution sanctions registration amount to the faculty for attending the workshop and conferences to enhance their knowledge on latest developing research areas.

**3.1.4 What are the efforts made by the institution in developing scientific temper and research culture and aptitude among students?**

Institute encourages first year students to actively participate to share their innovations in science day and project contest. Students are motivated to involve in the research activities and to submit project proposals to various organizations. Students are encouraged to present research papers in national/International conferences. Prize winners of paper presentation are recognized and awarded with cash prize. Further if the student publishes a paper in a reputed journal, a cash incentive is given to encourage him/her. Industrial visits, workshops and seminars are arranged to the students to update their knowledge in the recent technologies.

Financial assistance is provided to the students for applying patents and participating in events such as Smart India Hackathon 2017, IET – PATW 2017 etc.to enhance research attitude.

**3.1.5 Give details of the faculty involvement in active research (Guiding student research, leading Research Projects, engaged in individual/collaborative research activity, etc**

Faculty members regularly publish their research work in National/ International/ Conference/ Journals and submit their project proposals to various funding agencies. Faculty members guide mini-project and final year projects for under graduate students. Our College has 20 Doctorates who are involved in various research activities. At present, 64 faculty members are pursuing individual research works leading to their Ph.D. at various Universities.

**Details of Recognized supervisor:**

**Table 3.2 List of Recognized Supervisors**

S.No	Name of the Supervisor	Department
1.	Dr.T. Rengaraja	Civil
2.	Dr. S.Bhagavathi Perumal	Civil
3.	Dr.D.Paulraj	CSE
4.	Dr.N.Gangatharan	ECE

5.	Dr. C.Arun	ECE
6.	Dr.T.Inbamalar	ECE
7.	Dr.N.Kalaiarasi	EEE
8.	Dr.M.Balasubramanian	MECH
9.	Dr.P.K.Devan	MECH
10.	Dr.R.Patturaj	S&H
11.	Dr.A.Selvakumaran	S&H

### Sponsored projects

Table 3.3 Details of funded Research Projects

S.No	Project Title	Dept	Agency	Period	Amount (in Rs)	Principal Investigator
1	Design and Implementation of Dual Blind Detection Robust Watermarking for Multimedia security in FPGA	ECE	ISRO	2 yrs	12,98,000	Dr. C.Arun
2	Generation and Dynamics of Soliton Pulse in Resonant fiber media	S&H (Physics)	DST-SERB	3 yrs	14,46,000	Dr. B. Kalithasan
3	Studies on a new sub class of uniformly spiral like functions	S&H (Maths)	DAE	2 yrs	1,50,000	Dr. GeethaBalachandar

### Faculty engaged in Individual / Collaborative research Activity

Table 3.4 Details of Faculty engaged in Individual / Collaborative research Activity

Department	CSE	ECE	EEE	Mechanical	S & H
No. of faculty members currently pursuing Ph.D	13	19	9	14	9

**3.1.6 Give details of workshops/ training programmes/sensitization programmes conducted/organized by the institution with focus on capacity building in terms of research and imbibing research culture among the staff and students.**

Each department conducts programmes like symposium/ seminar/ workshop/ conference/ faculty development program, training program etc., to incorporate research culture among faculty members and students. Many technical programs are sponsored by the funding agencies.

**Table 3.5 List of Programs organized for last four years**

<b>Programs</b>	<b>2013-2014</b>	<b>2014-2015</b>	<b>2015-2016</b>	<b>2016-2017</b>
Conference	4	5	4	4
Workshop	3	8	6	6
FDP	1	3	1	1
Refresher Course	4	4	4	-
Seminar	1	3	2	1
Symposium	5	6	6	6
Sensitization Program	38	44	44	40

**3.1.7 Provide details of prioritized research areas and the expertise available with the institution.**

The Institution has eminent professor with research inclination in the frontier area of engineering and the details of their research expertise are given below

**Table 3.6. The details of research areas and the expertise**

<b>S.NO</b>	<b>Faculty Name</b>	<b>Dept</b>	<b>Research Areas</b>
1.	Dr.T.Rengaraja	Civil	Smart Structures
2.	Dr. S.Bhagavathi Perumal	Civil	Structural Engineering
3.	Dr. D. Paulraj	CSE	Service Oriented Architecture, Cloud Computing
4.	Dr.J.Faritha Banu	CSE	Networking
5.	Dr. N. Gangatharan	ECE	Wireless Communication, Multimedia Technology
6.	Dr. C. Arun	ECE	Image Processing, VLSI Design
7.	Dr.T.M.Inbamalar	ECE	Digital Signal Processing
8.	Dr.T.S. Arulanandh	ECE	Image Processing
9.	Dr. K.G.Shanthi	ECE	VLSI Design
10.	Dr. N.Kalaiarasi	EEE	Electrical Drives
11.	Dr.J.Prakash	EEE	Renewable Energy
12.	Dr.M.Balasubramanian	Mech	Manufacturing & Composite Materials
13.	Dr. P.K Devan	Mech	Thermal Sciences
14.	Dr.R.Patturaj	S&H	Applications in Fluid Mechanics
15.	Dr.K.A.Selvakumaran	S&H	Complex analysis
16.	Dr.Geetha Balachandar	S&H	Complex analysis
17.	Dr.S.M.Chitra	S&H	Operations research
18.	Dr.A.Sudha	S&H	Algebra
19.	Dr.G.Devi	S&H	Spectro physics
20.	Dr.B.Kalithasan	S&H	Theoretical physics

**3.1.8 Enumerate the efforts of the institution in attracting researchers of eminence to visit the campus and interact with teachers and students?**

The Institution organizes International/National conferences, workshop, Seminar etc by inviting keynote speakers from various areas of research to provide their vision to the teachers and students. The institution is an institutional member of various societies like IEEE, IET, ISTE, IIPE, SAE, IETE, etc., who conduct many programs involving eminent personalities. Faculty members and students are permitted to attend Viva-Voce presentations of research scholars arranged in our Institution.

Also details of eminent researchers who visited our institution in the recent past is detailed in section 3.7.4

**3.1.9 What percentage of the faculty has utilized Sabbatical Leave for research activities? How has the provision contributed to improve the quality of research and imbibe research culture on the campus?**

Around 20% of faculty members have utilized sabbatical leave for their research related activities like attending and presenting papers in national and international conferences, doctoral committee meetings, course work examinations, attending FDPs, seminars, workshop, training programs / internships in Institutes of Higher Learning and Centers of Research to enhance their knowledge in their domains of research. This provision has contributed in a significant way to the promotion of research culture in the campus.

**3.1.10 Provide details of the initiatives taken up by the institution in creating awareness/advocating/transfer of relative findings of research of the institution and elsewhere to students and community.**

Various funding schemes have enabled faculty and students for presenting their research work in India and abroad. Through funding from agencies, the research laboratories have been equipped with latest facilities with high end and updated software and hardware. Faculty members pursuing Ph.D. are advised to present and share their knowledge among the students and they are identifying the students to participate in their research activities. Mini project contest have been arranged periodically to enrich their technical skills among students and best projects from the contest are scrutinized by research cell and encourage them to participate in National/ International level project contest like Make in INDIA, Ti Contest, etc., The students are encouraged to attend Ph.D public viva-voce examinations held at our institution so that they can sharpen their knowledge and acquire research ideas. Our students are actively involved in socially relevant projects in domains such as Agriculture, Environmental safety, Accidental avoidance, Bio-medical Engineering etc.,

**Table 3.7. The details of ISRO Project Modules to students**

S.No.	Students Name	Title	Year
1	Manojkumar V	Design And Implementation	2014-15

	Pravesh Anand R Manoranjan U Mohideen Abdhul Lathif K	Of Dual Blind Detection Robust Watermarking Of Digital Video For Security Purposes in FPGA	
2	Sriram K Thangaselvam D Wasim Akram U Prabhakaran S	Implementation of image watermarking scheme with lifting DWT and SVD using FPGA	2015-16
3	Lokesh D Singaravelan S	Design and Implementation of Singular Value Decomposition Using CORDIC on FPGA	2016-17

Students were encouraged to participate in IET “Present Around the World – (PATW)” competition for the year 2017 held at Zone 2 – RMK College of Engineering and Technology on 17.03.2017

Students were provided with seed money to participate in the research project contest and the details are given below

**Table 3.8. The details of seed money provided to students for project contest**

S.No.	Team Members	Problem Category	Venue
1	Suryah V Sudharsan GP Gowtham P Sudharsan S Abirami S Dakshita Jain	<b>Forests &amp; Climate Change by Ministry of Environment</b>	Smart India Hackathon 2017 held at Sri Krishna College of Engineering and Technology, Coimbatore
2.	Hemanth Raj R Gokulnath C Nagarjun V Jayasri P Bhuvaneshwari S Aravapalli Pavan kumar	<b>Employer's app by Pradhan Mantri Kaushal Vikas Yojana</b>	Smart India Hackathon 2017 held at Chandigarh group of College

### **3.2 RESOURCE MOBILIZATION FOR RESEARCH**

#### **3.2.1 What percentage of the total budget is earmarked for research? Give details of major heads of expenditure, financial allocation and actual utilization.**

The management of our Institution encourages research activities among the faculty members as well as students. The college spends generously to support research activities like sponsoring to attend seminars, conferences, workshops, training programmes, paper publication and Patent filing.

**Table 3.9. The details of percentage of total budget earmarked for research**

<b>Academic Year</b>	<b>Total Budget Allotted (In Lakhs Rs)</b>	<b>Actual Expenditure for research activities (In Lakhs Rs)</b>	<b>Percentage of the Total Budget</b>
2014-2015	116.003	5.515	4.75
2015-2016	100.761	6.410	6.36
2016-2017	78.856	3.838	4.87

**3.2.2 Is there a provision in the institution to provide seed money to the faculty for research? If so, specify the amount disbursed and the percentage of the faculty that has availed the facility in the last four years?**

Yes, the percentage of faculty who have availed of this facility is shown below

**Table 3.10. Details of percentage of faculty availed seed money**

<b>Academic Year</b>	<b>Total Internal Fund Provided (In Lakhs Rs)</b>	<b>Number of Regular Faculty</b>		
		<b>On Rolls</b>	<b>Availed</b>	<b>Percentage</b>
2013-2014	1.9	82	21	26
2014-2015	3.3	100	36	36
2015-2016	4.5	104	39	38
2016-2017	2.1	118	22	19

**3.2.3 What are the financial provisions made available to support student research projects by students?**

The Institution consistently encourages the student to carry out research projects in their field of interest. Institution rewards the students with a cash prize, who received the best project and best paper presentation award organized by other institutions. Institution encourages student level research activities by offering registration amount to Participate in National and International Conferences. Best innovative projects of the students are elevated by the research committee towards patent filing sponsored by the institution. The institution sponsors to student research projects for their hardware components, project contest registration, traveling and accommodation.

❖ For student research project kindly refer section 3.1.10

**3.2.4 How does the various departments/units/staff of the institute interact in undertaking inter-disciplinary research? Cite examples of successful endeavors and challenges faced in organizing interdisciplinary research.**

The institution organizes various events like seminars, conference through which various departments collaborate and innovate on new projects. These projects are often submitted as a proposal to various funding agencies

for getting grants. Our Institution encourages inter-disciplinary research among student and faculty.

**Table 3.11. Details of inter-disciplinary research activities**

Academic Year	Name of the Project	Dept Involved	Faculty and Students Involved	Project Status
2015-16	Characterization of Machining Damage Pattern by Image Processing	MECH and ECE	Dr. M. Balasubramanian Dr. C Arun	On Going
2016 – 17	RMKCET Smart Presenter	CSE and ECE	Dr. Paulraj D Dr. Gangatharan N Kadam Sandeep Kumar Pankaj Kumar.T.S	Completed
2016 – 17	Electro Magnetic Engine	MECH and EEE	Mr. Sadasivan N Mr. Gunalan K E.Mariamiron	Completed
2016 – 17	Vacuum Duster using Arduino Board	MECH and ECE	Mr.N.Sadasivan Mr. Manikandan A H.Dillibabu	Completed
2016 – 17	Fabrication of Solar Panel Efficiency Improvement	MECH and EEE	Mr. Ashokkumar R Mr. Prakash T J. Immanuel	Completed
2016 – 17	Smart Solar sunflower	MECH and EEE	Mr. Krishnakumar M Mr. Prakash T K.Logeswaran	Completed
2016 – 17	Electromagnetic Suspension system	MECH and EEE	Mr.M.Krishnakumar Ms. Catherine T J A.S Nirmalram	Completed
2016 – 17	Antitheft defense mechanism of bikes	MECH and EEE	Mr.S.Senthil gavaskar Mr. Gualan K N.P Praveen	Completed
2016 – 17	Inbuilt Electrical Jack	MECH and ECE	Mr.C.Dillibabu Ms. Seshavidhya S V.Monesh	Completed

**3.2.5 How does the institution ensure optimal use of various equipment and research facilities of the institution by its staff and students?**

The laboratories of all the departments are equipped with state of art equipment's capable of supporting continuous and intrinsic research activities by the faculties and students. Each department maintains the utilization report for the research oriented equipment's to cater the needs of the faculties and students based on first cum first served basis.

Our Institution has various Laboratory equipment for both Academic and Research purposes. Majority of the faculty members make use of various equipment for teaching as well as research purposes. All the inventory, Stocks and equipment are periodically checked and serviced for Annual Maintenance and ensure safety measures for the effective and optimal usages. With the knowledge of Faculty and Laboratory technicians all the equipment are handled with utmost care for the Students Utility purposes in efficient manner to develop Projects, involve them in Technical Conference, Workshops and Competitions etc.,

For instance the ECE department has shared the Microprocessor and Microcontroller Laboratory with CSE department. The institution offers various facilities like special equipment and software for Value Added Courses, library resources like printed journals and on-line Journals; Wi-Fi connectivity is available in the campus as well as in hostels to help the faculty and students for doing research work and projects. All Computerized laboratories are effectively used for Training and Placement activities, Conduction of Workshops and Demonstration of Projects by the Students and faculty member apart from regular lab classes. The infrastructures developed through the various MOU's are effectively utilized to train both faculties and students.

**3.2.6 Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facility? If yes give details.**

Yes, the institution received grants in field of Resonant Fiber Media and Robust Watermarking from DST-SERB and ISRO respectively (Kindly refer section 3.1.5 for research grant details). A Wipro Telecom Lab has been established in association with Wipro Pvt. Ltd.

**3.2.7 Enumerate the support provided to the faculty in securing research funds from various funding agencies, industry and other organizations. Provide details of ongoing and completed projects and grants received during the last four years.**

The research cell will communicate the relevant details of the research oriented activities like proposal submission, conference etc. Through research cell coordinator, all the faculty members are instructed to send the project proposals to funding agencies like ISRO, AICTE, TNSCST, DST, DRDO, etc., All faculty members are encouraged to pursue their Ph.D degree. Registration fees and travelling expenses are reimbursed to faculty members for presenting their research papers in Indexed International

Journal/Conference publications. Institution offers special permissions to the faculty members to secure research funds. Kindly refer section 3.1.5 for details of grants received and ongoing projects.

### 3.3 RESEARCH FACILITIES

#### 3.3.1 What are the research facilities available to the students and research scholars within the campus?

The college takes efforts to facilitate research with resources like laboratories, digital library and computer lab facilities especially for research and project works. Apart from the regular curriculum of UG programs, all the departments have purchased R&D related equipment which could be used for pursuing research. The students and research scholars are permitted to use the research facilities available in the institution and the details of these facilities are listed below

**Table 3.12. List of research facilities available within the campus**

S.No	Name of the Laboratory	Major Equipment or software Available
<b>Department of Computer Science and Engineering</b>		
1	Digital Enterprise Laboratory – CTS	Partial support for 30 MAC Machines (iOS) + 30 Windows Machines
2	ORACLE Laboratory – Oracle	ORACLE 10g , DWH toolkit and related products (Rs. 99 Lakhs)
3	Information Security Laboratory – TCS	Partial support for 80 Windows Machines
<b>Department of Electronics and Communication Engineering</b>		
4	VLSI Lab	Vivado-Xilinx ISE & FPGA Kit, Computing facility
5	Microwave & Optical Fiber Laboratory	DSO, Optical Fiber System & Tool kit, Microwave Trainer Kit, Microwave Power meter, APD Module, Network Analyzer
6	Microprocessor & Microcontroller Laboratory	Microprocessor and microcontroller kits, Interfacing boards
7	Embedded Laboratory	ARM Cortex processor, interfacing Modules, Zigbee Modules, Keil software, CCS 6.0 software
8	Digital Signal Processing Laboratory	TMS 320C50, MATLAB, Simulink, DSO, Server, Computers,
9	Communication Laboratory	Network Analyzer, analog and digital modulation trainers, CRO, DSO, Computers
10	Networks Laboratory	LAN Trainer, Network Simulation Software, Computers
<b>Department of Electrical and Electronics Engineering</b>		
11	Electrical Machines Lab.	Induction Generator
12	Electrical Machines Lab.	BLDC Motor

13	Control and Instrumentation Lab.	Digital Storage Oscilloscope, Matlab-Simulink
14	Basic Electrical Lab.	Range Finder
15	Power Electronics Lab.	Solar Photovoltaic Module.
<b>Department of Mechanical Engineering</b>		
16	Strength of Materials	Digital Impact testing Machine for composites(ASTM D 256)
		Digital Torsion testing Machine.
		Digital UTM with tension compression and flexural test facility (ASTM D 790)
		Composite Fabrication Facility
17	Thermal Engineering	Diesel engine with data acquisition system.
		Biodiesel Extraction Facility
		soxhlet extraction Facility
18	Metrology and Measurements	Profile Projector(300mm) Surface roughness Tester (TIME @ R3100- (0.25- 6mm)
19	Mechatronics	Image processing with camera
<b>Department of Science and Humanities</b>		
20	Physics Lab	Spectrometer
		Ultrasonic interferometer
		Dual Trace Oscilloscope
		Laser Equipment
21	Chemistry Lab	Spectrophotometer

3.3.2 What are the institutional strategies for planning, upgrading and creating infrastructural facilities to meet the needs of researchers especially in the new and emerging areas of research?

The institution encourages faculty members to identify the research domains and thrust areas based on their area of interest. Based on the inputs from the Industries (through Industry – Institution Interaction Cell) and visiting researchers from Institutes of Higher Learning, the Research cell constantly updates the research goals.

The Institute encourages faculty members to apply to various funding agencies like AICTE, DST, ISRO, MNRE, NRB, AERB, IGCAR, NIOT, DIT, BRNS, etc. through their various schemes to establish research facilities through sanctioned funded project. The college continuously improves the laboratories and other facilities to enhance the research activities. The Centre of Excellence has been created for the benefit of student and staff research. Recently, the Computer centre has upgraded the terminals to Mac O/S through CoE.

**3.3.3 Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facilities? If ‘yes’, what are the instruments / facilities created during the last four years.**

Yes, the instruments / facilities created during the last four years are given below

**Table 3.13. List of research facilities developed on receiving special grants**

Academic Year	Industry /Agency	Computing / Software Infrastructure
2013-2014	iNautix Technologies & CTS	Rs. 6 Lakhs for iOS Laboratory Partial support for 30 MAC Machines (iOS) + 30 Windows Machines
2015-2016	ORACLE Academy	ORACLE 10g , DWH toolkit and related products (Rs. 99 Lakhs)
2016-2017	Information Security Laboratory – TCS	Partial support for 80 Windows Machines
2015-2016	ISRO	Vivado, Kintex-7 Xilinx mid-range Zynq-7000 board
2016-2017	DST-SERB	Workstation (Laptop)
2015-2016	Sri Lakshmi Industries	Digital Impact Testing Machine, <b>ASTM D790</b>

**3.3.4 What are the research facilities made available to the students and research scholars outside the campus / other research laboratories?**

The institution promotes the research activities and empowers the researchers to undertake challenges. The following research centers are available for the research scholars outside the campus/institution

- ❖ The Indian Institute of Technology Madras (IITM)
- ❖ Research labs Anna University
- ❖ Annamalai University
- ❖ Research labs Madras University
- ❖ ISRO Hyderabad
- ❖ DRDO CVRD, Chennai
- ❖ Micro Lab, Chennai
- ❖ MET Lab
- ❖ TANGEDCO
- ❖ NSIC Chennai
- ❖ CIPET ,Chennai
- ❖ RESPRO Labs
- ❖ Glosys Ltd
- ❖ RGMTTC, BSNL Chennai
- ❖ COREAL Tech, Bangalore
- ❖ Nano Networks Chennai

**3.3.5 Provide details on the library/information resource center or any other facilities available specifically for the researchers?**

The College Library and Information Centre have resources facilitating the Students and Research Scholars with the latest Technology in accordance with the International Standards. The Library Services are automated through the Standard Library Software package called “Autolib 5.2 version” The Circulation System is fully Computerized and all the documents are bar-coded.

The College Library Contains 22,159 Volumes of books with 4886 titles and 1574 CDs. The Library also subscribes to 543 E-Books, 54 National Journals, 621 International Journals, 25 Magazines and 11newspapers. To add to the wealth of options, RMKCET also has institutional membership in the Libraries of Anna University, British Council, and DELNET (Developing Library Network, New Delhi). The library also subscribes to the following online international journal for enhancing research

**Table 3.14. List of international journal packages subscribed**

Sl.No.	Name of the Package (International journals)
1	<b>IEEE (ASPP - All society Periodical Package for EEE, ECE &amp; CSE)</b>
2	<b>SPRINGER (EEE, ECE, CSE)</b>
3	<b>ELSEVIER (Science Direct for Engineering and Computer)</b>
4	<b>J-GATE - Journal of Engineering and Technology</b>
5	<b>Mc GRAW HILL (General Engineering and Reference)</b>
6	<b>ASME (American Society for Mechanical Engineering)</b>
7	<b>ASTM (Online Dictionary of Engg.Sc. &amp; Technology)</b>
8	<b>ISO-JTCI (online version)</b>
9	<b>IET-Digital Library</b>

**3.3.6 What are the collaborative research facilities developed/ created by the research institutes in the college? For ex. Laboratories, library, instruments, computers, new technology etc.**

The Research Cell of the Institution periodically intimates the faculties about various opportunities to submit research proposals. Three of research proposals have been accepted and research funds sanctioned to establish lab in their respective domain. Kindly refer the details given in section 3.3.3.

### **3.4 RESEARCH PUBLICATIONS AND AWARDS**

**3.4.1 Highlight the major research achievements of the staff and students in terms of Patents obtained and filed (process and product), original research contributing to product improvement, research studies or surveys benefiting the community or improving the services, research inputs contributing to new initiatives and social development**

Details of patent obtained and filed are given below

### Patent Granted

Table 3.15. Details of Patent granted

SNo	Inventors	Title	Patent Number
1	Dr. Devan P K Professor	New Poon Oil Composition-diesel Blend as Alternative Fuel for Diesel Engine	253355 (16.07.12)

### Patent Filed

Table 3.16. Details of Patents Filed

S.No	Inventors	Title	Patent Number
<b>Department of Computer Science and Engineering</b>			
1	Dr. Sankar Ram N	Gaming as Service – Cloud	2614/CHE/201 (filed)
<b>Department of Electronics and Communication Engineering</b>			
2	Dr.Perumal Pillai E B Principal Dr.Padmavathy T V Professor	Design and Development of Cross Slotted Circular Microstrip Patch Antenna Strain Sensor for Wireless Structural Health Monitoring	737/CHE/2015
3	Dr.Padmavathy T V Professor	Extension of Network Lifetime for Surveillance Wireless Sensor Networks Using Energy Efficient Routing Protocol	522/CHE/2012
4	Mr.Venkatesh Y B Mr.Revanth Kumar G Y Mr.Vignesh Babu M Student	Automatic Irrigation System and Security Surveillance From Living Beings in The Agricultural Field Using Renewable Solar Power Based on WSN	669 /CHE/2015
5	Dr.Perumal Pillai E B Principal Dr.Padmavathy T V Professor	Development of a Long-Term Monitoring System Based on Fiber Optic Sensors in Concrete Structures	4999/CHE/2015
6	Dr.Padmavathy T V Professor	Design and Development of smart sensor for damage detection in Bridges	7534/CHE/2016
<b>Department of Electrical and Electronics Engineering</b>			
7	Dr. N. Kalaiarasi Professor & Head	Enhancement of safety measures in Metro rail using PLC and SCADA	Application No: (201641018081) 2016
<b>Department of Mechanical Engineering</b>			
8	Dr.Balasubramanian M Professor & Head	A novel Methodology for the Placement of Multi diameter interlayer OFC Material in Friction Welding of Dissimilar Materials	1669/CHE/ 2015 (10.04.15)

9	Dr. Balasubramanian M Professor & Head	A Novel methodology implemented in modifying the nozzle by incorporating multi start internal thread	201641007629 (04.03.16)
10	Dr.P.K.Devan (professor) R.Ashok kumar (Assistant Professor) V.Thangadurai (Student) Thummala lokesh (Student)	Emission control using new chemical composition applied in engine exhaust line (muffler) of a stationery diesel engine	201641003944 (25.3.16)
11	Dr.P.K.Devan (professor) Mrs. K.Renugadevi (Assistant Professor)	Calotropis gigantean Natural fiber yarn reinforced composite laminate for making automobile and structural components	201641021535
12	Dr.M.Balasubramanian (Professor and Head) Dr.P.K.Devan (Professor) Mr.T.G.Loganathan (Associate Professor) Mohamed Furquan.K (Student) MurahariSaaiKrishna .B (Student)	New Methodology For Generating Spur Gear And Helical Gear Using Radial Drilling Machine	Filed
13	Dr.M.Balasubramanian Dr. P.K.Devan Mr.T.G.Loganathan, Mr.M.Saravanan, Mr. O.R.Nirmal, Mr.G.Praveen Kumar. Mr.S.R.Nishok Sriram.	New approach to arrest Flammable Gases Using Microcontroller Operated Solenoids	Filed

### Research Products Developed

Table 3.17. Details of research products developed

S.No.	Department	Product as research output
1	Computer Science and Engineering	<p><b>iOS Apps:</b></p> <ul style="list-style-type: none"> <li>a. Ilntuit</li> <li>b. Women security</li> <li>c. Fluminator (Game)</li> <li>d. HookOne</li> <li>e. GetEmployment</li> <li>f. Voicer Moculator</li> </ul> <p><b>Android Apps:</b></p> <ul style="list-style-type: none"> <li>a. IDROIDWARZ</li> </ul>

		<p>b. Smartway Interactive Learning Environment (SMILE)  c. News One  d. Classified  e. Helper Needed</p> <p><b>Robotics:</b></p> <p>a. Dexter – Digital assistant – (Raspberry Pi)</p> <p><b>Software Applications:</b></p> <p>a. Curzei-a factory Framework for Implementing Logical Data warehouse – L&amp;T  b. CRM Solutions for case workers for citizens and social services Department – Hitachi  c. iCheck: A Full-scale Implementation of Generic Application Administrator – iNautix  d. Batch Auditing System-Data Warehousing – iNautix</p>
2	Electronics and Communication Engineering	<p>a. A Novel Scheme for Computer Aided Operations of Substation  b. Active RFID based intelligent transport system  c. Enhanced Auto Information Recorder  d. Microstrip wideband MIMO antenna with high isolation for Wi-max application  e. Smart grid prepaid metering system  f. Data interpretation and analysis of agriculture using IOT  g. Navigational aid for Blind  h. AGRO ROVER  i. Industrial Automation  j. Arduino Controlled RL Car using Bluetooth Module</p>
3	Electrical and Electronics Engineering	<p>a. Smart Vehicle system management using LI-FI technology  b. Coordinated control scheme in solar-PV fed interleaved boost converter and hybrid multi level inverter  c. An efficient neutral point clamped 4 level DC-DC converter to supply differently rated loads simultaneously  d. Simulation of real and reactive power coordination for a IPFC using battery energy storage systems</p>
4	Mechanical Engineering	<p>a. Housing and Blade of a Ceiling Fan was developed from composite  b. Two wheeler Helmet  c. Exhaust gas after treatment setup using Catalytic Convertor  d. Foldable Bike  e. Plant for Bio Diesel production  f. Setup for arresting flammable gas using microcontroller and Solenoid</p>

**3.4.2 Does the Institute publish or partner in publication of research journal(s)? If ‘yes’, indicate the composition of the editorial board, publication policies and whether such publication is listed in any international database?**

Yes, the institution has an international publication for its group of institution named “**RSM International Journal of Engineering, Technology and Management**” with ISSN: 0974-9535

**3.4.3 Give details of publications by the faculty and students:**

**Publication per faculty**

**Table 3.18. List of Papers published per faculty**

<b>Department</b>	<b>2013-2017</b>
CSE	1.800
ECE	3.424
EEE	3.636
MECH	2.714
S&H	2.53

The number of Journal papers published by the faculty and students is given below

**Table 3.19. List of Papers published by faculty and students**

<b>Department</b>	<b>2013-2014</b>	<b>2014-2015</b>	<b>2015-2016</b>	<b>2016-2017</b>
CSE	-	3	-	5
ECE	3	8	11	6
EEE	-	4	1	-
MECH	-	4	5	14

The number of publication by faculty listed in International Data base Eg: Web of science, Scopus etc

**Table 3.20. List of publications in international data base**

<b>Department</b>	<b>No. of publications</b>	<b>International Data Base</b>
CSE	110	Web of Science/Google Scholar/ Scopus
ECE	118	Web of Science/ Google Scholar/ Scopus
EEE	54	Web of Science/ Google Scholar/ Scopus
MECH	110	Web of Science/ Google Scholar/ Scopus
S&H	81	Web of Science/ Google Scholar/ Scopus

## Details of Citation Index, Impact Factor, h-index

**Table 3.21. Details of Citation Index, Impact Factor, h-index**

S.N o	Name of the Faculty Member	Total No of papers Published		Citation indices range					
		Confe rence	Journa l	Citati on Index	Impa ct Facto r	Late st SJR	Late st SNIP	Late st h inde x	
<b>Computer Science Engineering</b>									
1.	Dr.Paulraj	10	7	50	5.746	2.996	2.5	3	
2.	Dr.Faritha Banu	13	8	14	0.25	0.15	0.25	3	
<b>Electronics and Communication Engineering</b>									
3.	Dr. Gangatharan N	26	25	60	1.683	0.589	1.207	5	
4.	Dr. Arun C	56	63	145	2.5	0.17	0.42	6	
5.	Dr. Inbamalar T M	12	10	10	0.77	0.31	0.38	3	
6.	Dr. Shanthi K G	10	6	4	1	0.3	0.33	1	
7.	Ms. SeshaVidhya S	5	4	-	1.65	-	-	-	
8.	Ms. Praveena N G	3	5	2	0.627	0.31	-	1	
9.	Mr. Muthumanick am S	13	5	-	2.59	-	-	-	
10.	Mr.Manikand an A	11	4	2	1.823	0.2	0.401	1	
11.	Mr.Sathyaraj P	5	4	-	-	0.156	-	-	
12.	Ms.Parvathy G	2	2	-	1.65	-	-	-	
13.	Ms. Nimitha N	11	7	-	1.65	-	-	-	
<b>Electrical and Electronics Engineering</b>									
14.	Dr.N.Kalaia rasi	10	14	29	8.39	3.49	6.143	4	
<b>Mechanical Engineering</b>									
15.	Dr.M.Balasu	12	45	491	3.997	1.916	2.526	13	

	bramanian							
16.	Dr.P.K.Deavan	6	11	446	5.746	2.998	2.439	5
17.	Mr.T.G.Log anathan	4	4	-	0.471	0.353	0.417	1
18.	Mr.S.Senthil kumar	8	7	-	-	0.330	0.773	-

The details of the Books/Chapter of Book with ISBN numbers and publishers are given below

**Table 3.22. Details of books published by faculty members**

Author	Title of the Book	ISBN Number	Publisher	Year of Publication
<b>Department of Computer Science and Engineering</b>				
Dr.N.Sankar Ram	Software Engineering		Magnum Publications	2015
Ms. Prianka R R	Design and Analysis of Algorithm		Shahara Publications	2016
<b>Department of Electrical and Electronics Engineering</b>				
Dr. N. Kalaiarasi Professor & Head	Basics of Electronics Engineering	-	Inder publications	2004
<b>Department of Electronics and Communication Engineering</b>				
Dr.T.V.Padmavathy Professor	Circuit Theory	-	-	2014
Dr.K.G.Shanthi Associate Professor	Transmission Lines and Waveguides	ISBN -13 9788192 70617	Sruthi Publishers	2012, 2015
Mr.R.Ramachandran Assistant Professor Mr.T.S.Arulananth Associate Professor	Microprocessor and Microcontroller	-	Sahara Publications	2015
Mr.T.S.Arulananth Associate Professor	Principles of Digital Signal Processing	ISBN 9788193 230688	Sahara Publications	2016
Dr.K.Shanthi Associate Professor	Antenna and Wave Propagation	ISBN- 13 9788193 371053	Sruthi Publishers	2017
<b>Department of Mechanical Engineering</b>				
Mr.S.Senthil Gavaskar Associate Professor	Production and Materials Management	-	University of Madras	2004

Mr.S.Senthil Gavaskar Associate Professor	Supply Chain Management	-	TamilNad u Open Univeristy	2006
Mrs.K.Renugadevi Assistant Professor	Engineering Practices Lab	-	TLS Printers	2008
Mr.S.Senthil Gavaskar Associate Professor	Rural Marketing	-	University of Madras	2009
Mr.S.Senthil Gavaskar Associate Professor	World Class Manufacturing	-	University of Madras	2013
Mr.S.Senthil Gavaskar Associate Professor	Resilience Management	-	University of Madras	2015
<b>Department of Science and Humanities</b>				
Dr.G.Devi Mr.T.Sundereswara n Ms.N.Jayanthi	Engineering Physics – I		RK publisher s	2010
Dr.G.Devi	Engineering Physics – I	ISBN 13-978-93-5260-276-6 ISBN 10-93-52060-2765	Mc Graw Hill Publications	2016
Mr.K.Sudhakar	Engineering Chemistry – I	ISBN 13-978-93-5260-277-3 ISBN 10-93-5260-277-3	Mc Graw Hill Publications	2016

#### 3.4.4 Provide Details (if any) of Research Awards Received by the Faculty

Details of the Research AWARD received by the faculty

- ❖ Dr.M.Balasubramanian's, article titled “Modeling corrosion behavior of gas tungsten arc welded titanium alloy” published in the journal Transactions of Nonferrous Metals Society of China was rated **one among the top 25 articles in Science Direct**
- ❖ Dr.M.Balasubramanian's, article titled “Experimental investigation of Ti–6Al–4V titanium alloy and 304L stainless steel friction welded with copper interlayer” published in the journal Defense Technology” was rated **one among the top 25 articles in Science Direct.**

**Table 3.23. Details of research awards received by faculty members**

<b>Sl. No</b>	<b>Name of the Faculty</b>	<b>Organization</b>	<b>Awards/Recognitions received by faculty</b>	<b>Year</b>
1.	Dr.M.Balasubramanain	Dr.Kalam's Trust	Best Administrator	2017
2.	Dr.C.Arun &Mr.S.Muthumanickam	Dr.Kalam's Trust	Best Project Work	2017
3.	Dr. Geetha Balachandar	Venus International	Women of the year	2017
4.	Dr.T.M.Inbamalar	TESFA-2017	Best Achievement Award	2017
5.	Dr.K.G.Shanthi	Dr.Kalam's Trust	Young Women Scientist Award	2017
6.	Ms.V.Kannagi	Dr.Kalam's Trust	Best Teaching Faculty Award	2017
7.	Ms.K.RenugaDevi	Venus International	Young Woman in Engineering	2017
8.	Dr.M.Balasubramanian	CTS	Best Teacher Award	2016
9.	Mr.R.Ashokkumar	IYPE	Best Teacher Award	2016
10.	Ms. S. Poovizhi	IET Professional Society	Best Women Engineer Award	2016
11.	Mr.S.Gopinath	IYPE	Best Overall Performer Award	2016
12.	Dr.C.Arun	VIFFA 2015	Young Faculty Award	2015
13.	Dr.T.V.Padmavathy	CTS	CTS Best Teacher Award	2015
14.	Dr.N.Gangatharan	IET	IET CLN Man Engineer Award	2014
15.	Ms.V.Kannagi	Lions Club of Madras Green Park	Best Teacher Award	2014
16.	Ms.R.Shimila	ISSRD	Best Project Award	2014
17.	Dr.C.Arun	IET	Er.D.A.Rajan Ambition Award	2013
18.	Dr. D. Paulraj	IET	Men Engineer Award	2012

### **3.5 CONSULTANCY**

#### **3.5.1 Give details of the systems and strategies for establishing institute-industry interface?**

The Institution follows various systems and strategies to interface with industry and approach various industries in and around Chennai through proper channel. Invite industry people as Governing Member, Advisory Committee Member, visiting faculty and adjunct faculty in respective department with respect to their specialization to share their experience and to guide our students to solve the real time challenges. Inviting industry people for inaugurating FDP, Seminar and Workshop for our faculty members and

students. Identify the thrust area and get suggestions from industrial people and turn we depute our expert faculty members to industry to solve real time problems. With available lab equipments in our institute we conduct consultancy work to various industries and generate consultancy income to develop the respective department.

**3.5.2 What is the stated policy of the institution to promote consultancy? How is the available expertise advocated and publicized?**

The respective department will host the facilities available in their official website. Prepare brochures of respective department mentioning the expertise of the faculty and with details of all available facility and send them to respective industry to avail consultancy work at reasonable cost. The faculty members jointly publish papers in national and international forums /journals along with the details of research and consultancy work done for the industries.

**3.5.3 How does the institution encourage the staff to utilize their expertise and available facilities for consultancy services?**

By conducting the FDP, FDTP programmes in thrust areas and inviting experts from industries to deliver lectures and offer solutions to overcome the problems encountered. By sharing the expertise of our faculty members with the industries and giving solutions to the problems faced by them. By depute the young faculty members to undergo online training in industries during their vacation period after completion of training they have to submit a detailed report about the training. Our institute sponsors the faculty for registration fees and the travelling expenses to do paper presentation, research and consultancy work globally. Also depute them for various workshops, seminar and conferences held in various colleges, universities and industries.

Our institution identifies and trains the faculty members in their expertise area to establish the Center of Excellence (COE) with respect to the department. For example Product Life cycle Management (PLM) is one of the booming areas in design and manufacturing industries. The trained faculties have to train the students and prepare them for facing campus interviews. The trained and expertise faculty generates revenue by doing consultancy work in thrust areas. Our institution encourages participation in several value added programme and certificate courses with available facilities to train students and young faculty to get knowledge about the available resources externally that boosts the faculty members to do various consultancy works to industries. Many industries sponsored Machineries, Tools and a Car to the Department of Mechanical Engineering satisfied with our excellent consultancy work.

**3.5.4 List the broad areas and major consultancy services provided by the institution and the revenue generated during the last four years.**

Most of the departments of the institution are enabled with various facilities to carryout consultancy work

**Table 3.24. Details of consultancy service provided by the institution**

<b>Academic Year</b>	<b>Name of faculty</b>	<b>Client Organization</b>	<b>Title of Consultancy of project</b>	<b>Amount received (in Rupees)</b>
2014-2015	Mr. Shanmugasundaram M Ms. Indra Priyadarshini	Sunlite Software Solutions Pvt Ltd	Mobile Application Development	10,000
2014-2015	Ms. K.V. Bindu Mr. K. Dilavar Basha	Innovate Engineering Services	Auxiliary House Load Control	10,000
2014-2015	Mr.T.G. Loganathan	Chennai Poles Pvt Ltd	Formability of sheet metal work	25,000
2014-2015	Mr. N.Sadasivan	Abide Industries	Tool and Die Design	70,000
2014-2015	Mr.T.G. Loganathan	Mailam Engineering College Villupuram	Composite Testing	13,000
2015-2016	Mr. Naresh Sammeta	Sunlite Software Solutions Pvt Ltd	IOT & Robotics	15,000
2016-2017	Dr.C.Arun & Mr.R.Ramachandran	Respro Labs, Chennai	Data Interpretation and Analysis of Agriculture using IOT combined with Embedded Systems	10,000
2016-2017	Dr.N.Gangatharan & Mr.S.Muthumanickam	Vidhara Secure Com, Vanagram	Image watermarking for data security using MATLAB	10,000
2016-2017	Dr.T.M.Inbamalar & Mr.P.Sathyraj	Techso Technologies, Chennai	DNA Sequencing to analyze NIR Spectroscopy	10,000
2016-2017	Mr.N. Aravindhan	Wear Coat Technologies	Erosion Measuring Test Rig	25,000
2016-2017	Dr. N. Kalaiarasi Ms. T. J.	Vignesh Powder Coating	Training in electrical maintenance	5,000

	Catherine			
2016-2017	Ms. K. Gunalan Dr. J. Prakash	Subham Industries	Energy Auditing	10,000

**3.5.5 What is the policy of the institution in sharing the income generated through Consultancy (staff involved: Institution) and its use for institutional development?**

Our institution has the policy of investing the income generated by the research / consultancy to the respective department for upgrading their establishments. Around 10% of the income generated will be offered to the PI and his team. Faculty or team honored by means of cash awards and rewards and books in the thrust area are purchased from out of the income generated through consultancy work.

**3.6 EXTENSION ACTIVITIES AND INSTITUTIONAL SOCIAL RESPONSIBILITY (ISR)**

**3.6.1 How does the institution promote institution-neighborhood community network and student engagement, contributing to good citizenship, service orientation and holistic development of students?**

Our Institution promotes various societies like YRC, ISTE Students and Staff Chapters and Entrepreneurship Development Cell. Youth Red Cross (YRC) organizes Blood donation camp, Tree plantation and First Aid Awareness camp regularly. Every year in association with M/s Right Hospitals, Research Institute for General Plastic Surgery and Trauma, Kilpauk, Chennai-600 010, blood donation camp is organized. Regular blood donation camps bring awareness to students about the value of life and their own contribution in saving lives. ISTE Students Chapter is actively involved in promoting various social and scientific awareness programs among students by organizing International Women's day, National Science day etc.,.

The college offers scholarship for the meritorious students from the rural background to promote the relationship with the neighborhood community. The faculty members and students are much aware of the social realities and their responsibilities in addressing social issues. Social responsibility programs are designed in such a way that the students get due exposure to the realities of life and realize their responsibilities.

The Entrepreneurship Development Cell (EDC) is actively involved in providing training and motivational sessions that help students to turn into active entrepreneurs. This helps in close community tie-ups thereby promoting societal transformations and bringing up business incubators and new business start-ups that increase the economic standards of the adjoining areas.

**3.6.2 What is the Institutional mechanism to track student's involvement in various social movements / activities which promote citizenship roles?**

The students are encouraged right from the beginning of the course to involve themselves in various societies like YRC, EDC, CGC and ISTE and to participate in societal activities to bring out their hidden talents and potentials. At the end of the year, the student coordinators and volunteers are given due recognition by awarding Certificate of Coordination or Appreciation, thereby the level of ability and potential and leadership qualities are identified and promoted. Any social activity taken up by the students will be in consultation with the respective counselor, Class In-charges, year coordinator and Heads of the Departments.

### **3.6.3 How does the institution solicit stakeholder perception on the overall performance and quality of the institution?**

The institution invites inputs from various stakeholders for continuous overall performance in all dimensions for the benefit of students and society.

#### **STUDENTS**

We receive the feedback of the students about the overall performance and quality of the institution through the following.

- ❖ Faculty counselor and HOD's interaction
- ❖ Class committee meetings

#### **PARENTS**

Parents can meet Teachers, HOD and Principal any time and give their valuable feedback and suggestions for the overall performance of the institution. The class advisor and the coordinators constantly are in touch with the parents and collect the feedback.

#### **STAFF**

Staff members can meet the HOD and Principal any time to suggest their ideas for the improvement of the students and the staff. Also they can express their opinions in the regular staff meetings organized by the HODs. In the HODs meetings convened by the Principal, the HODs can reflect the perception of the faculty members and that of their own to the Principal.

#### **ALUMNI**

We have constituted an Alumni Association with a faculty as In-Charge. The Alumni meet is organized every year in the college premises to get their feedbacks. Besides this, Alumni have regular formal and informal interactions with the HODs, Principal and Chairman and give their feedbacks.

#### **INDUSTRY**

The resource persons from various industries are invited on special occasions like workshops, seminar programs and to deliver guest lectures. The feedback is collected from the Industry people during their campus visit. Our

faculty members and students are in touch with the industries and they collect the feedback regularly.

**3.6.4 How does the institution plan and organize its extension and outreach programs? Providing the budgetary details for last four years, list the major extension and outreach programs and their impact on the overall development of students.**

The professional society in-charges submit proposal on the events which they are planning to organize in the academic year for approval. On approval, the sanctioned budget will be offered to the in-charge to organize the events. The budgetary details of various club activities for the last four academic years are shown below.

### **YRC Activities**

The various activities like Blood Donation Camp, Tree Plantation Program, and First Aid Awareness programs are organized every year to create awareness among faculty members and students of their social responsibilities.

**Table 3.25. YRC activities and its expenditure**

<b>Sl.No.</b>	<b>Academic year</b>	<b>Budget Planned (in Rs.)</b>	<b>Total Expenditure (in Rs.)</b>
1.	2012-13	14,440	14,440
2.	2013-14	18,000	11,884
3.	2014-15	16,750	14,280
4.	2015-16	16,000	12,912

### **ISTE Staff Chapter Activities**

**Table 3.26. Details of ISTE Staff Chapter Activities**

<b>Sl.No.</b>	<b>Academic year</b>	<b>Budget Planned (in Rs.)</b>	<b>Total Expenditure (in Rs.)</b>
1.	2013-14	17,000	16,000
2.	2014-15	16,000	14,550
3.	2015-16	12,000	11,180
4.	2016-17	11,000	9,350

### **ISTE Student Chapter Activities**

**Table 3.27. Details of ISTE Student Chapter Activities**

<b>Sl.No.</b>	<b>Academic year</b>	<b>Budget Planned (in Rs.)</b>	<b>Total Expenditure (in Rs.)</b>
1.	2013-14	25,500/-	21,583/-
2.	2014-15	69,000/-	68,941/-
3.	2015-16	58,500/-	47,023/-
4.	2016-17	45,000/-	33642/-

### EDC Activities

**Table 3.28. Details of EDC Activities**

Sl.No	Academic Year	Budget Planned (in Rs.)	Total Expenditure (in Rs.)
1	2013-14	22,000	22,113
2.	2014-15	45,500	62,966
3.	2015-16	38,500	42179
4.	2016-17	20000	22805

The impacts created through such programs are

- ❖ Social Awareness and Societal responsibility are inculcated
- ❖ Nourishment of Helping Tendency among People
- ❖ Leadership skill and organizing ability are imparted and improved.
- ❖ Cultivate fraternal spirit amongst the students, teachers, administrators, industrialists & professionals.
- ❖ Effective link between technical institution, industry & society.

**3.6.5 How does the institution promote the participation of students and faculty in extension activities including participation in NSS, NCC, YRC and other National/ International agencies?**

The college has YRC, ISTE Students and Staff Chapters and Entrepreneurship Development Cell to provide valuable opportunities to the students to apply their creative energy for social development. All these units have faculty advisors to guide the students in planning and in executing various service activities.

Students are at their liberty to choose their preferred activity. Our students are recognized and rewarded for their performance and participation.

**3.6.6 Give details on social surveys, research or extension work (if any) undertaken by the college to ensure social justice and empower students from under-privileged and vulnerable sections of society?**

The YRC Cell of the institution conduct surveys on the need of extensional activities to support the needy. It organizes blood donation camps to help poor and needy peoples in and around Tamil Nadu. YRC organizes tree plantation and awareness program to enforce clean and green environment.

To support the self-employability, the EDC Cell of the institution conducts programs to the underprivileged village youth to make them ‘JOB PROVIDERS than JOB SEEKERS’. The ISTE chapter of the Institution organizes events for the betterment of individual and the society. To mention one among the many, there is a program on ‘Driving Techniques ‘for the drivers.

**3.6.7 Reflecting on objectives and expected outcomes of the extension activities organized by the institution, comment on how they complement students' academic learning experience and specify the values and skills inculcated.**

The activities conducted by the institute enhance the scholastic learning skills of the students thus improving their commitment to the society. The regular academic course called Environmental Science and Engineering help the students in knowing their rights and inculcates an effectual knowledge to maintain the milieu. This subject is a compulsory for all students.

It focuses on

- ❖ Awareness among the young society about social problems and the ways to mitigate them.
- ❖ Handling complex situations.
- ❖ Building the self confidence in them, cultivate the culture to respect other ideas
- ❖ Role of Professions to groom-up the society

**3.6.8 How does the institution ensure the involvement of the community in its reach out activities and contribute to the community development? Detail on the initiatives of the institution that encourage community participation in its activities?**

The initiatives of the institution that encourage community participation in the activities are

- ❖ Tree Plantation
- ❖ Blood donation camp
- ❖ First Aid Awareness Camp
- ❖ Orientation program in the presence of eminent persons in the field of science, and social service

### YRC Activities

The Youth Red Cross Unit of our college has been functioning from the inception of this institution (Academic Year 2008-09). Various events are being conducted through this unit to create awareness on first aid and the importance of proper medication. Blood Donation Camps are conducted on a regular basis. Students and faculty members show their concern for the society by voluntarily donating blood. The YRC unit of this institution received best performance award in YRC movement in 2014. The details of YRC club activities for the last four academic years are shown in the table below.

**Table 3.29. Details of YRC Activities**

Sl. No.	Academic year	Program	Date
1.	2015-16	First Aid Awareness & Blood Donation Camp	11/03/16
2.		Tree Plantation Program	06/04/16
3.	2014-15	Tree Plantation and First Aid Awareness Program	24/01/15

4.		Blood Donation Camp	07/03/15
5.	2013-14	Tree Plantation Program	22/02/14
6.		Blood Donation Camp	05/10/13



Fig.3.1. Blood donation camp on 11.03.16 and Tree Plantation Program on 16.02.13

### ISTE

ISTE chapter of RMK college of Engineering and Technology, Puduvoyal, was inaugurated by Dr.R.S.Nirjar, Vice-chancellor Gautam Buddha University ,Greater Noida, UP on 20-11-2010. The objective of ISTE is to formulate the general goals and responsibilities of technical education and social responsibility and also to improve the instructional methods, practices & administrative usages. The details of ISTE Chapter activities for the last four academic years to encourage community participation are shown in the table below.

Table 3.30. Details of ISTE Staff Chapter Activities

Sl. No.	Academic year	Programme	Date
1.	2013-14	Professional Ethics	03-08-13
		Industrial Expectation from Young Minds	04-03-13
2.	2014-15	Awareness of Cancer	14-03-15
		This too shall pass	14-06-14
3.	2015-16	Personality Development	24-04-16
		Dental Care for Vibrant Teaching	25-07-15
4.	2016-17	Defensive Driving Techniques and orientation programme.	24-03-17



**Fig.3.2. Fire Fighting Awareness on 24.03.2017.**

**Table 3.31. Details of ISTE Student Chapter Activities**

<b>Sl. No.</b>	<b>Academic year</b>	<b>Programme</b>	<b>Date</b>
1.	2013-14	National Science Day	28.02.2014
2.	2014-15	National Science Day	02.03.2015
		International Women's day	07.03.2015
		"Art of Living" - Yoga	29.10.2015 – 31.10.2015
3.	2015-16	National Science Day	04.03.2016
		International Women's day	08.03.2016
4.	2016-17	National Science Day & orientation program	03.03.2017



**Fig.3.3. Science for Nation Building Chief Guest: Shri. V. PONRAJ, Scientist - G & Advisor to Dr.A.P.J.Abdul Kalam, Aeronautical Development Agency, DRDO, Ministry of Defence, Bangalore on Monday, 02.03.2015**

### EDC Activities

The EDC Unit of our college has been functioning from the academic year 2013-14. This unit organizes various orientation and awareness program for students as well as for unemployed youth in and around Puduvoyal village. Participants are given hands on training on operation of Lathe machine. Each one is given individual training and provided with information on how to become an Entrepreneur. They are highly satisfied and show positive response to a call given to them to become entrepreneurs. The details of EDC activities for the last four academic years are shown in the table below.

**Table 3.32. Details of EDC Activities for last four years**

Sl.No	Academic Year	Activity	Period
1	2013-14	Inauguration of Entrepreneurship Development Cell	28.02.2014
2	2014-15	One day workshop on Entrepreneurship Awareness	06.07.2014
3		One Day Workshop on “ Skill Development Programme on Machine Tools ”.	12.09.2014
4		EDC has organized a Three Day Entrepreneurship Awareness Camp from sponsored by EDII, Ahmedabad.	25.09.2014 to 27.09.2014
5		EDC has organized a Half-a- Day Entrepreneurship Awareness Camp	14.02.2015
6		Report on Phase 2 Entrepreneurship Development Program (EDP) - 5 Days Training program	21.07.2015 to 25.07.2015
7	2015-16	Three day Entrepreneurship Awareness Camp	04.03.2016 to 06.03.2016
8		Phase III camp at EDI, Guindy, Govt. of Tamil Nadu	16.03.2016 & 17.03.2016
9		Three day Entrepreneurship Awareness Camp	01.09.2016 to 03.09.2016
10	2016-17	On-Line course Learn wise course	Throughout the year



**Fig.3.4. One Day Workshop on “ Skill Development Programme on Machine Tools ” organized by EDC of RMKCET to unemployed youth in and around Puduvoval and Arani village on 12.09.2014.**

**3.6.9 Give details on the constructive relationships forged (if any) with other institutions of the locality for working on various outreach and extension activities.**

Our institution has conducted tree plantation camp in the Peruvoyal village as a part of social awareness by joining hands with Peruvoyal Panchayat board.

Periodically our institute organizes blood donation camp and first aid awareness to support poor and needy in around Chennai city. This is accomplished with the help of Right Hospitals Chennai and St John's Ambulance, Chennai. The details of constructive relationships with other institutions of the locality for working on various outreach and extension activities are given below.

- ❖ Food was supplied in the campus to the nearby village people during natural disasters
- ❖ Water was supplied to the nearby village people during power cut due to natural disaster for more than 10 days
- ❖ During summer season, water lorries distribute water to the needy people in the nearby villages every year
- ❖ Donated Rs.25 Lakhs towards the Chief Minister's Relief Fund for Thane cyclone
- ❖ Contributed Rs.2,00,000/- for PTA Teachers Salary for Govt. Hr. Sec. School, Kavaraipettai
- ❖ Donated Rs.20 lakhs to construct a New-block at Govt. Hr. Sec. School, Thiruvallur
- ❖ Donated 60 Personal Computers to Gengu Swamy Naidu School, Ponneri, Govt. HSS, Kavaraipettai, Govt. Boys HSS, Gummidipoondi, Govt. Girls HSS, Gummidipoondi
- ❖ Paid Rs. 2,00,000/- to upgrade KLK Girls High School, Gummidipoondi to Higher Secondary School

- ❖ Contributed Rs.83,000/-for Pulse –Polio programme

**3.6.10 Give details of awards received by the institution 3.6.10 Give details of awards received by the institution for extension activities and/contributions to the social/community development during the last four years.**

- ❖ The Youth Red Cross Unit of our college received Best Performance award in the year 2015 from the Indian Red Cross Society.
- ❖ ISTE chapter of our college received the most coveted ISTE - Bharatiya Vidya Bhavan National Award for the Best Engineering College having Best Overall Performance for the year 2015 from the Honourable Minister of Road Transport and Highways of India, Shri Nitin Gadkari on 09.01.2016 at HVPM College of Engineering & Technology, Amravati.



Fig.3.5. (a) YRC Award received by Former Principal



Fig.3.5. (b) ISTE Award received by Vice Chairman

### 3.7 COLLABORATION

**3.7.1 How does the institution collaborate and interact with research laboratories, institutes and industry for research activities. Cite examples and benefits accrued of the initiatives-collaborative research, staff exchange, sharing facilities and equipment, research scholarships etc.**

Our institution encourages collaborative research activities and sharing of facilities in various domain. As an outcome of this initiative, research scholars from various institutions approach our professors for executing their research works and to publish paper in conference/ journals. A sample of those activities sited below.

Table 3.33. Details of research scholars from other institute using lab facilities

Name of the Research Scholar From Other Institute	Research Domain	Name of the laboratory Shared	No.of Papers Published in Conference/Journals
<b>Department of Electronics and Communication Engineering</b>			
C.Raja	Biomedical Engineering	DSP Lab	06

N.Bharathi Raja	OFDM-Wireless Communication	DSP Lab	08
B.Sridhar	Image processing	DSP Lab	05
Baskar.S	Image processing	DSP Lab	03
C.Arunachalaperumal	MIMO	Communication lab	08
C.Saravanakumar	Cloud Computing	Networks lab	13
I.Poonguzhali	VLSI design	VLSI design lab	02
M. Shyamala Devi	Cloud Computing	Networks lab	04
M.Narayanan	Cloud Computing	Networks lab	08
Mr. Muthumanickam S	Image processing	DSP Lab & VLSI lab	06
Mr.Jayaram	DSP	DSP lab	01
Mr.K.Sampath Kumar	Image processing	DSP Lab	04
Ms.Kondaka Lakshmi Sudha	WSN	Communication lab	1
MS.Priya Stalin	VLSI design	VLSI design lab	05
R. Sivarama Krishnan	Image processing	DSP Lab	05
R.Premkumar	Image processing	DSP Lab	01
Vijayakumar.K	Cloud Computing	VLSI design lab	01
<b>Department of Electrical and Electronics Engineering</b>			
G.Shanmugaraj	VLSI Reconfiguration	VLSI Laboratory	02
C.T. Kalaivani	Control Systems and Networking	Electrical Machines lab	02
<b>Department of Mechanical Engineering</b>			
Mr.R.Kumar	Friction Welding	Manufacturing Technology Lab	5
Mr.S.Madhu	Abrasive Jet Machining	Composite Testing center	5
Mr.D.Jayabalakrishnan	Friction stir weave welding	Manufacturing Technology Lab	2
Mr.S.Sudarsanam	Diffusion bonding of Titanium alloy	Manufacturing Technology Lab	-
Mr.S.Manimudi	Surface coating	Manufacturing Technology Lab	-

The research centres available for the research scholars outside the institution to carry out research activities

- ❖ The Indian Institute of Technology Madras (IITM)
- ❖ Research labs Anna University
- ❖ Annamalai University

- ❖ Research labs Madras University
- ❖ ISRO Hyderabad
- ❖ DRDO CVRD, Chennai
- ❖ Micro Lab, Chennai
- ❖ MET Lab
- ❖ TANGEDCO
- ❖ NSIC Chennai
- ❖ CIPET ,Chennai
- ❖ RESPRO Labs
- ❖ Glosys Ltd
- ❖ RGMTTC, BSNL Chennai
- ❖ COREAL Tech, Bangalore
- ❖ Nano Networks Chennai

**3.7.2 Provide details on the MoUs/collaborative arrangements (if any) with institutions of national importance/other universities/industries/Corporate (Corporate entities) etc. and how they have contributed to the development of the institution.**

Industry institution interaction has been developed aiming to bridge the gap by signing Memorandum of Understanding with various industries and organizations.

**Table 3.34. List of MOUs Signed**

S.No	Name of the Company
1.	Soliton Technologies Pvt. Ltd.
2.	Infosys Campus Connect Ltd.
3.	S P Robotics Work Pvt. Ltd.
4.	Mitsubishi Electric India Pvt. Ltd.
5.	The British Council
6.	The Princeton Review, India
7.	Cambridge Esol, University of Cambridge, UK
8.	University of Upper Austria, Austria
9.	Excel Industries Ltd
10.	Nutech CNC Pvt. Ltd.
11.	Metagarage
12.	Virtusa Polaris Pvt. Ltd.
13.	iNautix Technologies Ltd.
14.	Johnson Controls India Pvt. Ltd.
15.	Poseidon Group of Company
16.	Nittan Indiatech Pvt. Ltd.
17.	KPIT Technologies Ltd.
18.	Sunlite Software Solutions
19.	Hitachi Solutions
20.	Computer Science Corporation
21.	Parametric Technology Pvt Ltd
22.	Musorri State University
23.	Metamorphosis

**3.7.3 Give details (if any) on the industry-institution-community interactions that have contributed to the establishment / creation / up-gradation of academic facilities, student and staff support, infrastructure facilities of the institution viz. laboratories / library/ new technology /placement services etc**

The consistent efforts taken by the institution in establishing industry institution linkage resulted in Center of Excellence, student and faculty training, Student internship, faculty training, workshop, publications in research areas.

### List of COE Developed

The institution industry interaction contributed towards the establishment of following CoE's.

**Table 3.35. List of COE Developed**

S.No	Academic Year	Name of the CoE	Established in Association With
1.	2013-14	Hitachi Solutions – ERP CRM	Hitachi Solutions
2.	2013-14	CCNA	CISCO
3.	2013-14	PLM	Wipro
4.	2014-15	MOBILITY	CTS
5.	2014-15	Big Data	iNautix
6.	2015-16	Telecom / TSSC (Telecom Skill Sector Council)	Wipro
7.	2015-16	PLC	Mitsubishi
8.	2015-16	Electric Drives	Mitsubishi
9.	2016-17	Wipro PRP	Wipro
10.	2016-17	Virtusa Polaris – Front End Technologies	Virtusa Polaris
11.	2016-17	Information Security	TCS
12.	2016-17	Automotive Electronics	KPIT
13.	2016-17	Embedded Systems	Wipro

### Students and Faculty Trained through CoE

The established COE's providing training in the frontier areas of engineering and research to the students and faculty

**Table 3.36. List of Students Trained through CoE**

S.NO	Name of the COE	No. of Students Trained in			
		2013 - 2014	2014 - 2015	2015 - 2016	2016 - 2017
<b>Department of Computer Science and Engineering</b>					
1.	Digital Enterprise COE	NA	3	18	32
2.	Big Data Analytics COE	NA	NA	NA	1

3.	Information Security COE	NA	NA	NA	10
<b>Department of Electronics and Communication Engineering</b>					
4.	Digital Enterprise COE	NA	1	40	18
5.	Big Data Analytics COE	NA	NA	3	7
6.	Wipro Telecom COE	NA	NA	9	NA
7.	Automotive Electronics COE	NA	NA	NA	9
<b>Department of Electrical and Electronics Engineering</b>					
8.	PLC COE	NA	NA	25	25
9.	Automotive Electronics COE	NA	NA	NA	3
10.	Embedded Systems COE	NA	NA	NA	5
11.	Digital Enterprise COE	NA	NA	NA	2
12.	Big Data Analytics COE	NA	NA	NA	1
<b>Department of Mechanical Engineering</b>					
13.	PLM	1	54	57	54

**Table 3.37. List of Faculty Trained through CoE**

S.No	Dept	Name of the COE	No. of Faculty Trained
1.	CSE	Digital Enterprise CoE	7
		Big Data Analytics CoE	4
		Information Security CoE	1
2.	ECE	Automotive Electronics - KPIT	1
		CCNA	3
3.	EEE	Factory Automation- PLC	2
		Electric Drives	2
		Automotive Electronics - KPIT	1
4.	MECH	PLM	6

**Details of Faculties providing training to Industry Persons**

The faculties of various departments are providing training to industry executives to strengthen their industrial service.

**Table 3.38. List of Details of Faculties providing training to Industry Persons**

Department	2013-14	2014-15	2015-2016	2016-2017
CSE	11	12	10	2
ECE	-	25	29	-
EEE	10	9	10	-
MECH	9	16	12	2

**Details of Student Internship**

The students of all department are encouraged to undergo internship in their domain through various forums MOU's and COE's

Table 3.39. List of student's undergone internship in industries

S.No	Year	Department	Name of the company	Number of Students
1.	2013-2014	CSE	iNautix Technologies Ltd	3
2.			Hitachi Solutions Ltd	3
3.		ECE	iNautix Technologies Ltd	4
4.			iNautix Technologies Ltd	1
5.		MECH	Infosys	3
1.	2014-2015	CSE	iNautix Technologies Ltd	5
2.			Cts	10
3.			Hitachi solutions ltd	4
4.			Infosys ltd.	4
5.		ECE	iNautix Technologies Ltd	2
6.			INFOSYS	4
7.		EEE	iNautix Technologies Ltd	2
			INFOSYS, FACE	2
1.	2015-2016	CSE	iNautix Technologies Ltd	5
2.			Zoho	1
3.			Wipro	15
4.			Market Simplified	1
5.			Virtusa	1
6.			Soliton Technologies	1
7.			Infosys Ltd.	5
8.			CTS	21
9.			Hitachi Solutions Ltd	4
10.		ECE	Wipro	23
			Wipro Telecom	9
			iNautix Technologies Ltd	5
			CSC Corporation	2
11.		EEE	Wipro Internship	5
			iNautix Technologies Ltd	2
			CSC Corporation Internship	1
12.		MECH	Infosys (2), Wipro (16) iNautix (1)	19
1.	2016-2017	CSE	iNautix Technologies Ltd	1
2.			Infosys	19
3.			Hitachi Solutions Ltd	1
4.			Newgen Technologies Ltd	2
5.			Amazon	2
6.			CTS	9
7.			IBM	4

8.		Zoho Corporation	2
9.	ECE	Soliton	1
10.		E – CON	1
11.		Wipro Telecom	12
12.		iNautix Technologies Ltd	1
13.	EEE	Johnson Controls	1
14.		IBM	2
	MECH	Wipro	8

**Details of Workshops Organized and papers published with the industries personnel's**

The industries organize various workshop in our campus to enhance knowledge and to provide hands-on experience to faculty and students

Table 3.40. Workshops Organized and papers published with industry contribution

Department	Workshop organized	Papers published with industry person
CSE	6	13
ECE	9	14
EEE	1	7
MECH	3	13

**3.7.4 Highlighting the names of eminent scientists/participants who contributed to the events, provide details of national and international conferences organized by the college during the last four years**

Details of Eminent/ Resource Persons' Contribution for conducting various Events

The details of Conference organized and the resource person invited for the last four years is listed below

Table 3.41. Details of Eminent resource persons invited for conference

Academic Year	Date of the Event	Topics	Name of the Resource Person with Designation and organization
<b>Department of Computer Science and Engineering</b>			
2013-14	10.02.2014	3 rd National Conference on Computing Technologies – Todays & Beyond (NCCTB'14)	Shri Jupdi Srinivasa Rao, Head – Information Security, TCS
2014-15	09.03.2015	4 th National Conference on Computing Technologies – Today and Beyond (NCCTB'15)	Er. S.Ramaswamy, Chairman, IETE Chennai Center.

2015-16	07.03.2016	Fifth National Conference on “Computing Technologies Todays and Beyond - NCCTTB16”	Dr Gokula Krishnan R., Joint Director, Software Technology Parks of India Dr Somasundaram P., Zonal Officer from Anna University
2016-17	27.03.17	Sixth National Conference on “Computing Technologies Todays and Beyond – NCCTTB’17	Dr.K Jayaraman, Distinguished Scientist, DRDO
<b>Department of Electronics and Communication Engineering</b>			
2013-14	01.04.2013	NCRASPC -2013	Dr.H.Ravi Shankar Senior Scientist CTRI
	10.03.2014	NCRASPC -2014	Dr. R.Balasubramanian Professor IIT, Roorkee
2014-15	15.12.2014 & 16.12.2014	ICRTEECC-2014	Mr.K.SrinivasaRaghav an Senior Technical Director, NIC
2015-16	09.03.2015	NCRASPC -2015	Shri. Ramaswamy S Chairman, IETE
2016-17	07.03.2016	NCRASPC -2016	Shri. Krishnamurthy V & Dr.P.Somasundaram Additional Director & Associate Professor IIET & Anna University
	28.02.2017	NCRASPC – 2017	Dr.K.Jayaramam, Director DRDL(Retd.), DRDO
<b>Department of Electrical and Electronics Engineering</b>			
2013-14	24.03.2014	Recent Trends in Power Engineering, Power Electronics and Control Systems NCRTPPC’14	Shri Jupdi Srinivasa Rao, Head – Information Security, TCS
2014-15	15.12.2014 & 16.12.2014	ICRTEECC-2014	Mr.K.SrinivasaRaghav an,Senior Technical Director, NIC
2015-16	07.03.2016	NCETDPSPED’16	Shri. Krishnamurthy V & Dr.P.Somasundaram
2016-17	28.02.2017	NCETDPSPED’17	Dr.K.Jayaramam, Director DRDL(Retd.), DRDO
<b>Department of Mechanical Engineering</b>			
2013-14	10.3.2014	Fascinating Advancements in Mechanical Engineering	Dr.P.Iyamperumal, Executive Director, TNSTC, Chennai

		(FAME-2014)	
2014-15	23.03.2015	FAME-2015	Dr. Anil Kumar Sharma, Scientific Officer, DAE, IGCAR,
2015-16	07.03.2016	FAME-2016	Mr. P.Veluchamy, AGM, Ashok Leyland
2016-17	27.02.2017	FAME-2017	Dr.K.Jayaramam, Director DRDL(Retd.), DRDO

The details of Symposium organized and resource person invited for the last four years is listed below

**Table 3.42. Details of Eminent resource persons invited for symposium**

Academic Year	Date of the Event	Topics	Name of the Resource Person with Designation and organization
<b>Department of Computer Science and Engineering</b>			
2013-14	16.09.2013	National Level Technical Symposium XENIOZ-13	Dr.M.P. Pillai, Director, NIELIT
2014-15	08.09.2014	National Level Technical Symposium XENIOZ-14	Mr.A.Senthil Raja, Senior Quality Analyst, NCR Corporation Pvt. Ltd.,
2015-16	31.08.2015	National Level Technical Symposium XENIOZ-15	Dr.T.S Rangan, Director, RupaJan Management Consulting Pvt. Ltd.,
2016-17	26.09.2016	National Level Technical Symposium XENIOZ-16	Shri. B. ANBUTHAMBI Vice President- Education Initiatives, ICTACT, ICTACT
<b>Department of Electronics and Communication Engineering</b>			
2013-14	19.08.2013	National Level Technical Symposium	SHRI R.BASKARAN Chief Communication Engineer, Southern Railway,Chennai.
2014-15	11.08.2014	National Level Technical Symposium "TWYSTRA 2k14"	Mr. Meganathan Kumar, DGM- Electrical & Electronics, Mahindra & Mahindra Limited.
2015-16	31.08.2015	National Level Technical Symposium "TWYSTRA2k15"	Dr.T.S. Rangan ,Founder and Managing Director, RupaJan Management Consulting Private Limited.
2016-17	26.09.2016	National Level Technical Symposium TWYSTRA '16	Shri. Anbuthambi B., VP, Educational Initiatives, ICTACT,Chennai
<b>Department of Electrical and Electronics Engineering</b>			
2013-14	16.09.2013	OPUZELEK 2K 13'	Dr. M.P. Pillai, Director,

			NIELIT, Chennai
2014-15	08.09.2014	OPUZELEK 2K 14'	Mr. A. Senthil Raja, Senior Quality Analyst, NCR Cooperation India Pvt. Ltd Chennai.
2015-16	31.08.2015	OPUZELEK 2K 15'	Dr. T.S. Rangan, Founder and Managing Director, RupaJan Management Consulting Private Limited.
2016-17	26.09.2016	OPUZELEK 2K 16'	Shri. B. Anbuthambi, Vice-president-Educational Initiatives, ICTACT.
<b>Department of Mechanical Engineering</b>			
2013-14	26.9.2013	MAQUINAS-13	Mr.V.Balakrishnan GM & Plant Head, Wheels India Ltd, Sriperumpudur
2014-15	14.7.2014	MAQUINAS-14	Mr. S.B. Venkhatesh DM & TQM, TAFE
2015-16	17.8.2015	MAQUINAS-15	Dr.V.Jayabalan, Former Professor & Head, Anna University
2016-17	26.9.2017	MAQUINAS-16	Mr. B. Anbuthambi, Vice President - Education Initiatives, ICTACT
<b>Department of Science and Humanities</b>			
2013-14	28.02.2014	National science day	Dr.P.Vivekanandan, Head, Computer Center, A C College of Technology
2014-15	02.03.2015	National Science Day	Shree. V.Ponraj, Scientist – G & advisor to Dr.APJ Abul Kalam, DRDO, Bangalore
2015-16	04.03.2016	National Science Day	Dr.P.Iyamperumal, Executive Director, TNSTC, Chennai

The details of Faculty Development Programs organized and the resource person invited for the last four years is listed below

**Table 3.43. Details of Eminent resource persons invited for FDP**

Academ ic Year	Date of the Event	Topics	Name of the Resource Person with Designation and organization
<b>Department of Computer Science and Engineering</b>			
2014-15	10.06.14 to 16.06.14	FDTp on “ Programming Paradigms”	Dr.Swamynathan, Professors Anna University, Chennai & Professors of RMK group of Institutions
2015-16	22.06.15 to	STTP on “Cloud	Mr.K.Subash,

	26.06.15	Infrastructure and Services”	Founder & Head of Technology Training, TechV Consulting & Professors of RMK group of Institutions
<b>Department of Electronics and Communication Engineering</b>			
2015-16	30.05.2015 to 06.06.2015	Anna University approved 7 days FDTP on Electronic Circuits-I(EC6304)	J.Santhanakrishnan DGM, BSNL Dr.D.Meganathan AP / MIT Dr.R.Tamilchelvan Project Leader R&D, Siemens, Chennai
2016-17	13.06.2016 to 19.06.2016	Anna University approved 7 days FDTP on Transmission Lines And Wave Guides (EC6503)	Dr. K. Malathi, Professor, Anna University
<b>Department of Mechanical Engineering</b>			
2014-15	08.12.14 to 14.12.14	Thermal Engineering	Dr.R.Krishnamurthy, Former Profeesor, IIT Madras,
2015-16	22.4.15 to 06.5.15	AICTE Sponsored Two weeks FDP on challenges and opportunities in World class manufacturing	Dr.L.Karunamoorthy, Prof. & Chairman Dept. of Mechanical Engineering, Anna University

The details of Seminar/Workshops Programs organized and resource person invited for the last four years is listed below

**Table 3.44. Details of Eminent resource persons invited for Seminar/Workshop**

<b>Seminar / Workshop</b>			
<b>Academic Year</b>	<b>Date of the Event</b>	<b>Topics</b>	<b>Name of the Resource Person with Designation and organization</b>
<b>Department of Computer Science and Engineering</b>			
2013-14	24.08.13	CSI – Introduction & Your Unique Identification”	Mr. Kathiresan, Senior Manager (Promotions) - CSI
	03.08.13	Applications on Android OS	Mr. SreeKanth, TCS, Chennai
	06.07.13	Recent Trends on Information Technology	Rajesh Marthandam, CTS
	09.12.2013	Mobile Android Workshop	TifacCore, Ms.P.Mehta, System Engineer, TCS Bangalore and Mr.Srikanth, IT Analyst, TCS

			Bangalore.
2014-15	06.02.2015	Design and Analysis of Algorithms	Dr.G.RamaKrishna, AP/CSE, IIIT-Sri city
	22.06.15 to 26.06.15	Cloud Infrastructure and Services	Mr.E.P.Subash, TechV Consulting
	10.10.15	High Dimensional Data Analytics with AWS'	Mr. Karthik Raja, CTS
	14.03.2015	Awareness of Cancer	Dr.S. Suresh, Sri Ramachandra University
	08.09.2014	Recent Trends in IT	Shri. V. Anbu thambhi ICTACT
	09.03.2015	Industry oriented training	S.Ramaswamy, Chairman, IETE Chennai Center, CSI
	06.02.2015	Design and Analysis of Algorithm	Shri. G.Rama Krishnan IIT, AP
2015-16	09.03.2016	Big Data Analytics	Mr Raman G., Trainer, Cloud Madurai Technologies
2016-17	27.07.2016	Grid and Cloud Computing	Mr Kailash S., Senior Engineer, C-DAC
	20.08.2016	OOAD Testing	Mr.Kaushik.R, Manager,Appedo
	20.08.2016	Web services Soap-UI-Demo	Mr.J.Selvaprabu., ILink Multitech Solutions pvt Ltd
	20.08.2016	“Project management methodology	Mr.Saravanan.P., ILink Multitech Solutions pvt Ltd
	02.09.2016	“Web development and Web services	Mr.S.Prabakaran., Harbha's Technologies,
	31.12.2016	Mr. Arun Prakash, Technology Analyst, Cognizant and Ms. Tamarai K, HR - Inautix	CTS & Inautix
<b>Department of Electronics and Communication Engineering</b>			
2013-14	02.12.2013 & 03.12.2013	Wireless Communication & Future Networks	Dr.K.GIRIDHAR, Professor IITM
2014-15	03.01.2015	How to implement Solar Energy	Dr.S.R.S. Prabakaran Professor VIT University
	27.08.2014	Embedded System Product Design	R.Purushothaman Managing Director

		Technologies	EPR LABS, Pvt. Ltd.
	31.08.2015	ARDUINO and IoTs	R.Purushothaman Managing Director EPR Labs, Pvt. Ltd.
	09.03.2015	Xplore Robotics	R.PurushothamanMa naging Director EPR Labs, Pvt. Ltd.
2015-16	07.03.2016	Pioneer to Discover with Internet of Things (P2DIOT)	Shri.Krishnamurthy Additional Director, NIELIT
	17.06.2016 & 18.06.2016	Embedded System Technologies	Shri. Janarthanam.S, Scientist, NIELIT
2016-17	26.09.2016 & 27.09.2016	Intelligent Robotics	Mr.Shabarinath Managing Director Respro Labs
	23.02.2017 & 24.02.2017	The Internet of Things (IoT 2017)	Mr.Shabarinath Managing Director Respro Labs
<b>Department of Electrical and Electronics Engineering</b>			
2015-16	29.08.2016 & 30.08.2016	Two days' Work shop on “Robotics Hands on Training	Mr.Purushothaman, Director,EPR Labs
<b>Department of Mechanical Engineering</b>			
2013-14	11-11- 2013	Recent opportunities in Material Joining-2013	Dr.P.Siva Kumar, Scientist-H, CVRDE, Avadi
2014-15	23.3.15	Autonomous Robot Workshop	Sivaram. A, Director
2015-16	7.03.16	I.C. Engines workshop	I. Mohammed Lukmon, Co- Founder
2016-17	27.2.17	I.C. Engines workshop	P.Krishnakanth Director Metatechgarage

**3.7.5 How many of the linkages/collaborations have actually resulted in formal MoUs and agreements? List out the activities and beneficiaries and cite examples (if any) of the established linkages that enhanced and/or facilitated.**

The institution- industry interaction resulted in 23 MOU's being signed. Through MOUs the following activities are conducted for enhancing the overall growth of the students, faculty and in turn the Institution.

- **Faculty Exchange and professional Development:**
- **Faculty development Programs:**
- **Research Activities**
- **Collaborative Research**
- **Internship / Training**

- Placement
- Develop value added course

**Example:** The MoU established with KPIT, Pune resulted in faculty training in Automotive Electronics at the company premises. The trained faculty are training the students in the respective domain

### **3.7.6 Detail on the systemic efforts of the institution in planning, establishing and implementing the initiatives of the linkages/collaborations.**

The Governing Council Meetings of the institution and the Advisory council Meeting of the Departments consistently insist on Institution-Industry Interaction to establish MOU's and COE's.

The established MOU's and COE's provide scope for various collaborative activities to strengthen quality teaching, learning process through industrial visits, Corporate lectures, Guest lectures, in plant training, internship, project contest, Placement. Etc.,

With all pride we place on record that the excellence of our linkage with the Industries has been rightly recognized with the award “Best Industry Linked Institution” under the coveted PLATINUM Category by AICTE – CII Survey for the years 2015 and 2016 .

We continue with our journey with the motto to serve the society with added vigour and determination to transform the student community to serve as the real ambassadors of our nation in its progress and become the inevitable support base in its elevation as the best nation in the world to live in.

# **Criterion IV**

## **Infrastructure and Learning Resources**



## CRITERIA IV – INFRASTRUCTURE AND LEARNING RESOURCES

### 4.1 PHYSICAL FACILITIES

#### 4.1.1 What is the policy of the Institution for creation and enhancement of infrastructure that facilitate effective teaching and learning?

- ❖ The stated policy of the institution is to provide state of art infrastructure to the students.
- ❖ The Institution has a sprawling campus spread over 23.2 acres with modern buildings, technology enabled class room to provide excellent resources of infrastructure to create a learner centric environment.
- ❖ The college has a positive progressive approach for creation and enhancement of the infrastructure which facilitates effective teaching-learning process. The college frequently interacts with the stake holders to improve the infrastructure facilities.
- ❖ The college constantly upgrades the facilities and requirements like class rooms, tutorial rooms, ICT tools, laboratories, library, seminar halls, hostel facilities, sports facilities based on the requirements.

#### 4.1.2. Infrastructural Facility Available

a) Curricular and co-curricular activities – classrooms, technology enabled learning spaces, seminar halls, tutorial spaces, laboratories, botanical garden, Animal house, specialized facilities and equipment for teaching, learning and research etc.

b) Extra –curricular activities – sports, outdoor and indoor games, gymnasium, auditorium, NSS, NCC, cultural activities, Public speaking, communication skills development, yoga, health and hygiene etc.

- ❖ The college has 40 classrooms, 21 spacious laboratories, 4 seminar halls and 2 drawing halls for the conduct of the courses for the 4 UG programmes. In addition, 15 faculty rooms, rest rooms exclusively for boys and girls and a students' activity centre for organizing students' events centrally viz., blood donating camps, separate halls for the conduct of examinations, two drawing hall, a hall for parents visiting are available. For Sports, besides spacious play fields and courts for outdoor games, there is a basketball court of international standard, a spacious hall for a number of indoor games and two fitness centres separately for boys and girls.
- ❖ The physical academic infrastructure and information on the supporting infrastructure are shown in the following tables:

**Table 4.1 Physical Academic Infrastructure**

Description	No. of Rooms	Area in sq.m	Total Area in Sq.m
Classroom	40	2*81.97 21*79.44 17*73.39	3079.81
Tutorial rooms	12	7*54.08	671.14

		1*55.2 1*56.31 1*56.87 2*62.1	
Seminar halls	4	1*110.4 1*447.9 1*322.84 1*173.76	1054.9
Department Library	4	2*52.39 1*20.38 1*20.5	145.66
Central library	1	-	467.6

**Table 4.2 Laboratories Area**

S.No	Name of Laboratory	Area in Sq.m
<b>Department of Computer Science and Engineering</b>		
1.	Programming and Data structures Lab II	223.32
2.	Database Management Systems Lab	
3.	Networks Lab	80.28
4.	Operating Systems Lab	223.32
5.	Case Tools Lab	
6.	Internet Programming Lab	223.32
7.	Computer Graphics Lab	
8.	Mobile Application Development lab	160.56
9.	Compiler Lab	
10.	Security Lab	160.56
11.	Grid and Cloud Lab	
<b>Department of Electronics and Communication Engineering</b>		
1.	DSP Lab	80.28
2.	VLSI Design Lab	
3.	Embedded System Lab	80.28
4.	Computer Networks Lab	
5.	Circuits and Devices	
6.	Circuits and simulation	160.56
7.	Communication System Lab	
8.	Analog and Digital Circuits	160.56
9.	Linear Integrated Circuits Lab	
10.	Microprocessor and Microcontroller Lab	160.56
11.	Optical and Microwave Lab	
12.	Engineering Practices Lab	111.9
<b>Department of Electrical and Electronics Engineering</b>		
1.	Control Systems Lab	160.56
2.	Electrical Machines Lab	332
3.	Electron Devices And Electric Circuits Lab	160.56
4.	Engineering Practices Lab	111.9
5.	Linear And Digital Integrated Circuits Lab	160.56

6.	Measurements And Instrumentation Lab	160.56
7.	Power Electronics Lab	160.56
8.	Power System Simulation Lab	66
<b>Department of Mechanical Engineering</b>		
1.	Engineering Practice Lab	223.9
2.	CAD Lab	111.6
3.	Fluid Mechanics and Machinery lab	173.7
4.	Manufacturing Technology Lab – I	265.8
5.	Strength of Materials Lab	230
6.	Thermal Engineering Lab – I	115
7.	Manufacturing Technology Lab – II	265.8
8.	Thermal Engineering Lab – II	115
9.	Metrology & Measurements Lab	73.39
10.	Dynamics Lab	73.39
11.	CAD / CAM Laboratory	86.8
12.	Mechatronics Lab	98.48
13.	Simulation and Analysis Lab	173.7

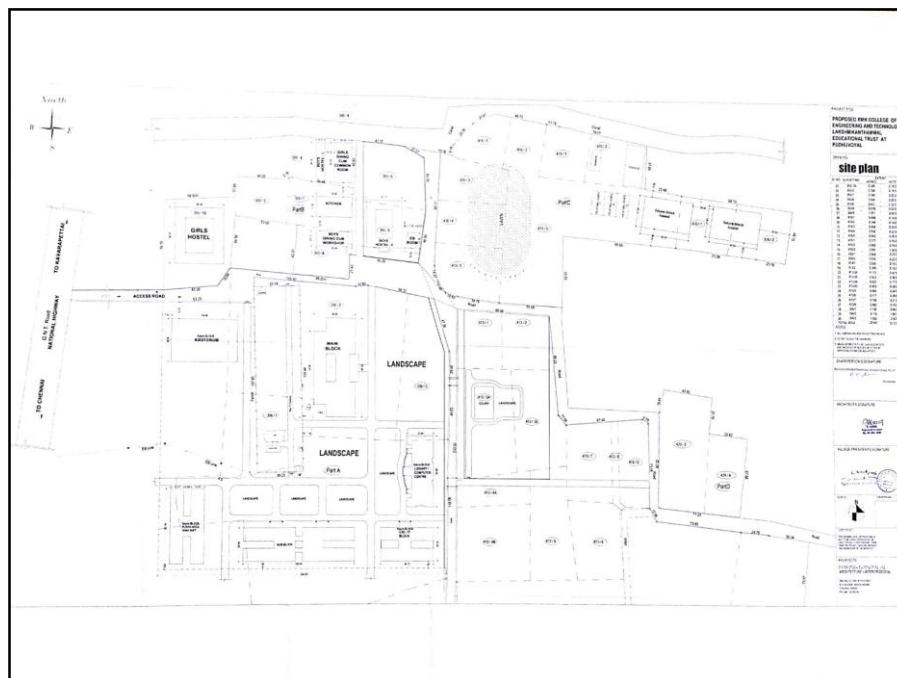
**Table 4.3 Supporting Facilities**

S.no	Description	Facility Available
1	<b>Sports Facility</b>	Full-fledged ground with 400 meter track one, Football field-1, Cricket Field-1, Volley Ball court - 2 , Ball Badminton – 1 Kho Kho ground – 2 , Tennis Field – 1, Table tennis – 1 , Basket Ball Court – 2, Kabadi field – 2, Long Jump Pit, High Jump pit, Shortput Sector, Disc and Throw Ball Unit, Javelin throw, Hand ball court – 1, Indoor available for carom, chess, Separate Gym for boys and girls are available.
2	<b>Power House</b>	TNEB Power Supply with sanctioned load 250 kVA. Additionally a Diesel Generator with capacity of 250 kVA is also available.
3	<b>Networking</b>	Entire Campus is networked with fibre optic cables and connectivity is accompanied with 120 Mbps of Reliance bandwidth and 25 Mbps of Tata Indicom bandwidth. Along with this, 50 Mbps of Reliance bandwidth for WIFI facility are spread over the campus.
4	<b>Medical Aid</b>	A full time doctor, and an emergency van available. A dispensary with six beds and essential medicines available for the necessity of students and faculties available in the quarters.
5	<b>Transport</b>	31 buses available for students to commute from the city to the college and back.
6	<b>Park &amp; Green Cover</b>	The entire free area is prepared and available as park for supporting green environment

		inside the campus. Many water plants are available for watering and maintaining the landscaping. The rainwater is saved and cleaned for much day to day purpose inside the campus.
7	<b>Drinking Water</b>	The campus has total water tank capacity of 1,60000 liters with three RO plants of capacity 4000 liters per hour, with 24x7 facility.
8	<b>Quarters</b>	Quarters are available within the campus.
9	<b>Canteen</b>	4 canteens are available with the following capacity: 221 persons at a time, 247 persons at a time, 120 persons at a time and 230 persons at a time.

**4.1.3 How does the institution plan and ensure that the available infrastructure is in line with its academic growth and is optimally utilized? Give specific examples of the facilities developed/augmented and the amount spent during the last four years (Enclose the Master Plan of the Institution / campus and indicate the existing physical infrastructure and the future planned expansions if any).**

The institution has its own planning and development to expand the infrastructural requirement in line with the growth. The present facilities are because of consistent development to place in the last seven years, for instance the institution started in the year 2008 with one ICT enabled seminar hall. In due course of time as the requirement of the department grows up the number of seminar hall is increased to four with total seating capacity of 1600.



**Fig. 4.1 Master plan**

#### **4.1.4 How does the institution ensure that the infrastructure facilities meet the requirements of students with physical disabilities?**

To assist physically disabled students wheelchair, ramp are provided in most of the blocks. Some of the laboratories and class rooms are located in the ground floor for ease of attending.

#### **4.1.5 Residential Facility:**

The details of hostels and the residential quarters for the faculties and students within the campus are shown below:

**Table 4.4 Details of Hostel within the Campus**

Description	No.of Floors	Total No. of Rooms for students (4 / room)	Total capacity	Area in Sq.m
<b>Boys Hostel</b>				
First Year Hostel	G+2	21	84	816.33
Higher Sem Hostel	G+3	64	256	2508.72
<b>Girls Hostel</b>				
Girls Hostel	G+2	56	224	2652.87
Assistant Prof (Hostel) Accommodation				
Staff Accommodation	-	8	24	95

**Table 4.5 Details of Staff Quarters within the Campus:**

S.no	Details of the Quarters	Unit Area in sq.m
1	Principal Quarters	625
2	Vice Principal Quarters	
3	Associate Professor Quarters	
4	Assistant Professor Quarters	
5	Guest House	30

For recreational facilities, Gymnasium, Medical Emergencies, drinking water facilities are given in the section 4.1.2. The detailed library facilities are given in the following section 4.2.2.

#### **4.1.6 What are the provisions made available to students and staff in terms of health care on the campus and off the campus?**

Health Centre is available with a full time doctor for the wellbeing of staff and students. In case of severe illness, staff and students will be taken to the hospitals by the college vehicle. Staff members and students can opt for Apollo Munich medical health insurance policy. Counselling to needy patients is provided by the medical personnel. All the academic buildings, laboratories, physical education department and hostels (Boys & Girls) are provided with first aid boxes which are located at important points.

The following health care facilities are available,

- 2 sick rooms separately available for both boys and girls with 6 beds each.
- Clinical Laboratory for basic investigations
- Basic medicines – drug store
- Wheelchair & Stretcher
- Ambulance

**4.1.7 Give details of the Common Facilities available on the campus – spaces for special units like IQAC, Grievance Redressal unit, Women's Cell, Counselling and Career Guidance, Placement Unit, Health Centre, Canteen, recreational spaces for staff and students, safe drinking water facility, auditorium, etc.**

Table 4.6 Campus Facilities

S. No	Name of the Unit	Faculty In charge	Functions
1	Internal Quality Assurance Cell( IQAC)	Dr. Inbamalar T M	<ul style="list-style-type: none"> <li>❖ Established on 01-03-2017</li> <li>❖ To develop a system for consistent improvement of the academic and administrative performance of the Institution.</li> <li>❖ To help the management in achieving the Quality Objectives</li> <li>❖ To plan and execute development programs</li> <li>❖ To assist the institute for applying and complying to the National/ International Accreditation</li> </ul>
2	Grievance Redressal Cell	Dr. Kalaiarasi N	<ul style="list-style-type: none"> <li>❖ To create a platform where students can express their views/problems regarding academic and non-academic issues.</li> <li>❖ To take necessary actions to improve further.</li> </ul>
3	Women Development Cell	Dr. Geetha Balachandar	<ul style="list-style-type: none"> <li>❖ To ensure protection of girls/women.</li> <li>❖ To redress the cases of sexual harassment if any.</li> <li>❖ To organize workshops ,seminars to create awareness</li> <li>❖ To organize programs on women`s day</li> </ul>

<b>4</b>	Counselling and Career Guidance Cell	Mr. Loganathan T G	<ul style="list-style-type: none"> <li>❖ To conduct awareness programs of foreign universities to pursue Higher education.</li> </ul>
<b>5</b>	Higher Education Cell	Mr.S.Senthil Kumar	<ul style="list-style-type: none"> <li>❖ To give Periodic announcements regarding competitive exams.</li> </ul>
<b>6</b>	Placement Cell	Mr. Sudharsanam V	<ul style="list-style-type: none"> <li>❖ Training activities(SMART,JADE,FACE,BEC)</li> <li>❖ AMCAT test and Group Discussions are conducted throughout the year for the campus selection programs.</li> </ul>
<b>7</b>	Recreational Spaces for staff and students	Mr.R.Sabari, Mr.N.Ramachandran and Ms.K.Vanathi	<ul style="list-style-type: none"> <li>❖ The college has well equipped International standard Gym separately for men/women with latest equipment's.</li> <li>❖ Yoga –Training program is conducted by “The Art of Living” once in a year for happy and peaceful living.</li> <li>❖ Full-fledged ground with 400 m track, Football field, Cricket Field-, Volley Ball court - 2 , Ball Badminton, Kho Kho ground – 2 , Tennis Field – 1, Table tennis – 1 , Basket Ball Court – 2, Kabadi field – 2, Long Jump Pit, High Jump pit, Shortput Sector, Disc and Throw Ball Unit, Javelin throw, Hand ball court – 1, Indoor available for carom, chess.</li> </ul>
<b>8</b>	Safe Drinking Water Facility	Mr.Sridhar	<ul style="list-style-type: none"> <li>❖ The campus has total water tank capacity of 1, 60000 liters with three RO plants of capacity 4000 liters per hour, for 24x7 facility.</li> </ul>
<b>9</b>	Health Centre and Hostel	Dr.Venkata subrajalu Mr.T.G.Venkatraman Mr.LakshmiPathy Mr.Subramanian Mr.Vikraman	<ul style="list-style-type: none"> <li>❖ A full time doctor, an emergency van available; a dispensary with six beds and essential medicines available for the necessity of students and faculties available in the quarters.</li> </ul>

		Ms.Jayalakshmi Ms.Jeevarani	❖ Well-furnished home away from home facility separately for girls and boys which is spread over an area of 6000 sq.m.
10	Electricity Maintenance	Mr.Velmurugan	❖ A generator with the capacity of 250 KVA and a separate transformer of 500 KVA. ❖ Electrical equipment's will be inspected by TNEB yearly once. ❖ Annual Maintenance contract with Gmmco Limited.
11	Transport	Mr. Leo Amalraj J	❖ 31 buses with the maximum radius coverage of 150 kms.
12	Auditorium	Mr.Sudarsanam V Mr.D.Silambarasan Mr.S.Pradeep Kumar Mr.Basheer Ahmed	❖ ICT enabled spacious Seminar Halls with seating capacity of 1600 – 4 nos. It is the regular venue for conferences, workshops and seminars. It has all the facilities to enhance the learning process.

## 4.2 LIBRARY AS A LEARNING RESOURCE

### 4.2.1 Does the library have an Advisory Committee? Specify the composition of such a committee. What significant initiatives have been implemented by the committee to render the library, student/user friendly?

Yes, the institution has formed a library advisory committee with the objective of providing user friendly and learner specific environment. The committee comprises the Head of the Institution, Librarian, Head of the Departments and faculty representatives. It meets once in a semester to review the functioning of the library along with feedbacks from library users.

Table 4.7 Library Advisory Committee

Advisory Committee Members	Initiatives by the committee	Implementation
Principal Librarian HODs Staff i/c Ms.Nandhakumari (CSE) Ms.Chitra(ECE) Mr.Dilavar Basha (EEE)	Institutional Membership for resource sharing	British Council Library, Anna University Library, DELNET
	Subscriptions of new Magazines on Information Technologies, Mechanical	T3 India Magazine

Ms.PremPriya(IT) Mr. Arun Kumar (Mech)	and Electrical.	Auto Components of India Car India Power Watch India Science Reporter
	Reference and Competitive Exam Books	GATE ,TOEFL and General Books
	Online E-Journals	IEEE, ELSEVIER, ASME, SPRINGER, J-GATE (JET), ASTM and McGraw HILL

The library advisory committee initiated and implemented the following:

Library is fully automated through AutoLib Library software systems for the benefit of the users. OPAC (Online Public Access Catalogue) service is installed to search the availability of books with Title, author or publisher. All the latest journals and magazines for all disciplines are subscribed periodically. Latest arrival of books, journals, periodicals and renewal of books are notified to the library users through E-mail. To inform the faculty members about the news related to education, employment. Published in newspapers everyday through E-mail. The library user gets the benefit of un-interpreted power supply while accessing the computers.

#### 4.2.2 Provide details of the following:

- ❖ Total area of the library (in Sq. Mts.)
- ❖ Total seating capacity
- ❖ Working hours (on working days, on holidays, before examination days, during examination days, during vacation)
- ❖ Layout of the library (individual reading carrels, lounge area for browsing and relaxed reading, IT zone for accessing e-resources)

Table 4.8 Library Details

Total area of the Central library (in Sq. Mts.)	467.6 sq.m.	
Total seating capacity	100	
Working hours		
On working days	-	8.00 AM to 6.00 PM
On holidays	-	9.00 AM to 4.00 PM
Before examination days	-	8.00 AM to 6.00 PM
During examination days	-	8.00 AM to 6.00 PM
During vacation	-	9.00 AM to 4.00 PM

<b>Layout of the library (individual reading carrels, lounge area for browsing and relaxed reading, IT zone for accessing e-resources)</b>	401.95 sq.m (Individual reading carrels + lounge area for browsing + IT zone) 65.65 sq.m ( relax reading)
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**4.2.3 How does the library ensure purchase and use of current titles, print and e-journals and other reading materials? Specify the amount spent on procuring new books, journals and e-resources during the last four years.**

The Library advisory committee is entrusted with the task of ensuring the purchase and use of current titles, print and e-journals and other reading materials. Purchase strategy followed in the institution is as follows.

- ❖ The head of departments in consultation with their faculty team and students representatives submit a list of books and periodicals to be purchased to the head of the institution based on curriculum and syllabi, students strength, faculty research areas and students projects.
- ❖ The librarian scrutinizes and forwards to the head of the institution for approval in the library advisory committee meeting.
- ❖ The library advisory committee discusses it and presents to the governing council.
- ❖ The governing council approves it for procurement based on the availability of funds.

**Table 4.9 Details of Journals, E Resources, Membership**

<b>Library holdings</b>	<b>2013-14</b>		<b>2014-15</b>		<b>2015-16</b>		<b>2016-17</b>	
	<b>No. of Books</b>	<b>Total Cost(Rs)</b>						
<b>Text books</b>								
<b>Reference Books</b>	2638	1238485	2390	1376789	2298	1200674	1104	505796
<b>Journals/ Periodicals</b>	60	188166	60	144669	60	132343	60	160647
<b>e-resources</b>	579	1206427	170	528710	612	1564780	621	1722527
<b>Any other (specify) Membershi p*</b>	-	-	-	-	-	36500		31500

\* Membership - Anna university library, DELNET, British Council library

**4.2.4 Provide details on the ICT and other tools deployed to provide maximum access to the library collection?**

- ❖ OPAC
- ❖ Electronic Resource Management package for e-journals
- ❖ Federated searching tools to search articles in multiple databases
- ❖ Library Website
- ❖ In-house/remote access to e-publications
- ❖ Library automation
- ❖ Total number of computers for public access

- ❖ Total numbers of printers for public access
- ❖ Internet band width/ speed 2mbps 10 mbps 1 GB
- ❖ Institutional Repository
- ❖ Content management system for e-learning
- ❖ Participation in Resource sharing networks/consortia (like Inflibnet)

Central library is equipped with ICT tools to ensure the maximum utilization of resources available.

## 1. NPTEL

NPTEL provides E-learning courses through online mode in web and video form for engineering, science and humanities. Our library has a copy of all NPTEL videos in two separate hard disks of capacity 1.5TB & 1TB

## 2. OPAC

OPAC- Online Public Access Catalogue facility in the library and all Computer Laboratories, are used for the following services:

- ❖ To search for the availability of books with author name or book number or title
- ❖ To know the account details of a particular user

## 3. Electronic Resource Management Package for E-Journals

- (i) 543 e-books and 621 online journals and magazines are subscribed and made available to users in the webpage [http://www.rmkcet.ac.in/lib\\_el.htm](http://www.rmkcet.ac.in/lib_el.htm)
- (ii) 195 Mbps Internet Line provided for enhancing the access to electronic resources.
- (iii) The digital section of the library has access to all e-resources.

**Table 4.10 Electronic Resource Management package for e-journals**

Sl.No	Publisher	Subject Areas	Webpage
1	IEEE	Computer Engineering + Computer Science + Electrical and Electronics Engineering + Telecommunications and related disciplines	<a href="http://ieeexplore.ieee.org/Xplore/dynhome.jsp">http://ieeexplore.ieee.org/Xplore/dynhome.jsp</a>
2	ASME American Society of Mechanical Engineers	Mechanical Engineering	<a href="http://asmedigitalcollection.asme.org/">http://asmedigitalcollection.asme.org/</a>
3	Springer (Electrical and Electronics and	Electrical and Electronics and Computer Science Engineering	<a href="http://link.springer.com/">http://link.springer.com/</a>

	Computer Science Engineering )		
4	ELSEVIER	Engineering + Computer Science (Electrical + Electronics + Mechanical + Civil and Structural + Aerospace + Biomedical + Industrial and Manufacturing + Ocean Engineering + Computational Mechanics and Safety Risk, Reliability and Quality + Computer Network and Communications, Artificial Intelligence, Computer Science, Computational Theory and Mathematics, Computer Graphics and Computer – Aided Design, Information Systems, Control and System Engineering and Software	<a href="http://www.sciencedirect.com/">http://www.sciencedirect.com/</a>
5	J-GATE(JET)	Engineering and Technology (JET) and any other similar service providers	<a href="https://jgateplus.com/search/">https://jgateplus.com/search/</a>
6	ASTM DIGITAL LIBRARY (DL) ONLINE VERSION	Online dictionary of Engineering Science and Technology Electrical and Electronics Engineering Mechanical Engineering, Civil, Metallurgical, Petroleum, Instrumentation	<a href="https://compass.astm.org/CUSTOMERS/index.html">https://compass.astm.org/CUSTOMERS/index.html</a>
7	McGraw Hill	General Engineering and Reference	<a href="http://accessengineeringlibrary.com/">http://accessengineeringlibrary.com/</a>
8	ISO- JTC1(Online version)	Information Technology, Electronics and Telecommunications	<a href="http://www.rmkcet.ac.in/lib_ej.htm">http://www.rmkcet.ac.in/lib_ej.htm</a>
9	IET Digital Library	The Institute of Engineering and Technology - General Engineering and Reference	<a href="http://digital-library.theiet.org/">http://digital-library.theiet.org/</a>

## **Library Website**

We have website for our library (<http://www.rmkcet.ac.in/library.htm>) which gives all the updated information about our college library.

## **In-house/remote access to e-publications**

Online journals and e-books available as open access are made available to the users through the webpage [http://www.rmkcet.ac.in/lib\\_ej.htm](http://www.rmkcet.ac.in/lib_ej.htm).

## **Library automation**

- ❖ All library transactions are carried out through bar-coded identity card. Entry is recorded in the gate entry register.
- ❖ Intranet campus operation for OPAC through the Library Software AutoLib Software systems
- ❖ Digital user identification system for all the users
- ❖ Lib Software is used for automated report generations for the following
  - ✓ User entry
  - ✓ Transaction history
  - ✓ Individual library user history
  - ✓ Automated resource usage history
  - ✓ Online Public Access Cataloguing (OPAC)
  - ✓ Usage history
  - ✓ Stock availability

## **Total number of computers for public access**

Apart from 7 computers in the central library, all the computers in the campus are enabled to access e-Journals, e-Books and OPAC through intranet.

## **Total numbers of copier/printers for public access**

Two copier cum printer with network sharing is available in digital library. Every department has sufficient printer facility to take printout.

## **Internet band width/speed**

195 Mbps Internet Leased Line

## **Institutional Repository**

Knowledge based repository is maintained in the library and accessible through Intranet- Campus Performance Tracker. Repository contains popular articles, lecture notes, projects/thesis, audio/video files, photographs, journals, newsletters, circulars, annual reports, curriculum, syllabus and NPTEL lectures.

## **Content management system for e-learning**

Archives and e-learning data base like e-books, e-journals, question bank, syllabus and curriculum are available in the library website. Users can access their required information through the links provided in the website.

## **Participation in resource sharing networks/consortia**

To enhance the knowledge based resource sharing and learning facilities, the institutional library has been a member of IEI, IETE, DELNET, British Council Library and Anna University Library.

Facilities like archives and services, union catalogues and other databases available online are accessed

#### 4.2.5 Provide details on the following items:

The statistical data that is furnished below is evidence that the library learning resources are utilized more effectively and efficiently.

Average number of walk-ins	: 200-250
Average number of books issued/returned	: 150-200
Ratio of library books to students enrolled	: 11:1
Average number of books added during last three years	: 1930
Average number of login to opac (OPAC)	: 100
Average number of login to e-resources	: 75
Average number of e-resources downloaded/printed	: 70
Number of information literacy trainings organized	: 02

#### 4.2.6 Give details of the specialized services provided by the library

Table 4.11 Services Provided in Library

<b>Manuscripts</b>	Students project reports are available
<b>Reference</b>	Reference section enriched with collection of books for competitive examinations, books on General Knowledge, Dictionaries, Subject Encyclopedia, Handbooks and Question Banks.
<b>Reprography</b>	A copier cum printer with network sharing is available.
<b>ILL (Inter Library Loan Service)</b>	Membership with British Council Library DELNET Anna University Library - to avail reading materials from other libraries.
<b>Information deployment and notification</b>	New arrivals and press clippings are regularly displayed in library notice boards and the same Information is sent to concerned staff through e-mail.
<b>Download</b>	Downloadable facilities are provided e-resources, such as E-Books and E-Journals, Anna University previous year question papers and NPTEL and educational oriented videos.
<b>Printing</b>	Facility for taking printout is available in the library.
<b>Reading list/ Bibliography compilation</b>	Reading list and bibliography compilation can be provided to the user on request.
<b>In-house/remote access to e-resources</b>	Through Intranet
<b>User Orientation and awareness</b>	Orientation is given to the first year students (fresher's) by the Library staff, during the beginning of the first semester.
<b>Assistance in searching Databases</b>	OPAC facility for searching the availability of books with author name, book number or title.

<b>DELNET</b>	Inter Library Loan service (ILL), online journals and document delivery service can be done.
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**4.2.7 Enumerate on the support provided by the Library staff to the students and teachers of the college.**

The staff members of the library assist the users in the location/identification of books, journals, project reports and back volumes.

Other useful supports provided by the library staff are:

- ❖ Searching / locating the books through online and offline
- ❖ Information about books and non-book materials available in the library
- ❖ An orientation program on accessing library facilities for new students is organized during the beginning of every academic year.
- ❖ Displaying the photocopies of interesting news and articles in the library notice board to create awareness among the users.
- ❖ Displaying the new arrivals of books, journals in the jacket allotted for displaying new arrival.
- ❖ Advertisement in the newspapers about scholarships, higher education admissions, job opportunities in government agencies are displayed in notice board and e-mailed to the faculty members.
- ❖ Advertisement in the newspapers about notifications regarding banking, consumer laws, and income tax and government beneficiary schemes are displayed in notice board and e-mailed to the faculty members.
- ❖ Purchase of books for research activities based on the staff requirements

**4.2.8 What are the special facilities offered by the library to the visually/physically challenged persons? Give details.**

Central library is user friendly for everyone including physically challenged students. Special care is taken for physically challenged students to select, borrow and return the books. Physically challenged students can exclusively book their request to the librarian through e-mail in advance to borrow books. The other useful facilities offered to differently-abled users are:

- ❖ Wheel chair for their comfortable movement inside the library
- ❖ Extended loan period for returning the borrowed books
- ❖ Class room delivery of the library resources
- ❖ Remote and electronic access to the OPAC

**4.2.9 Does the library get the feedback from its users? If yes, how is it analyzed and used for improving the library services. (What strategies are deployed by the Library to collect feedback from users? How is the feedback analyzed and used for further improvement of the library services?)**

Yes, the library gets feedbacks from its users. The library maintains a register where the users can enter their feedback. Users of the library can also e-mail their feedback directly to the librarian. The library advisory committee meets once in every year and reviews the feedback collected through various modes. It is analyzed by the library advisory committee and actions are taken for further improvements in the library.

### 4.3 IT INFRASTRUCTURE:

**4.3.1. Give details on the computing facility available (hardware and software) at the institution. Number of computers with Configuration (provide actual number with exact configuration of each available system)**

- ❖ Computer-student ratio
- ❖ Stand alone facility
- ❖ LAN facility
- ❖ Wifi facility
- ❖ Licensed software
- ❖ Number of nodes/ computers with Internet facility
- ❖ Any other

Our college provides computer laboratory for every department with the required software. Besides this a Common Internet Laboratory is also functioning for the benefit of the students. All the computers are connected through Local Area Network (LAN). Internet of 195 Mbps with Wi Fi facility is available in the campus. Principal, Vice Principal, HODs and Senior faculty members are provided with separate computers and printers.

**Table 4.12 Total Number of Computers and other IT Equipment**

Sl.No.	Name of the Equipment	Quantity
1.	Server	5
2.	Client System	601
3.	Licensed Software	12
4.	Laser Printer	32
5.	Scanner	04
6.	LCD Projectors	22
7.	LED Television (Communication Lab)	01
8.	Bar Code Reader	02
9.	Bar Code Printer	01
10.	Copier	04
11.	Plotter	01
12.	Dot matrix printer	10
13.	Fax machine	01

**Table 4.13 Computer System Configuration**

Sl. No.	System Configuration	Quantity
1	Intel core 2 quad,intel DG31PR MB,160GB HDD, 1GBX2 DDR RAM,sony DVD ROM,HCL CRT 17" Monitor, HCL Keyboard+Mouse	90
2	Intel Dual core/intel MB/250GB HDD/2GB RAM/DVD RW/LG 15.6" LCD Monitor/Optical Mouse/HCL Keyboard	136

3	Intel core i3/intel MB/320GB HDD/2GB RAM/DVD RW/Acer 17" LCD Monitor/Optical USB Mouse/TVS Keyboard	30
4	Intel core i5/intel MB/500GB HDD/2X2GB RAM/DVD RW/Acer 17" LCD Monitor/Optical USB Mouse/TVS Keyboard	90
5	Intel core i7 2800/intel 61ww MB/500GB HDD/8GB RAM/DVD RW/Acer 20" LCD Monitor/1GB Graphics Card/Optical USB Mouse/TVS USB Keyboard	100
6	Intel XEON 3220/intel s3000AH server board/250X2GB HDD/1GBX2 RAM/17" HCL CRT Monitor/Logitech Mouse/HCL keyboard	2
7	Intel(R) Xeon(R) CPU E5-2630/24GB RAM/HDD 2TB/20" DELL LCD Monitor/USB Keyboard/USB Mouse	1
8	Intel(R) Xeon(R) CPU E5-2403/16GB RAM/HDD 2TB/20" DELL LCD Monitor/USB Keyboard/USB Mouse	2
9	DELL Intel core i7/Quad Processor(3.4GHZ ,8m, 86W)intel MB/500GB HDD/8GB DDR RAM/DVD RW/E2014H- 20" Monitor/Optical USB Mouse/USB Keyboard	25
10	Intel core i7/Intel MB/500GB HDD/8GB RAM/DVD RW/Acer 17" LCD Monitor/Optical USB Mouse/TVS Keyboard	100
11	<b>Mac Machines iMAC 21.5" /Quad Core i5 2.7GHz/1TB HDD/8GB RAM/Intel Iris Pro Graphics/Apple Mouse/Apple Keyboard</b>	30
<b>TOTAL</b>		<b>606</b>

- Computer-student ratio : UG 1 : 4  
 Stand-alone facility : 1 Fax Machine  
 LAN facility : 606 computer systems are connected with LAN  
 Wi-Fi facility : Hostel Premises are connected with WiFi facility  
 Licensed software : 14  
 Number of nodes/ computers with Internet facility : All the 606 Computer Systems.

**Table 4.14 List of Licensed Software**

<b>Branch</b>	<b>Name of the Software</b>
<b>CSE / IT</b>	MICROSOFT PACKAGE
	ADOBE
	HICLASS Software
<b>EEE</b>	MATLAB
<b>ECE</b>	MATLAB
	XILINX
	CADENCE
	NETWORKING SIMULATION SOFTWARE
<b>MECH</b>	Creo 2.0
	HYDROSIM
	PNEUMOSIM
	FANUC MILLTURN
	ANSYS
	MATHCAD
	WIND CHILL 10.2

#### **4.3.2 Detail on the computer and internet facility made available to the faculty and students on the campus and off-campus?**

All the departments have separate computer lab with latest configuration computers connected with LAN, and 606 systems are connected with internet facility of 195 Mbps for the benefit of staff and students. Computer laboratories are kept open up to 7.00 P.M. for the utilization and comfort of staff and students. Separate internet lab is also provided to the students.

Wi Fi facility is available in the Hostel premises. Students and staff can access internet from their own laptop anywhere in the hostel campus. HODs and senior faculty members are provided with separate computer system with internet facility and printer.

#### **4.3.3 What are the institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities?**

- ❖ The Institution has strategic plan to enhance ICT facility in the campus. In that line, internet bandwidth has been increased from 115 Mbps to 195 Mbps.
- ❖ E-governance of academics is deployed throughout the institution by campus performance tracker.
- ❖ Through center of excellence in every department recent software and hardware are procured.
- ❖ To provide smart boards to all the classrooms in future.
- ❖ E-learning facilities and course modules will be developed and uploaded in the website by the faculty.

**4.3.4 Provide details on the provision made in the annual budget for procurement, up gradation, deployment and maintenance of the computers and their accessories in the institution (Year wise for last four years)**

Table 4.15 Annual Budget for the last four years in Rupees

Year	Procurement	Up gradation	Deployment/ Maintenance
2013-14	69,82,373	6,00,000	3,00,000
2014-15	82,4058	4,20,000	2,85,000
2015-16	3,70,5914	3,50,000	4,50,000

**4.3.5 How does the institution facilitate extensive use of ICT resources including development and use of computer-aided teaching/ learning materials by its staff and students?**

The college provides adequate Information and Communication Technology (ICT) Resources for teaching and learning process. Computer facility with internet is available for the students & staffs in all departments, which helps to enrich their prescribed curriculum. In addition to this, the college also has a well-equipped air-conditioned seminar halls with projectors and AV facility for the effective use of faculty and students. Wi-Fi connectivity enables staff and students to access resources for teaching-learning from anywhere in the hostel campus. The digital library provides services to the faculty members and students to access online course materials, video lectures and NPTEL courses. The college also provides the facilities to take up online courses like IIT spoken tutorials, Udemy, Course Era. We have common group mail systems to communicate with students and staffs regarding their notes, placements notifications, discussions for preparation for competitive exams etc., Apart from this the institution extends the usage of ICT, by running internet hours, project hours, placement tests and value added courses.

**4.3.6 Elaborate giving suitable examples on how the learning activities and technologies deployed (access to on-line teaching - learning resources, independent learning, ICT enabled classrooms/learning spaces etc.) by the institution place the student at the centre of teaching-learning process and render the role of a facilitator for the teacher.**

The Digital library provides access to on-line resources and e- journals for independent learning. Our College provides internet facility which enables the students and staff to enrich their knowledge by self-learning through online courses, online materials video lectures and webinars. All the departments are provided with multimedia projector and seminar halls are enabled with AV facility for the learning activities. The students take up IIT spoken tutorial in various topics through on line. Centre for Campus to Corporate conducts online tests for aptitude tests and technical tests through the software available. We have notes materials in our college websites for easy access. Through Infosys campus connect portal the students and staffs can acquire the knowledge about recent technology updates. Many company related exams are scheduled and been utilized by the students in websites like hacker rank, skill rack etc.

**4.3.7 Does the Institution avail of the National Knowledge Network connectivity directly or through the affiliating university? If so, what are the services availed of?**

Yes, National Programme on Technology Enhanced Learning (NPTEL) facilities is availed. Periodically Students are registering in that programme. After their enrolment, they are asked to attend video lectures and our faculty members use to guide them to complete their assignments. Our college arranges all the facilities to the students who want to attend their exams and helps them to glitter in their favorite domain.

**Table 4.16 NPTEL Registration details**

S.no	Session	No. of Students Enrolled
1	September 2016	241
2	March 2017	307
3	April 2017	345

**4.4 MAINTENANCE OF CAMPUS FACILITIES**

**4.4.1 How does the institution ensure optimal allocation and utilization of the available financial resources for maintenance and upkeep of the following facilities (substantiate your statements by providing details of budget allocated during last four years)?**

At the beginning of every academic year, Principal convenes a meeting of HODs to discuss about various academic activities to be conducted during the year and requests all HODs to submit a budget proposal highlighting recurring and non-recurring expenses. After the budget consolidation, the Principal forwards the same to the Management for necessary approval.

**Table 4.17 Maintenance Cost in Rupees**

S.NO	Academic Year /Expenditure	2012-2013	2013-2014	2014-2015	2015-2016
1	<b>Building Maintenance</b>	18,81,90,423	25,47,82,746	22,93,04,471	30,30,74,264
2	<b>Furniture &amp;Fittings</b>	43,75,555	39,37,555	35,85,083	34,06,575
3	<b>Electrical Fittings</b>	38,72,347	34,85,112	31,36,601	28,22,941
4	<b>Audio / Video Equipments</b>	1,02,203	86,873	94,999	5,42,881
5	<b>Electricity Charges</b>	37,08,165	46,30,462	49,90,528	60,91,745
6	<b>Computers</b>	19,16,429	13,71,633	5,48,653	11,31,341
7	<b>Air Conditioners</b>	10,63,090	9,84,923	8,37,185	13,97,982
8	<b>Repair &amp; Maintenance</b>	24,93,581	23,64,728	25,02,543	14,10,579

9	<b>College Maintenance</b>	68,75,298	1,02,03,565	90,24,017	1,31,25,363
10	<b>Garden Expenses</b>	12,42,250	11,82,943	1,28,01,116	14,56,621
11	<b>Hostel Maintenance</b>	2,44,965	5,95,610	2,49,022	1,03,826
12	<b>Mess Expenses</b>	2,31,03,985	3,27,17,349	2,81,92,803	2,61,76,669

#### **4.4.2 What are the institutional mechanisms for maintenance and upkeep of the infrastructure, facilities and equipment of the college?**

There are specific personnel appointed for maintenance of infrastructure by way of buildings, furniture and transport. The technical staff attached to the respective laboratories maintains the maintenance chart of equipment. If an equipment require service, it will be routed through proper channel for necessary action. A Systems Administrator and a Network administrator with their staff look after the maintenance of computers and the networking. Some of the equipment also have annual maintenance contract (AMC) signed with leading service companies.

#### **4.4.3 How and with what frequency does the institute take up calibration and other precision measures for the equipment/ instruments?**

All the machines are under periodic maintenance. The faculty in-charge of each lab conducts pilot test before the start of the lab classes to check the equipment's / machines precision and accuracy. If the measured values are not precise / accurate calibration will be called for through proper channel.

#### **4.4.4 What are the major steps taken for location, upkeep and maintenance of sensitive equipment (voltage fluctuations, constant supply of water etc.)?**

All the sensitive equipment will be monitored periodically. If any malfunctions found out, a separate team for each category of equipment will arrive to replace or repair in time. Expired date for fire extinguishers are periodically checked and replaced if necessary. We have three water plants of capacities 3000L, 500L and 500L which will be regularly cleaned and purifying water for daily usage. The UPS are under AMC with APC, Twice digital and Scomec. We have Genset generators of capacity 250 KVA are maintained by GMMCO limited. Air coolers are well conditioned and regularly looked after by COOL MAX service providers.

# **Criterion V**

## **Student Support and Progression**



## CRITERION V: STUDENT SUPPORT AND PROGRESSION

### 5.1 STUDENT MENTORING AND SUPPORT

**5.1.1 Does the institution publish its updated prospectus / handbook annually? If “yes”, what is the information provided to students through these documents and how does the institution ensure its commitment and accountability?**

The Institution publishes its prospectus every year and it is distributed to the first year students during the time of admission. The prospectus provides a complete Profile of the college, Courses offered, Infrastructure details, Transportation details and Placement details. The college calendar is distributed to all faculty and students. It contains Vision, Mission, Quality Policy, Program Educational Objectives, Program Outcomes, College Rules and Regulations and information regarding working days, holidays, test schedule, commencement of tentative university practical examination and theory examinations date and college achievements.

The college publishes annual magazine “Radiance” every year which contains details of governing council, final year class photographs, College activities, University rank holders, Annual Report, Training and Placement details and articles given by students.

The college provides opportunity for various stakeholders such as alumni, student, parent and employers by conducting alumni meeting, parent teachers meeting and class committee meeting to collect the feedback to establish and reiterate the commitment which is published through prospectus.

**5.1.2 Specify the type, number and amount of institutional scholarships / free ships given to the students during the last four years and whether the financial aid was available and disbursed on time?**

To encourage and motivate the students, the management provides scholarship for their academic achievements and for excellence in sports and cultural activities. Besides this, academically strong and economically weak students are also given special scholarship. The scholarships are given under following schemes.

**Table 5.1 Scholarship provided by Management**

<b>S.No</b>	<b>Type of Scholarship</b>	<b>2013 – 2014</b>	<b>2014 – 2015</b>	<b>2015 – 2016</b>	<b>2016 – 2017</b>
		<b>Amount in Rs</b>			
1)	Smt. Lakshmikanthammal Memorial Scholarship	25,000	15,000	20,000	25,000
2)	Shri.R.Swaminatha Naidu      Memorial Scholarship	20,000	20,000	20,000	20,000

<b>3)</b>	Shri.S.R.Rajendra Naidu Memorial scholarship	20,000	20,000	20,000	20,000
<b>4)</b>	Smt. Lakshmiammal memorial scholarship	20,000	20,000	15,000	20,000
<b>5)</b>	Smt. Kanthammal Memorial Scholarship	20,000	20,000	15,000	20,000
<b>6)</b>	Shri. Mannar Naidu Memorial Scholarship	20,000	20,000	15,000	20,000
<b>7)</b>	Smt. Kamachiammal Memorial Scholarship	20,000	20,000	15,000	20,000
<b>8)</b>	Thiru. G.R.Naidu Memorial Scholarship	20,000	20,000	15,000	20,000
<b>Total Amount</b>		<b>1,65,000</b>	<b>1,55,000</b>	<b>1,35,000</b>	<b>1,65,000</b>
<b>No. of scholarships</b>		<b>31</b>	<b>33</b>	<b>34</b>	<b>33</b>

### 5.1.3 What percentage of students receives financial assistance from state government, central government and other national agencies?

About 39% of students apply and get the State and Central Government Scholarships under various scholarship schemes and the amount is directly credited into their bank accounts.

**Table 5.2 Scholarship provided by State and Central Government for the year 2016 – 2017**

Sl. No.	Type of Scholarship	Course	No. of students received scholarship
<b>1)</b>	Backward class and Minority Welfare office	B.E./B.Tech.	269
<b>2)</b>	Aadi Dravidar Welfare office	B.E./B.Tech	133
<b>3)</b>	First Graduate tuition fees waiver by State Government	B.E./B.Tech	342
<b>4)</b>	SC/ST tuition fees waiver	B.E./B.Tech.	30

### 5.1.4 What are the specific support services/facilities available for?

- ❖ Students from SC/ST, OBC and economically weaker sections
- ❖ Students with physical disabilities
- ❖ Overseas students
- ❖ Students to participate in various competitions/National and International

- ❖ **Medical assistance to students: health centre, health insurance etc.**
- ❖ **Organizing coaching classes for competitive exams**
- ❖ **Skill development (spoken English, computer literacy, etc.,)**
- ❖ **Support for “slow learners”**
- ❖ **Exposures of students to other institution of higher learning/corporate/ business house etc.**
- ❖ **Publication of student magazines**

The college supports the exemplary students who are from economically weaker sections by offering them scholarships. Also, the college guides the students to avail the scholarship provided by the Government and other agencies.

#### **Students from SC/ST, OBC and economically weaker sections:**

The students belonging to SC/ST, OBC category are identified and their economic status, personal and academic details are collected at the time of admission and records maintained.

The information related to scholarship schemes from Government and Non – Government organizations are intimated to all the students whenever the organizations announce about it and all necessary support are provided for them to apply for the scholarship on time.

#### **Students with physical disabilities:**

Special care is being taken for the physically challenged students by providing well laid roads, wheel chairs and ground floor class rooms and examination hall. Library staff helps them in their library hours regarding book borrowing. Food will be provided to them in the classroom. Moreover, tuition fee waiver scheme given by government is applicable to all differently-abled students.

#### **Students to participate in various competitions/National and International:**

On Duty is given to students to attend various events in other institutes. Students who win prizes in other colleges are encouraged by awarding equal prize money by the institution.

#### **Medical assistance to students: health centre, health insurance etc:**

A well – furnished clinic, along with Doctor Facility for 24 Hours to take care of the health requirements of the hostel students is available and the college has ambulance facility. First aid boxes are adequately provided in the college campus.

#### **Organizing coaching classes for competitive exams:**

The college Higher education cell has been functioning to give exposure to students about competitive exams like GATE, CAT, XAT and TANCET for admission for higher studies in India and GRE, TOEFL, IELTS, GMAT for entering overseas universities. The college regularly organizes awareness

programs for the benefits of civil services aspirants. Question banks for competitive exams and books are available in the library.

### **Skill Development (Spoken English, Computer Literacy, etc):**

To improve the communication ability and also to develop the personality marks of students, various training programmes and workshops are conducted. Communication skills - BEC training, Personality development program, Mock Aptitude test, Creative thinking workshop, Campus Readiness Program, Life skill workshop. Through value added courses like ORACLE - Java / DBMS, ALSTOM Lab view, C / C++ Programming skills training (EPS), Mini Project, CISCO - CCNA / Texas Instruments and PLM are few of such activity based trainings that are conducted by the college to the students for their overall skill enhancement.

### **Support for “slow learners”:**

Based on the performance in the slip test, internal assessment tests and previous university exam results, slow learners are identified in each class. They are given special coaching in their weak areas. Evening classes are conducted for slow learners by the respective subject teachers if necessary. Retests are also conducted for their improvement. Faculty counselor provides additional support to improve their academic performance.

### **Exposures of students to other institution of higher learning / corporate / business house etc:**

Students are encouraged to actively participate in corporate competitions like Aspirations Programming Contest by Infosys, Wipro Earthian, EngiNx by TCS, SPARKLE by KPIT, JCI India Techno Connect, Techgium by L&T etc organized by Corporate Relationship Cell (CRC) Students are also encouraged to take part in company sponsored internships.

### **Publication of student magazines:**

The college provides opportunities to both staff and students to publish articles in newsletters and magazines through which the talents are exhibited. The newsletter gives a bird's eye view into the various activities conducted during the semester.

### **5.1.5 Describe the efforts made by the institution to facilitate entrepreneurial skills, among the students and the impact of the efforts.**

The Institution has established an Entrepreneurship Development Cell (EDC) in 2014 with a sponsorship of Rs.1 Lakh by Entrepreneurship Development Institute (EDI), Tamil Nadu headed by Dr. P.K. Devan, Professor /Mechanical Engineering Department.

EDC is receiving Rs.20, 000/- consecutively for three years to organize 3 days entrepreneurship awareness camp from the Department of Science and Technology (DST).

EDC received financial assistance of Rs.36, 000/- from ICTACT for organizing entrepreneurship development and training program. Two students Mr. S.R. Chellakumar, T.Karthikeyan of EEE department are selected to participate in state level Entrepreneurship program.

Learn wise program of 30 hours duration is being organized for interested students. In this batch 87 students have registered. This program is supported by EDC of Anna University and EDI Government of Tamil Nadu. Four of our students have undergone training at Anna University and have become E Leaders to organize the above program. Mr.C.V.Kishan, Mr.Ranjith, Mr.Manimaran won third prize in startup weekend powered by Google for entrepreneurs conducted by CEG.

**5.1.6 Enumerate the policies and strategies of the institution which promote participation of students in extracurricular and co- curricular activities such as sports, games, Quiz competitions, debate and discussions, cultural activities etc. additional academic support, flexibility in examinations special dietary requirements, sports uniform and materials any other**

The institution encourages the students to participate in co-curricular and extra-curricular activities for their overall development. In the first year itself students participate in National Science day- project display contest and receive appreciation. This motivates the students to actively involve themselves in co-curricular activities such as Quiz programmes, Project contest, etc

The Physical Education department conducts intradepartmental sports competitions and inter-college competitions (within our group of colleges) to spot and nurture the talent in this field from the beginning.

Students who excel in both co-curricular and extracurricular activities are provided with coaching and mentoring to participate and excel in zonal, regional and national level competitions.

The students are given duty leave to participate in events of other institutions. The winners of every event are encouraged with cash awards. Due to their active participation in these activities, if the students find it difficult to cope up with academics, special coaching is organized for such of them. Internal Assessment Tests will be conducted at a date and time convenient to them.

Special transport arrangements are being made at 6PM every day for day scholar students participating in the practice matches. Students are provided with sports suit for their events and nutritious and balanced diet in a hygienic environment is also made available to them

**Extracurricular activities – Sports:**

The Physical Education department have two full-time qualified Directors, Mr. R. Sabari Giri M.Phil P.Ed., and Mr. Ramachandran N. M.Phil,P.Ed and also another Directress in Physical Education, Ms. K.Vanathi, M.Com, M.P.Ed., PG Dip. (Yoga). They train both boys and girls in their games of interest and sports event of their choice.

**5.1.7 Enumerating on the support and guidance provided to the students in preparing for the competitive exams, give details on the number of students appeared and qualified in various competitive exams such as UGC-CSIR- NET, UGC-NET, SLET, ATE / CAT / GRE / TOFEL / GMAT / Central /State services, Defense, Civil Services, etc.**

Higher Education Cell of our college provides the guidelines and arranges coaching classes to the students to prepare them for competitive exams. Online materials, Model question papers with answer keys and important website addresses are also provided to them. Besides this, our central library provides past year questions from the stored question banks and books for all competitive exams.

**Table 5.3 Competitive Exam Details**

<b>Exam</b>	<b>2012-2013</b>		<b>2013-2014</b>		<b>2014 - 2015</b>		<b>2015 – 2016</b>	
	<b>Appeared</b>	<b>Qualified</b>	<b>Appeared</b>	<b>Qualified</b>	<b>Appeared</b>	<b>Qualified</b>	<b>Appeared</b>	<b>Qualified</b>
TANCET	2	2	23	23	25	25	12	12
GATE	-	-	1	1	23	15	7	2
CAT	-	-	1	1	1	-	-	-
GRE	8	6	2	2	4	4	10	10
TOFEL	8	7	4	4	9	9	10	10
CIVIL SERVICES	1	1	-	-	-	-	-	-
IELTS	2	2	2	2	-	-	3	3

**5.1.8 What type of counseling services are made available to the students (academic, personal, career, psycho-social etc.)**

**Academic Counseling:**

Department Faculties are acting as academic counselors and a batch of 20 students is assigned to each counselor. The students' academic, co-curricular and extracurricular activities are monitored by the counselor and they are provided with necessary counseling for their improvement. The Year Coordinator, HOD and Principal provide necessary counseling and take corrective measures for any irregularity or deviation in the progress of the students in their academic pursuits.

Apart from academic counseling, faculty members also address the students' psycho-social issues and guide them for their overall personality development.

**Career Counseling:**

Awareness is created among students about various career options and higher studies opportunities by Placement Cell, Higher Education Cell, Entrepreneurship Development cell and Career Guidance cell. Training and Placement (T&P) cell organizes various Training Programs, Guest Lectures by

eminent industry professionals, corporate pre placement talk and establish COE for the benefit of students in enabling holistic development and desired placement.

**5.1.9 Does the institution have a structured mechanism for career guidance and placement of its students? If “yes”, detail on the services provided to help students identify job opportunities and prepare themselves for interview and the percentage of students selected during campus interviews by different employers (list the employers and the programmes).**

#### **Training & Placement:**

Ever since its inception, the Department of Training and Placement has been working on the training and development activities so as to equip the students to meet with the requirements of the recruiting companies. Twenty three (23) MoUs have been signed with different Industries, Universities abroad and Institutions, seven (8) value added courses and eleven (11) Centre of Excellence (COE) for enhancing the academic and collaborative research.

Nearly 96% of the eligible students of 2012 – 16 batch have been recruited by highly reputed companies through Campus Recruitment Programme. In respect of the present 2013 – 17 batch, it is heartening that 80% of the eligible students have already got their placements. This is despite the fact that a few more top-notch companies are yet to visit for Campus for recruitment. Once they complete the process, we are confident of even surpassing the 96% mark of the earlier batch.

- ❖ The List of Value added courses and Centers of Excellence are given in the section 1.1.7
- ❖ The List of MoUs with Industries & Abroad Universities is given in the section 3.7.2.

The training program has been evolved in consultation with various experts and structured right from the first semester onwards.

**Table 5.4 List of Training Program**

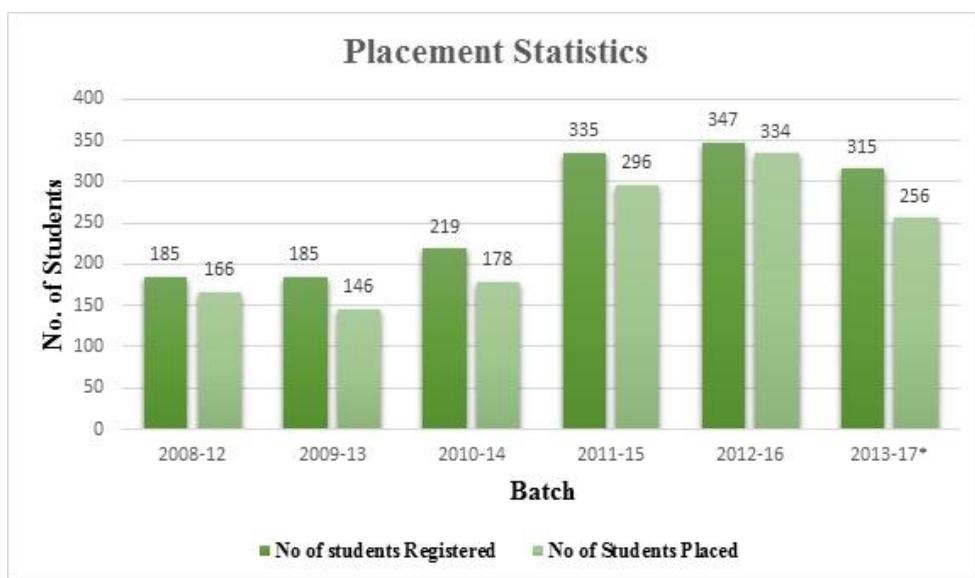
S. No	Semester	Training Program Title	No. of Days
1	I	Orientation Programme by <b>Mr.Jayaprakash Gandhi, Career Consultant</b>	Half a Day
		Motivation Programme by <b>Dr. B.V.Pattabhiram</b>	Half a Day
		Life Skills Workshop by <b>M/s.Ethnus</b>	2 Days
2	II	Orientation Program by Mr.Raghunath	Half a Day
		Creative Thinking by Ethnus	1 Day
		Engineering Orientation by FACE	2 Days
3	III	Campus Readiness Programme	2 Days
		Communication Skills – BEC Training	5 Days

4	IV	Personality Development by Jade	2 Days
		Communication Skills – BEC Training	5 Days
		BEC Assessment Online Test	Half a Day
5	V	Mission Possible – Interview skills improvement workshop by <b>Mr.Suresh Punjabi, Career Consultant and Motivational Speaker</b>	2 Days
		Campus Readiness Programme by M/s Ethnus	2 Days
6	VI	Aptitude programme by Smart Resources	5 Days
		Student Mentor Program and Placement Presentation	1 Day
7	VII	Aptitude Training programme by Smart Resources	4 Days
		Java Training Program by EPS Trained Faculty Members	5 days
		Company Specific Aptitude Training by FACE	4 Days
8	VIII	Special 2 Days Aptitude Refresher Course by SMART	2 Days

### Year wise Placement Statistics

Table 5.5 Placement Statistics

Particulars	2008-12	2009-13	2010-14	2011-15	2012-16	2013-17*
% of Students Placed	89.72	78.91	81.28	88.35	96.25	81.58



\*In progress

Fig.5.1 Placement Statistics

### 5.1.10 Does the institution have a student grievance redressal cell? If yes, list (if any) the grievances reported and redressed during the last four years

Yes. The Institution has a grievance redressal cell and is headed by the Professor and Head of Electrical and Electronics Engineering Department. The students can express their grievances to the members of the cell personally or

over phone. The cell meets as and when required and recommendations are forwarded to the Principal for further process.

**Table 5.6 Composition of Grievance redressal cell**

<b>Sl. No.</b>	<b>Name</b>	<b>Category</b>
1	Dr. N. Kalaiarasi, Professor and HoD/EEE	Chairman
2	Dr. T. M. Inbamalar, Professor, Dept. of ECE	Member
3	Dr. Geetha Balachander, Associate Professor, Dept. of S&H	Member
4	Dr.G. Devi, Associate Professor, Dept. of S&H	Member
5	Ms. G. Manimegalai, Trustee, Relief Foundations	Member
6	Dr.S.Bhagavathi Perumal, Vice Principal	Member
7	Dr.D.Paulraj, Professor and HoD/ CSE	Member
8	Dr.M.Balasubramanian, Professor and HoD/ Mechanical	Member

### **5.1.11 What are the institutional provisions for resolving issues pertaining to sexual harassment?**

The institution has constituted an internal complaints committee for sexual harassment to women to deal with the women related issues in the campus. It is headed by Dr. N.Kalaiarasi, Professor and Head of the Department of EEE, with Dr. T.M.Inbamalar, Professor of ECE, Dr.Geetha Balachandar, Associate Professor of S&H, Mr. R.Krishnaswamy, Senior Lawyer as members and student members. The forum is not only looking into the highly sensitive issues of any form of harassment, but also emphasizes on the women empowerment.

We are fortunate not to have any issues regarding the sexual harassment in the campus so far.

**Table 5.7 Composition of Internal Complaints Committee**

<b>S. No</b>	<b>Name</b>	<b>Designation</b>	<b>Committee</b>	<b>Phone No</b>
1	Dr.N.Kalaiarasi	Professor & Head	Presiding Officer	9843969353
2	Dr.Geetha Balachandar	Associate Professor	Member	9840448215
3	Dr.T.M.Inbamalar	Professor	Member	9444661095
4	Ms.Pasupuleri Ganapathi	Student III yr EEE	Member	9959605511
5	Ms. B.Pavithra	Student III yr ECE	Member	9840263466
6	Ms. A.Vaishnavi	Student III yr CSE	Member	9444193918
7	Mr. R.Krishnaswamy	Senior Lawyer	Member	

**5.1.12 Is there an anti-ragging committee? How many instances (if any) have been reported during the last four years and what action has been taken on these?**

The college anti-ragging committee is functioning as per AICTE directives and Anna University guidelines to handle the issues related to ragging. The team members are always vigilant and they interact with freshers and make surprise checks inside the campus and hostel premises. The anti-ragging committee has created awareness among students to do away with any form of ragging both inside and outside the campus. Every department has student representatives in the committee to report any incidents of ragging.

The anti-ragging guidelines are being prominently displayed prominently in various buildings of the campus. It is heartening that there has been no incident of ragging reported in the campus so far because of active performances of the anti-ragging committee.

**Anti-ragging Committee:**

Table 5.8 Composition of Anti-ragging Committee

Name	Position	Category
Dr. Rengaraja T,Principal	Chairman	Convener
Dr. Bhagavathi Perumal S, Vice Principal	Member	Co-convener
Dr. Gangatharan N, HOD ECE	Member	HOD1
Dr. Paulraj D, HOD CSE	Member	HOD2
Mrs. Kalaiarasi N, HOD EEE	Member	Faculty member -Female
Dr. Inbamalar T.M., Professor	Member	Faculty member -Female
Mr. Leo Amalraj J, Associate Professor	Member	Faculty member - Male
Mr. Loganathan T.G, Associate Professor	Member	Faculty member - Male
Mr. Lakshmipathy D, Warden	Member	Non-Teaching Faculty

**5.1.13 Enumerate the welfare schemes made available to students by the institution.**

The institution is working towards ensuring social justice through the various students' welfare schemes. The induction programme clearly presents the welfare schemes available to the students. The following welfare schemes are made available for the students.

- ❖ Providing Institutional scholarships and financial assistance for economically weak students with good academic track record
- ❖ Providing state and central government scholarships
- ❖ Providing medical facility
- ❖ Providing financial support for participation in conferences, paper presentations in other institutions

- ❖ Funding for innovative in-house projects
- ❖ Supporting facilities for getting educational loan
- ❖ Academic tutor mentorship
- ❖ Career guidance and campus placement

The details of institutional and government scholarship availed by the students are given in the section 5.1.2 and 5.1.3 respectively

**5.1.14 Does the institution have a registered Alumni Association? If “yes”, what are its activities and major contributions for institutional, academic and infrastructure development?**

Yes, the Institution has a very active Alumni Association and organize alumni meet twice every year. The college has a strong support of alumnus and well established network. The college gets fruitful suggestions and feedback related to the curriculum and development of the institution. Some of our alumni periodically visit the college and deliver the lectures to their juniors to make them improve their technical as well as soft skills and fulfill the industry requirements. They also provide awareness about industry and conduct mock interviews for supporting our placement activities in an effective manner.

Some of the Alumni members are also inducted into our Department Advisory Committee (DAC) that helps in taking strategic decision for bridging the gap between academicians and the industry.

**5.2 STUDENT PROGRESSION:**

**5.2.1 Providing the percentage of students progressing to higher education or employment (for the last four batches) highlight the trends observed**

The strategic planning and implementation of training program by the institution exhibiting the positive trend in the students' progression to employment and higher education.

Table 5.9 Student Progression

S. No	Details of Progression	Progression as a percentage during			
		2013 – 2014	2014 – 2015	2015 – 2016	2016 – 2017
1	UG to PG	9.84	11.81	8.11	Yet to be completed
2	Employed through campus Recruitment	81.28	88.35	96.25	80% (In Progress)
3	Employed through other than campus recruitment	12.3	1.79	4.89	Yet to be completed

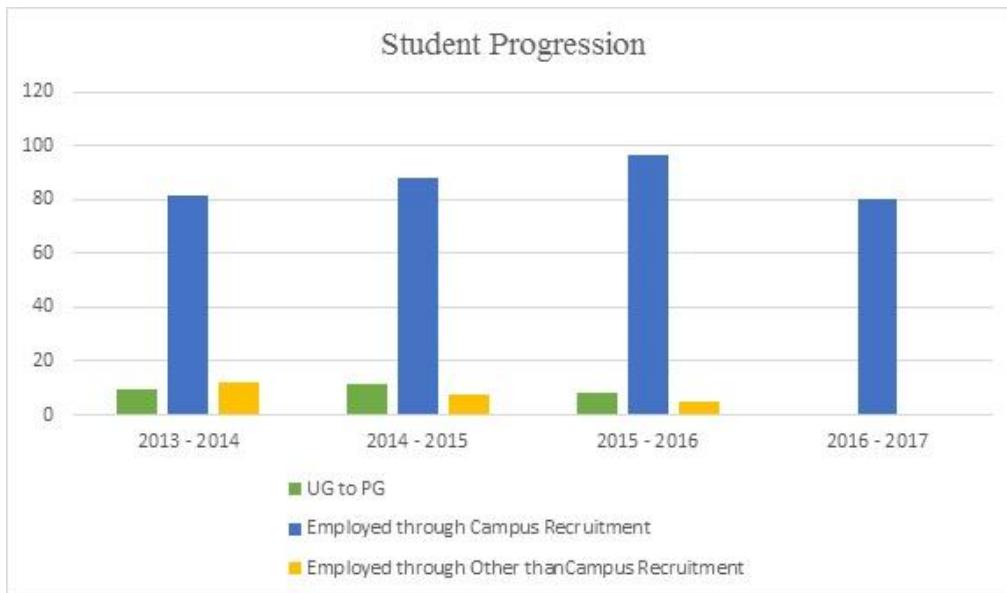


Fig.5.2 Student progression Chart

**5.2.2 Provide details of the programme wise pass percentage and completion rate for the last four years (cohort wise/batch wise as stipulated by the university)? Furnish programme-wise details in comparison with that of the previous performance of the same institution and that of the Colleges of the affiliating university within the city/district.**

#### Students Pass Percentage and University Ranks

Table 5.10 Students Pass Percentage and University Ranks

Dept	Particulars	Year of Graduation				
		2012	2013	2014	2015	2016
CSE	Total no of students	65	61	72	67	128
	Total Number of Graduates	42	54	66	61	118
	<b>Pass %</b>	<b>64.61</b>	<b>88.52</b>	<b>91.66</b>	<b>91.04</b>	<b>92.18</b>
	<b>University Rank</b>	<b>4</b>	<b>6</b>	<b>4</b>	<b>9</b>	<b>3</b>
ECE	Total no of students	66	130	140	143	199
	Total Number of Graduates	52	110	124	128	184
	<b>Pass %</b>	<b>78.78</b>	<b>84.61</b>	<b>88.57</b>	<b>89.51</b>	<b>92.46</b>
	<b>University Rank</b>	<b>4</b>	<b>14</b>	<b>7</b>	<b>4</b>	<b>10</b>
EEE	Total no of students	66	66	71	70	68
	Total Number of Graduates	60	58	62	63	58
	<b>Pass %</b>	<b>90.91</b>	<b>87.88</b>	<b>88.32</b>	<b>90.00</b>	<b>85.29</b>
	<b>University Rank</b>	<b>8</b>	<b>5</b>	<b>3</b>	<b>2</b>	<b>4</b>
MECH	Total no of students	NA		66	139	140
	Total Number of Graduates			63	129	133
	<b>Pass %</b>			<b>95.45</b>	<b>92.8</b>	<b>95</b>
	<b>University Rank</b>			<b>0</b>	<b>9</b>	<b>3</b>

<b>IT</b>	Total no of students	65	64	71	66	61
	Total Number of Graduates	61	56	65	63	59
	<b>Pass %</b>	<b>93.85</b>	<b>87.50</b>	<b>91.55</b>	<b>95.45</b>	<b>96.72</b>
	<b>University Rank</b>	<b>6</b>	<b>4</b>	<b>4</b>	<b>9</b>	<b>2</b>

### Students Pass Percentage Comparison with nearby Colleges:

Table 5.11 Pass Percentage Comparison with Neighboring Institute

Year	RMK College of Engineering and Technology	RMK Engineering College	RMD Engineering College	Velammal Institute of Technology	Velammal Engineering College
Nov/Dec - 2015	85.55	81.92	87.91	82.84	79.68
April/May- 2014	89.43	87.26	87.92	85.80	85.18
Nov/Dec- 2013	73.33	73.46	75.40	68.77	66.23
April/May 2013	81.21	81.24	81.18	78.86	79.13
Nov/Dec - 2012	81.45	79.56	79.93	77.73	76.76

### 5.2.3 How does the institution facilitate student progression to higher level of education and/or towards employment?

The institution creates awareness among the students about their future prospects through various cells like Placement, Higher Education, Entrepreneurship Development and Career Guidance. Based on the students' choice, the department directs the students to participate in the training program relevant to their choice of career path.

The experts from various industries/ institutions/ professional bodies in specific domain invited as resource persons to lecture help the students to focus on their target. The students are made industry ready by giving industry oriented training in line with curriculum through the established COE's and MoU's.

### 5.2.4 Enumerate the special support provided to students who are at risk of failure and drop out?

The meticulous evaluation system of the institution identifies the slow learners (with risk of failure) from the cumulative assessment of the semester. Special care is being provided to those students in the form additional lecture/doubt clarification classes and study material.

Faculty counselors assigned with each 20 students identifies their difficulties in academic performance. The observed challenges among slow

learners are effectively handled and met with to entrust improvement in consultation with HOD.

Students are provided with special counseling sessions to address the issues related to heterogeneous socio economic background, cultural and linguistic differences and also the issues arising out of urban/semi urban and rural background.

The institution encourages parents to come and discuss with college authorities and help them to make their ward achieve academic excellence.

### **5.3 STUDENT PARTICIPATION AND ACTIVITIES**

#### **5.3.1 List the range of sports, games, cultural and other extracurricular activities available to students. Provide details of participation and program calendar.**

The institution has Department of Physical Education, which has made tremendous progress in sharpening and shaping the various skills of the students in sports and in increasing their mental strength and inculcating the eagerness in students to excel in their performances, thereby enabling them to outshine and register remarkable feats in their respective sporting events.

#### **Facilities:**

##### **i) Sports**

Facilities for playing indoor and outdoor games are provided for the students. The following are the excellent outdoor sports infrastructural facilities provided for the students.

- ❖ A Cricket Ground
- ❖ A Basket Ball Court
- ❖ A Football Ground
- ❖ Two Tennis Courts
- ❖ Two Badminton Courts
- ❖ Two Volleyball Courts
- ❖ Throw Ball Courts
- ❖ Two Tennikoit Courts
- ❖ A 400 Mts. Athletic track and Field of International standard has been commissioned for the students to develop their sports personality.

#### **Indoor Games**

- ❖ Carrom Board
- ❖ Chess Board
- ❖ Table Tennis
- ❖ Separate air conditioned fitness centre is made available for hostel students.

##### **ii) Cultural**

Every year the College annual day is preceded by a month-long celebration of various cultural events and competitions. The students' showcase their talent in various activities like dance, singing, skits, drama,

adzap etc. and the winners are awarded prizes during the college day celebrations.

**Table 5.12 Extracurricular Calendar**

<b>Academic Year</b>	<b>ODD Semester</b>	<b>Even Semester</b>
2016-17	<ul style="list-style-type: none"> <li>❖ Anna University Zone</li> <li>❖ Inter Zone</li> <li>❖ All India Games</li> </ul>	<ul style="list-style-type: none"> <li>❖ Smt.Manjula Munirathinam Memorial Trophy</li> <li>❖ M.G.R Trophy</li> <li>❖ Mr.Chennai</li> <li>❖ Jeppiaar Educational Trust Sports (JETS)</li> </ul>

**5.3.2 Furnish the details of major student achievements in co-curricular, extracurricular and cultural activities at different levels: University / State / Zonal / National / International, etc. for the previous four years.**

Students are encouraged to participate in as many events as per their interest, so that they can shed all their inhibitions and imbibe a sense increased attachment to the Institute.

The following table gives a glimpse into the paper publications and other co-curricular activities of the students.

**Participation of students in co- curricular activities:**

**Table 5.13 Student participation in Co-Curricular and Extra Curricular Activities**

Academ ic Year	Branc h	No of Students participated in Co-Curricular Activities	No of Students participated in Extra Curricular Activities	No of Students participated in Cultural			No of Student s particip ated in Sports		
2016-2017	ECE	226	45	30	4	10	6	3	-
	CSE	60	10	12	4	18	15	20	3
	EEE	65	8	67	-	4	2	2	-
	MEC	14	34	-	4	29	8	10	-

	H												
2015-2016	ECE	184	21	17	5	6	7	17	1	25	1	24	90
	CSE	143	36	25	2	15	16	22	4	16	5	10	42
	EEE	3	22	50	-	3	6	3	5	8	5	7	10
	MEC H	1	20	-	4	41	17	5	-	6	10	32	57
2014-2015	ECE	45	41	28	1	-	6	16	1	17	-	18	112
	CSE	118	33	10	3	13	12	20	5	18	5	5	36
	EEE	5	20	25	2	4	8	5	6	9	6	7	6
	MEC H	38	39	-	12	40	14	22	-	10		14	6
2013-2014	ECE	37	15	26	1	-	3	6	1	12	1	27	53
	CSE	75	4	-	-	12	10	15	4	16	3	5	42
	EEE	-	-	3	-	-	9	6	6	10	5	4	8
	MEC H	5	16	-	10	43	2	4	1	4	2	16	9

**5.3.3 How does the college seek and use data and feedback from its graduates and employers, to improve the performance and quality of the institutional provisions?**

The Institution has well defined procedures for collecting the feedback from all its stakeholders. The Feedback taken from the company executives who come to recruit the students on the performance of the past students as well as from Parents-Teachers meeting are utilized to minimize the skill gap and conduct special technical sessions to improve the effective placement rate. The above feedback and suggestions are collected periodically and meetings are conducted in this regard by the management with the Principal and HODs to get better possible solutions.

A special meeting of HODs along with placement committee members is being convened by the Principal before the commencement of placement preparation. Placement cell works closely with industry and participates in industry interaction programs to gather this information. Final decisions taken in the meetings are implemented to improve the performance and quality of the institution. The institute regularly interacts with the Alumni to benchmark best practices and implement them wherever necessary

**5.3.4 How does the college involve and encourage students to publish materials like catalogues, wall magazines, college magazine, and other material? List the publications/ materials brought out by the students during the previous four academic sessions.**

Students of the institution are encouraged to join with their department to publish magazine detailing various activities of the students and other news of their department.

**Table 5.14 List of Department News Letters**

Sl. No.	Name of the magazine	Department	periodicity	Availability for viewing
1.	Dazzler	Institute	Biannual	In print, college website
2.	Luminon	EEE	Biannual	In print, college website
3.	Twystra	ECE	Biannual	In print, college website
4.	Tech Buzz	CSE	Biannual	In print, college website
5.	Tech Times	IT	Annual	In print, college website
6.	Cynosure	Mechanical	Biannual	In print, college website
7.	Mentira	Mechanical	Biannual	In print, college website

**5.3.5 Does the college have a Student Council or any similar body? Give details on its selection, constitution, activities and funding.**

Yes, each department has year wise class committee which comprises students as well as faculty as the members. The committee is formed with proportionate and balanced representation from the hostellers and day scholars and keeping in mind their meritorious achievements both academic and social.

**5.3.6 Give details of various academic and administrative bodies that have student representatives on them.**

**Anti-ragging committee**

Every department has a student representative who actively participates in this committee and involves himself / herself in various decision makings and action plans to prevent ragging menace in the campus.

**Professional bodies**

- ❖ The Institution of Engineering and Technology (IET)
- ❖ The Institution of Electronics and Telecommunication Engineers (IETE)
- ❖ Indian Society for Technical Education (ISTE)
- ❖ Computer Society of India (CSI)
- ❖ Society of Automotive Engineers (SAE)
- ❖ Institute of Electrical and Electronics Engineers (IEEE)
- ❖ Indian Institution of Production Engineers (IIPE)

### **5.3.7 How does the institution network and collaborate with the Alumni and former faculty of the Institution?**

The institution has a good relationship with alumni for the betterment of the institution as well as the students. They are contacted through social media like Email, Facebook, whatsapp and other communication applications in the mobile phones. Alumni are invited periodically to the college to motivate the students and the twice a year Alumni meet helps in networking the alumni of RMKCET for a much better interaction and joint contribution for the betterment of their Alma Mater.

Former faculty members of the institution are invited to the college to give guest lectures and be the Juries for the symposiums and project reviews.

# **Criterion VI**

## **Governance, Leadership and Management**



## **CRITERION VI: GOVERNANCE, LEADERSHIP AND MANAGEMENT**

### **6.1 INSTITUTIONAL VISION AND LEADERSHIP**

**6.1.1 State the vision and mission of the Institution and enumerate on how the mission Statement defines the institution's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, institution's traditions and value orientations, vision for the future, etc.?**

#### **VISION:**

To be knowledge hub of providing quality technical education and promoting research for building up of our nation and its contribution for the betterment of humanity.

#### **MISSION:**

- ❖ To make the best use of state of the art infrastructure to ensure quality technical education.
- ❖ To develop industrial collaborations to promote innovation and research capabilities.
- ❖ To inculcate values and Ethics to serve humanity.

With this grand vision and mission in the background, the institution addresses various issues:

#### **I. The vision/mission and the societal need:**

In today's scenario, knowledge is accessible to everyone. Hence, humans are technically strong but ethically not so. The Institution inculcates moral integrity, respectful attitude and a spirit of selfless service among students. The disciplined culture of the faculty and students inside the campus orient the youth minds towards optimistic life. Thus, we transform the students as better citizens.

#### **II. The vision/mission and the students:**

Marching towards globalization is achievable only by increasing the literacy rate of our country. In this process, the institution serves the rural and minority students in large along with urban across the country with state of art infrastructure to serve the society.

#### **III. The vision/mission and the Institutional traditions and value orientations:**

The main objective behind all Institutional activities and traditions is a synchronized development of technical knowledge, service and ethics. We believe the knowledge of Science and Technology in a human is for the material development of the Nation and the ethical value coming from a person is the identity of being a real and worthy human being. Hence, the college cultivates research on ethical background. The college is proud to claim that it has been able to draw students from all communities, denominations and religions thereby bringing unity in diversity in our college campus.

#### **IV. The vision for the future:**

The Institution has developed an effective inter linkage across teaching, research and extension. These collaborations are to strengthen the Institute's capacities to fulfill its vision of being an institution of excellence in engineering education that develops and applies knowledge in pursuit of Industry collaborative research. The Institution strives to be the exemplary educational window. We believe that till now, our Institution has been successful in producing quality engineers to serve the society. The college aspires to continue in producing such enlightened citizens who can be of physical help and mental solace to all. In spite of all these, we are humble to state that whatever our Institution has achieved is its primal vision and is still in its infancy. The towering vision is in front of it motivating greater and greater heights to be achieved in future.

RMK college of Engineering and Technology has the pride of having Shri.R.S.Munirathinam, personification of Philanthropy, guiding the college. The college has a Governing council to monitor and guide the Institution on administrative and academic matters. The governing council meets twice a year to take stock of the current situation and progress. The governing council makes policy decisions to improve the functioning of the college towards its vision. The composition of the Governing Council is given below:

**Table 6.1 Members of the Governing Council**

<b>Sl. No.</b>	<b>Name</b>	<b>Position</b>	<b>Qualifi-cation</b>	<b>Present Designation/Occupatio-n</b>
1.	Thiru.Munirathinam R S	Chairman		Chairman, RMK College of Engineering and Technology.
2.	Thiru.Jothi Naidu R	Member (Management Nominee)		Director, RMK College of Engineering and Technology.
3.	Thiru.Kishore R M	Vice chairman	B.E., M.B.A. (U.K)	Vice-Chairman, RMK Group of Institutions.
4.	Thiru. Yelamanchi Pradeep	Secretary	B.E., M.S.	Secretary, RMK College of Engineering and Technology.
5.	Dr. Durgadevi Pradeep R M	Vice Chairperson	B.E., M.B.A., Ph D.	Vice-Chairperson, LakshmiKanthamal Educational Trust.
6.	Tmt. Sowmya Kishore	Management Trustee	B.E.,	Management Trustee, LakshmiKanthamal Educational Trust.
7.	Mr. Yalamanchi Saiji Rao Y	Managing Director	B.E.,	Managing Director
8.	Thiru. Sampath M S	Member (Industrialist)	M.Sc.	Managing Director, Vishnupriya Paper Mills Pvt. Ltd., Chennai.

9.	Thiru. Kumar R	Member (Engineering Consultant)	M.E	Heramba Engineering Consultants Pvt. Ltd. Chennai.
10.	Dr. Palanichamy MS	Advisor	Ph.D	Advisor
11.	Mr. Pitchandi T	Member	I.A.S	Advisor
12.	Ms. Madhumathi S	Member	I.A.S	The Directorate of Technical Education
13.	Mr. Balamurugan R	Member	M.E	REGIONAL OFFICER' SRO OF AICTE
14.	Nominee of Anna University.	Member Anna University Nominee		Registrar Anna university
15.	Dr. Chandrasekaran K	Member	Ph.D	Dean, R.M.K Engineering College
16.	Dr. Sivaram K	Member	Ph.D	Principal, R.M.D Engineering College
17.	Dr. Thyagarajan K K	Member	Ph.D	Dean, R.M.D Engineering College
18.	Dr. Mohamed Junaid KA	Member	Ph.D	Principal, R.M.K Engineering College
19.	Dr. Anbu Chezhian N	Members	Ph.D	Vice Principal , R.M.D Engineering College
20.	Dr. Rengaraja T	Member Secretary	Ph.D	Principal , R.M.K College of Engineering and Technology
21.	Dr. Bhagavathi Perumal S	Member	Ph.D	Vice Principal, R.M.K College of Engineering and Technology
22.	Mr. Periyasamy S	Member	M.Sc	Retd Executive Director, Madras Fertilizers
23.	Dr. Elwin Chandra Mounie E	Member	Ph.D	Educationalist

#### **6.1.2 What is the role of top management, Principal and Faculty in design and implementation of its quality policy and plans?**

The Institution has a well-defined quality policy designed and implemented for scholastic development of students.

##### **Design of quality policy:**

The quality policy of the organization has been designed through brainstorming among the Principal, Vice Principal, Academic Coordinator and Heads of the Departments based on the following inputs:

- ❖ Series of data collection including the past performance of the Institution
- ❖ Status of attainment of the vision and mission and the gaps if any
- ❖ Market survey of the performance of other institutions and benchmarking
- ❖ Feedback from stakeholders, regulatory bodies and affiliating bodies.
- ❖ Discussions held in the Governing Council

The formulated policy has been approved by the Governing Council.

### **Implementation of quality policy and plans:**

The Top Management facilitates the implementation of its quality policy and plans through the responsibilities of the Governing Council Members, Principal and Faculty as listed in Table.

**Table 6.2 Authorities Roles & Responsibilities**

<b>Position</b>	<b>Functions &amp; Responsibilities</b>
<b>Governing Council Members</b>	<ul style="list-style-type: none"> <li>❖ Frame directive principles and policies.</li> <li>❖ Amend and approve policies from time to time.</li> <li>❖ Approve budgets.</li> </ul>
<b>Principal</b>	<ul style="list-style-type: none"> <li>❖ Defines quality policy and objectives.</li> <li>❖ Designs and defines Organization Structure.</li> <li>❖ Delegates responsibilities of various positions in the organization.</li> <li>❖ Prepares and executes academic calendar.</li> <li>❖ Oversees the Teaching Learning process.</li> <li>❖ Carries out result analysis and suggests corrective measures.</li> <li>❖ Identifies employer training requirement.</li> <li>❖ Ensures periodic monitoring &amp; evaluation of various processes &amp; sub- processes.</li> <li>❖ Prepares annual budget.</li> <li>❖ Ensures effective purchase procedure.</li> <li>❖ Conducts periodic meeting of various bodies such as Heads of the Department, Management Committee, Academic Council, Library Committee and Women's Grievances Redressal Committee, etc.</li> <li>❖ Generates resource for various events.</li> <li>❖ Arranges internal audits.</li> <li>❖ Arranges Recruitment process.</li> <li>❖ Intimation and implementation of employee development program.</li> </ul>
<b>Vice-Principal</b>	<ul style="list-style-type: none"> <li>❖ Assist Principal in the following           <ul style="list-style-type: none"> <li>Communication with affiliating and regulatory bodies.</li> <li>Teaching, learning and Evaluation Process.</li> <li>Legal and other judicial matters.</li> <li>College activities like Sports day, Graduation day and Annual day.</li> </ul> </li> <li>❖ Maintains students discipline in the campus.</li> </ul>

	<ul style="list-style-type: none"> <li>❖ Plays the role of the Principal in his absence.</li> <li>❖ Responsible to the Provost for the proper maintenance and management of the hostel</li> </ul>
<b>Academic Co-ordinator</b>	<ul style="list-style-type: none"> <li>❖ Coordinates the academic activities and organizes all Institution Programmes.</li> <li>❖ Maintain Institutional database – Students / Staffs, Exam results etc.,</li> </ul>
<b>Heads of the Departments</b>	<ul style="list-style-type: none"> <li>❖ Responsible for efficient functioning of the Department/Centre with reference to its goals and objectives.</li> <li>❖ Develop and schedule the activities of the department for the academic year.</li> <li>❖ Ensure that all faculty members complete their role of responsibilities in a timely manner.</li> <li>❖ Management of leave for Teaching and Non-teaching Staff of the department, in such a way that no prescribed class hours are lost.</li> <li>❖ Ensure harmonious working environment to nurture a healthy academic community and assist in resolving differences.</li> <li>❖ Review and approval of all relevant records of concerned Faculty members.</li> <li>❖ Periodic independent review of Faculty performance individually and suggest remedial tips.</li> <li>❖ Initiate opportunities and avenue for developing Faculty knowledge and capability.</li> <li>❖ Encourage regular academic discussions for subject exposure among the relevant faculty members in and outside the department, to facilitate knowledge sharing and updating.</li> <li>❖ Identify and arrange Special lectures for different subjects.</li> <li>❖ Inspect concerned department classes.</li> <li>❖ Maintain overall student discipline in the department as per college policy and guideline, with due coordination with the Class Advisors, with regard to attendance, dress code, attitude, conduct, assignment completion, etc.,</li> <li>❖ Resolve difficulties faced by the students, academic and non-academic, in due consultation with the Class Advisors, Counsellor and referring essential cases to the Principal.</li> <li>❖ Take all the efforts from the department side for enhancing employability and placement readiness of the students in the department.</li> <li>❖ Nurture Research activities among Students and Faculties.</li> <li>❖ Convene regular faculty meetings to assess and review the progress of planned activities.</li> </ul>

	<ul style="list-style-type: none"> <li>❖ Convene class committee meeting to get students feedback on teaching.</li> <li>❖ Conduct pre-examination and post examination reviews with the Faculty members concerned with regard to quality of questions, answers, rectification measures etc to improve the student performance/results.</li> <li>❖ Finalize the work load/allotment and timetable for the next semester immediately on completion of the current semester.</li> <li>❖ Prepare and submit feedback about the staff members to Principal as per the students' evaluation.</li> </ul>
<b>Teaching Faculty</b>	<ul style="list-style-type: none"> <li>❖ The Faculty Member should take additional responsibilities as assigned by HoD / Principal in academic, co-curricular or extracurricular activities, Research and consultancy works.</li> <li>❖ Subject wise course plan has to be maintained and implemented by the faculty.</li> <li>❖ Every Faculty Member should maintain student's attendance record and the absentees roll number should be noted every day in the Master Attendance Register maintained in the Department as soon as the classes/laboratory hours are over.</li> <li>❖ Suggestions towards curriculum strengthening are taken for discussion toward positive implementation.</li> <li>❖ The Faculty Counselor must update the student's counselling record regularly and put up for inspection by HoD/Principal as the case may be.</li> </ul>

### 6.1.3 What is the involvement of the leadership in ensuring?

- a) The policy statements and action plans for fulfillment of the stated mission
  - b) Formulation of action plans for all operations and incorporation of the same into the institutional strategic plan
  - c) Interaction with stakeholders
  - d) Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders
  - e) Reinforcing the culture of excellence
  - f) Champion organizational change
- a) The policy statements and action plans for fulfillment of the stated mission:

Once the quality policy is approved by the Governing Council, Principal communicates to Heads of Department and other stake holders. Benchmarking will be fixed by the Principal for academic, extra and co- curricular activities to ensure quality policy and to achieve the Vision and Mission of the Institute. HoDs are asked to prepare the action plan for respective departments. HoDs discuss with the faculty members and prepare the action plan and present to the Principal for approval. HoDs execute, monitor and review the process every month and communicate the prevailing activities to the Principal periodically.

Meetings will be conducted periodically between the Principal, Vice Principal, Heads of the department and academic coordinator to review the implementation of action plan. Governing Council meetings are conducted once in six months to review and decide on the policy statements and action plans for fulfillment of the stated mission.

**b) Formulation of action plans for all operations and incorporation of the same into the Institutional strategic plan:**

Brainstorming will be held among the HoDs and the faculty members to finalize the action plan considering the target as fixed by the Principal, academic performance of the students for the past 3 years, status of attainment of the Vision and Mission of the department, feedback from internal and external stakeholders, Curriculum, Syllabi and Regulations of Anna university, experts available in the department, lab facilities, etc. Once action plan is approved by the Principal, HoDs implement and monitors the process in the day to day activities of the department. The effectiveness of the process is periodically reviewed by the Principal.

**c) Interaction with stakeholders**

Our college interacts with the internal and external stakeholders periodically and progresses constantly to ensure quality and with an intention to fulfill the vision and mission of the college. The interaction with stakeholders is done as given below:

Every department has a Department Advisory Committee (DAC) with members including HoD, senior faculty and experts from industries. Advisory committee meeting will be conducted in the beginning of every semester.

- ❖ Class committee meetings are conducted every semester by class committee chairperson
- ❖ Parents are informed about their wards' performance and if necessary they are asked to meet the Head of Department and faculty.
- ❖ Alumni meetings are conducted twice in a year.
- ❖ Faculty meeting conducted every month and whenever necessary
- ❖ Meeting with the Eminent Industry persons who visit the college for special lectures.
- ❖ Employers contacted through the placement cell.
- ❖ Internal and external audits

**d) Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders:**

The Principal analyzes the academic needs and professional needs of the engineering students in tune with global scenario through their interactions with stakeholders. The need analysis is done with respect to the learners' age and attitude, their socio-cultural background, knowledge of technical subjects, knowledge of English, effective teaching and learning styles with which they are familiar with. Research inputs are obtained through Institute-

Industry Interactions. Based on the needs, research inputs and the feedback obtained from stakeholders, periodical reviews are conducted. For example, Training and certification programmes like PLM, CCNA, JAVA, Power Electronics and Embedded Systems are arranged in consultation with Industry personnel to make the students readily employable

**e) Reinforcing the culture of excellence**

Principal ensures a productive organizational culture which inculcates the student community and stakeholders to affirm their confidence on Institution. The culture of excellence is reinforced by awarding prizes in academics, appreciation for innovations and research and providing sponsorships to attend career enhancement programmes. The Institution cultivates a productive environment by conducting Orientation Programs for new faculty members, career enhancement programme for senior faculty and career guidance programme to the students.

**f) Champion organizational change**

Our Institution promotes collaborative approach among the organizational members, establishes a supportive social climate and promotes the practice that ensures equitable treatment. The college has a pragmatic approach to promote the changes in the procedure and to progress in the system. The Management listens to the needs of all the stakeholders and any transition is smoothly facilitated and managed. Organizational structures incorporate the changes in terms of appointment of Year Coordinator, Examination Cell Coordinator, Students Mentor, Members for the Research and Consultancy Advisory Board, NBA and ISO Coordinators, EDC Coordinator etc., are made whenever needed. Whenever changes are effected in any set up, the sentiments of the stakeholders are appropriately considered.

**6.1.4 What are the procedures adopted by the Institution to monitor and evaluate policies and plans of the Institution for effective implementation and improvement from time to time?**

Principal evaluates the effectiveness of implementation of policies and plans of the Institution as well as its improvement from time to time. Under the guidance of the Principal, there are various committees formed in the college as given in Table to execute the plans and evaluate the policies. Further, the Governing Council meeting is organized once in six months to discuss the strategic plan and academic progress of the Institution.

**Table 6.3 Responsibilities and functions of various committees in the college**

Committee	Responsibilities and Functions
Planning and Monitoring Board	<ul style="list-style-type: none"> <li>❖ Plan the academic courses, research programmes and inter-disciplinary activities.</li> <li>❖ Interaction with outside agencies for training, extension and research.</li> <li>❖ To monitor from time to time the implementation of the programmes and activities formulated by it.</li> </ul>

Anti- Ragging Committee	<ul style="list-style-type: none"> <li>❖ Inform students about the contents of the anti-ragging act and to advise them not to involve in the incidents of ragging.</li> <li>❖ Make frequent visits in the campus to prevent any acts of ragging.</li> <li>❖ Visit class rooms and to explain to the students about the severe punishments and the consequences likely to be imposed as per the act.</li> <li>❖ Accompany the students in the college buses at the end of the day's work.</li> <li>❖ Prepare Charts and Banners depicting the seriousness of actions to be taken in case of any ragging incident and to give wide publicity by displaying those banners at salient locations inside the campus.</li> </ul>
Anti-Ragging Squad	<ul style="list-style-type: none"> <li>❖ Make surprise visits in the campus to prevent any acts of ragging.</li> </ul>
Discipline and Welfare Committee	<ul style="list-style-type: none"> <li>❖ Looks into student discipline.</li> <li>❖ Maintenance of proper dress code.</li> <li>❖ Usage of cell phones is prohibited inside the class room.</li> <li>❖ Action plan is prepared to take care of cases involving in discipline in the classrooms, labs and campus etc.</li> <li>❖ Take action against general misbehavior of the student within the campus, hostels for improper mannerisms, body language etc. and report the same to the higher authorities.</li> <li>❖ Inform students about various scholarship schemes.</li> </ul>
Complaints cum Redressal Committee	<ul style="list-style-type: none"> <li>❖ The Grievance Appeal committee is intended to undertake the processes of attending to the grievances put forward by the students and staff.</li> <li>❖ It focuses on setting proper facilitation procedures for settling the issues in a cordial atmosphere.</li> <li>❖ The committee is expected to initiate proper investigative mechanism within 24 hours from the receipt of the complaint in written form duly signed by complaints.</li> <li>❖ The observations, findings, suggestions and recommendations are merely recommendatory in nature and do not carry any legal binding for the college to follow or implement.</li> <li>❖ The committee is expected to submit the minutes of its meetings along with observations, suggestions, if any, and resolutions to the respective statutory committees for further processing the same at the deliberations.</li> </ul>

	<ul style="list-style-type: none"> <li>❖ The chairman and the members of the committee shall undertake all the operations in coordination with the Heads of the Departments and administrative office.</li> </ul>
Alumni Association	<ul style="list-style-type: none"> <li>❖ Arranges periodic Alumni Meeting.</li> <li>❖ Maintains the records of Alumni and the Alumni meets that take place.</li> <li>❖ Ensures the Alumni registration.</li> <li>❖ Prepares Alumni News Letter.</li> <li>❖ Proposes annual budget of the association.</li> <li>❖ Invites Alumni for Guest Lecture, Mock Interview etc.,</li> </ul>
Research Cell	<ul style="list-style-type: none"> <li>❖ Organizes research committee meetings periodically.</li> <li>❖ Conducts meetings to discuss about the latest development in technology and advices the faculty members to prepare articles and research proposals.</li> <li>❖ Maintains the database of all funding agencies.</li> <li>❖ Scrutinizes the research proposals submitted by the faculty members</li> <li>❖ Maintain list of publications of the faculty / students in chronological order.</li> <li>❖ Maintain hard copies of research papers / technical reports published in National / International Conferences / Journals.</li> <li>❖ Maintain copies of the text books authored by the faculty.</li> <li>❖ Maintain the details of various Conferences.</li> <li>❖ Maintain collection of literature on various latest research areas.</li> <li>❖ Monitor the Research Work being carried out by our faculty.</li> </ul>
Training & Placement Cell	<ul style="list-style-type: none"> <li>❖ Arranges campus interviews</li> <li>❖ Maintains list of companies offering jobs / career opportunities for the students.</li> <li>❖ Maintains the records of the placements by various companies chronologically.</li> <li>❖ Maintains Department wise list of students placed.</li> <li>❖ Organizes special programs for career guidance.</li> </ul>
Entrepreneurship Development Cell (EDC)	<ul style="list-style-type: none"> <li>❖ Develop spirit of Entrepreneurship among the students of the parent and other institutions.</li> <li>❖ Conduct Entrepreneurship Development and Awareness Programmes.</li> <li>❖ Mentoring Students, Assisting the Head of the Institution in getting financial support for Start-ups.</li> <li>❖ Respond effectively to the emerging challenges and opportunities both at National and International level relating to SMEs and Micro Enterprises.</li> </ul>

	<ul style="list-style-type: none"> <li>❖ Provide need-based consultancy services to industries.</li> <li>❖ Act as an institutional mechanism for providing various services including information to budding student entrepreneurs.</li> <li>❖ Promotes programmes related to women and weaker sections of the society.</li> </ul>
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### 6.1.5 Give details of the academic leadership provided to the faculty by the top Management?

Under the leadership of the Principal, chairpersons of various committees are engaged in assigning, delegating, co-ordinating and communicating the responsibilities to the members as per the established system. The Heads of the Departments are in-charge of executing the policies of the Institution. Faculty are nominated to be the members of the committees like Planning and Monitoring Board, Anti- Ragging Committee, Discipline and Welfare Committee, Complaints cum Redressal Committee, Alumni Association Committee, Research Cell, Placement Cell, Entrepreneurship Development Cell, etc.,

#### Planning and Monitoring Board Composition

Table 6.4 Structure of Planning and Monitoring Board

Sl. No.	Name	Position (Chairman/ Member)	Category
1	Dr. Rengaraja T	Chairman	Principal
2	Dr. Bhagavthi Perumal S	Others	Vice Principal
3	Dr. Mohamed Junaid K A	Member	Senior faculty member from Group Institution.
4	Dr. Kalaiarasi N	Member	Senior faculty, HoD/ EEE
5	Mr. Sridhar K B	Member	Industrial expert
6	Mr. Sampath S	Member	Industrial expert
7	Mr. Kumar R	Member	Architect /Civil Engineer

#### Anti- Ragging Committee

Table 6.5 Structure of Anti- Ragging Committee

Sl. No.	Name	Position (Chairman/ Member)	Category
1	Dr. Rengaraja T	Chairman	Principal
2	Dr. Bhagavathi Perumal S	Member	Vice Principal

3	Dr. Geetha Balachandar	Member	Official of NGO
4	Dr. Chilambu Selvan A	Member	Parent Representative
5	Ms. Shakshi J	Member	Student Representative
6	Mr. Rajkumar D	Member	Student Representative
7	Mr. Chandra Babu N M	Member	Representatives of Non-Teaching staff
8	Mr. Sekar R	Others	Member
9	Mr. Krishna Swamy R	Others	Member

### Discipline and Welfare Committee

Table 6.6 Structure of Discipline and Welfare Committee

Sl. No.	Name	Position (Chairman/ Member)	Category
1	Dr.Bhagavathiperumal S	Chairman	Vice Principal
2	Dr.Inbamalar T M	Convener	Professor/ECE
3	Dr.Paulraj D	Member	HoD/CSE
4	Dr.Gangatharan N	Member	HoD /ECE
5	Dr.Balasubramanian M	Member	HoD /ME
6	Dr.Shanthi K G	Member	Lady faculty member
7	Dr.Geetha Balachandhar	Member	Lady faculty member
8	Mrs.Jayalakshmi T	Member	Warden of Girls Hostel
9	Mr.Lakshmipathi D	Member	Warden of Boys Hostel

### Complaints cum Redressal Committee

Table 6.7 Structure of Complaints cum Redressal Committee

Sl. No.	Name	Position (Chairman/ Member)	Category
1	Dr. Kalaiarasi N	Chairman	HoD/EEE
2	Dr. Bhagavathi Perumal S	Member	Vice Principal
3	Dr. Balasubramanian M	Member	HoD/ME
4	Dr. Paulraj D	Member	HoD/CSE
5	Dr. Inbamalar T M	Member	Professor/ECE
6	Dr. Geetha Balachandar	Member	ASP/S&H

7	Dr. Devi G	Member	AP/S&H
8	Ms. Manimegalai G	Member	Trustee Relief Foundations

### Alumni Association

Table 6.8 Structure of Alumni Association

Sl. No.	Name	Position	Category
1	Mr.Hariharan N	Coordinator	AP/EEE
2	Mr.Loganathan T G	Co-Coordinator	ASP/ ME
3	Ms. Nageswari D	Organizer	AP/EEE
4	Mr.Senthil Kumar S	Organizer	ASP/ ME
5	Ms.Nimitha N	Organizer	AP/ECE
6	Ms.Akila K	Organizer	AP/CSE
7	Mr.Madhu A	Organizer	AP/IT

### Research Cell

The details of the research cell coordinators and members are given in the section 3.1.2

### Placement Cell

Table 6.9 Structure of Placement Cell

Sl. No.	Name	Position	Category
1	Mr.Sudharsanam V	College level Co-ordinator	AP/ECE
2	Mr.Ranjith Kumar M	Department Co-ordinator	AP/CSE
3	Mr. Babu M	Department Co-ordinator	AP/ECE
4	Mr.Dilvar Basha	Department Co-ordinator	AP/EEE
5	Mr.Krishna Kumar M	Department Co-ordinator	AP/ME

### Entrepreneurship Development Cell

Table 6.10 Structure of Entrepreneurship Development Cell

Sl. No.	Name	Position	Category
1	Dr.Devan P K	Convener	Professor/ME
2	Ms.Akila K	Department Co-ordinator	AP/CSE
3	Mr.Sathyaraj P	Department Co-ordinator	AP/ECE
4	Ms.Geethamahalakshmi G	Department Co-ordinator	AP/EEE

5	Mr.Balaji Krishna Bharathi A	Department Co-ordinator	AP/ME
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### 6.1.6 How does the College groom the leadership at various levels?

The management has assigned responsibilities to various members of the college as detailed below:

**Principal:** Head of the institution wields the powers with regard to all the academic and administrative matters of the college.

**Vice-Principal:** Assists the Principal in Academic and Non-Academic affairs for the growth of institution.

**Head of the Department:** Responsible for all the affairs of the department to attain the vision and mission of the department and the college.

**Exam Cell Convener:** In charge for conducting internal and university examination.

**Academic coordinator:** Assists the Principal and Coordinates all the academic activities of the college.

**Management Representative:** A Member of faculty monitors and coordinates the institution's activity with the help of the Heads of Department and the department ISO/ IQAC Coordinators for quality certifying and upgradation process.

**Training and Placement Officer:** Responsible for all training and placement activities of the college.

#### At student level:

As a part of leadership enhancement, the institution encourages students' participation in the association and professional society activities. Students are encouraged to organize symposiums, conference, workshops, seminars, etc. Each class has representatives to coordinate the teaching learning process and the placement activities to nurture team and leadership skills.

### 6.1.7 How does the college delegate authority and provide operational autonomy to the departments/ units of the institution and work towards decentralized governance system?

Based on the requirements, Principal forms separate committees. As per the recommendations of the individual committees Principal takes action.

- ❖ Annual Budget is prepared by the Heads of the Department in consultation with Teaching and Non-Teaching staff members. Principal reviews and recommends for approval.
- ❖ Heads of the Department are the decision making authority with respect to department academic activity and execution.
- ❖ Examination related works are entrusted to exam cell. A senior faculty member is the convener.
- ❖ Training and Placement Cell organizes special programs for career guidance

- ❖ Entrepreneurship Development Cell inculcates entrepreneurial spirit and culture among the graduates
- ❖ Research cell scrutinizes the research proposals prepared by the faculty members
- ❖ Alumni Association invites Alumni for guest Lecture, mock interview etc.,
- ❖ Anti- Ragging Committee makes frequent visits in the campus to prevent any acts of ragging
- ❖ Co-Curricular and Extra-Curricular activities are delegated to Faculty members of various Departments.
- ❖ Discipline and Welfare Committee is responsible for maintenance of proper dress code and discipline of students.

**6.1.8 Does the College promote a culture of participative management? If yes, indicate the levels of participative management.**

Yes, the College promotes a culture of participative management which involves Management, Principal, HOD, Faculty and Students. All academic and administrative activities are decentralized. The Management is always open to discussion with the Principal and the HODs, which in turn encourages the involvement of the staff for quality improvement. Principal monitors academic and administrative activities of the Institution.

## 6.2 STRATEGY DEVELOPMENT AND DEPLOYMENT

**6.2.1 Does the Institution have a formally stated quality policy? How is it developed, driven, deployed and reviewed?**

Yes, the quality policy of the organization has been developed and designed in the brainstorming meet held between the Principal, Vice Principal, Academic Coordinator and HODs as mentioned in 6.1.2. The Institution quality policy is to:

- ❖ Establish continuous student and teacher quality enhancement.
- ❖ Continuous improvement of quality will be realized through effective Quality Management System.
- ❖ Manage risks and utilize Opportunities by following a structured approach to achieve Quality objective.
- ❖ Create a record of being on the top rung of Discipline, Quality Education, Results and Placement.

The approved Quality Policy is driven by the Principal by communicating to all stake holders. Heads of the Department are asked to prepare the action plan for concerned departments. Brainstorming sessions will be held between the Principal, Vice Principal, Heads of the Department and academic coordinator to finalize the action plan of every department.

- HODs implement and monitor the process in the day to day activities of the department.
- HODs communicate the prevailing activities to the principal periodically.

- Governing Council meetings are conducted once in six months to review and decide on the policy statements and up gradation of the infrastructure.

### **6.2.2 Does the Institute have a perspective plan for development? If so, give the aspects considered for inclusion in the plan.**

Yes, the Institute has a perspective plan for its continuous development and the following are included in the plan:

- ❖ To establish research centre in all the departments and promote quality research projects.
- ❖ To obtain NAAC and NBA accreditation.
- ❖ To create Centre of Excellence in each department.
- ❖ To expand and upgrade the existing infrastructure.
- ❖ To promote Institute Industry Interaction.
- ❖ To establish Incubation centre.

### **6.2.3 Describe the internal organizational structure and decision making processes.**

The college is managed by the Lakshmi Kanthammal Educational Trust. Decision making and work establishment follows top to down approach as given in the flowchart. The Chairman approves the overall administrative aspects of the Institution proposed by the Principal. The major decisions regarding developmental plans are discussed in the Governing Council meetings. Principal is the academic and administrative head to decide on academic and non-academic activities. The HODs are the in-charge of the academic and administrative functioning of the departments. The teaching Faculty takes care of the academic aspects and activities related to co-curricular and extra-curricular aspects. The Physical Director takes effort to make the students physically as well as mentally fit by giving proper guidance, training and guiding them in Inter and Intra college sports meet. The Librarian plans for procuring of books and maintains all functions of Library. The Exam cell plans for organizing and conducting of Internal assessment test, Model examination and conducts University examinations. The placement cell makes efforts to survey and solicit job opportunity from leading establishments by organizing campus interviews for the final year and pre-final year students. The Administrative officer is in charge of the office and takes care of the staff leave, attendance and other official works. The Manager takes care of the hostel related works. The System Administrator upkeeps, configures and maintains operation of college servers, updates college website, arranging on-line feedback.

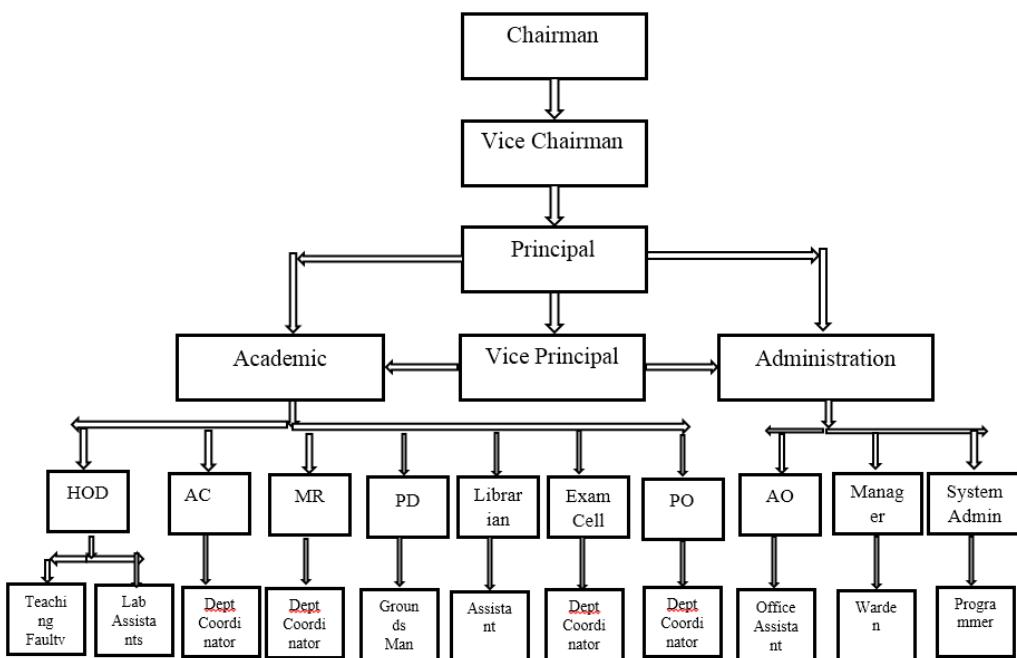


Fig. 6.1 Internal organizational structure

#### 6.2.4 Give a broad description of the quality improvement strategies of the Institution for each of the following

- ❖ Teaching & Learning
- ❖ Research & Development
- ❖ Community engagement
- ❖ Human resource management
- ❖ Industry interaction

#### Teaching & Learning

HODs with the help and co-operation of the faculty, monitors the effective implementation of teaching learning process as given below:

- ❖ Academic calendar is prepared well in advance before the commencement of every semester by the academic coordinator. It comprises working days, curricular/ Co-curricular and academic activates that are to be held in a semester.
- ❖ Time table committee prepares the individual, department and overall master timetable for optimum utilization of time and infrastructure
- ❖ Outcome Based Lecture plan will be prepared by the concerned faculty using the academic calendar, possible Assessment/ Tutorial Questions for quality delivery of subjects.
- ❖ Modern teaching-learning technologies such as multimedia projectors, over-head projectors, charts, video presentation have been adopted by the faculty to implement the effective Teaching-Learning Process.
- ❖ For each subject, a course file is prepared by the faculty concerned. The course file consist of Individual Time Table, Syllabus, Lecture plan, Log Book (Attendance and Assessment Monitoring), Previous years University question paper, Assignment Questions and sample answer sheets, Internal test question papers with sample answer sheets,

- Individual Result Analysis, Content Beyond the syllabus topics with material and Model question paper with answer key.
- ❖ The Institution introduced Outcome Based Assessment and Evaluation from academic year 2015- 2016.
  - ❖ Internal Assessment tests and model tests are conducted as per the academic calendar. Evaluation and analysis are done with faculty in-charge and class advisor in co-ordination with students' counselor. Students results are intimated to the parents by SMS.
  - ❖ Parents are given opportunity to give their suggestions and to visit the student counselor, faculty members and HOD. The Faculty members can extend all co-operation to ensure the improvement on the performance of their ward.
  - ❖ The HOD takes oral feedback at regular intervals from the Students regarding the progress and effectiveness of teaching learning process and takes immediate actions.
  - ❖ The equipment required for labs / workshops are constantly reviewed by HOD in co-ordination with lab-in-charge / workshop in-charge and ensure availability of all items without exceeding the budgetary provisions.
  - ❖ NPTEL Online courses are conducted to enhance the learning perspectives.
  - ❖ All the co-curricular and extra-curricular activities are reviewed periodically and progress assessed and actions are initiated.
  - ❖ In each meeting the follow up actions taken on the agenda of the previous meeting is taken up for review and progress assessed and if necessary further corrective action suggested.

Thus Teaching and Learning in our college aim at good academic performance in Unit test, Assessment tests and University examination leading to good placements and increased number of students opting for higher studies.

### **Research & Development**

To improve the quality of Research & Development we have a Research and Consultancy cell. The Research and Consultancy cell keeps track of the worldwide technological changes and makes the faculty aware of the growing importance of the Research based Education. The following are the strategies adopted by the Institution to improve research and development.

- ❖ Faculty members are motivated to enroll for Ph.D program in Anna University and other reputed Universities.
- ❖ Faculty members are encouraged to publish their research findings in referral journals.
- ❖ Faculty members and students are encouraged and sponsored to apply for Patents.
- ❖ Faculty members and students are motivated to attend Conferences, Seminars and Workshops with sponsorship. As a token of appreciation, faculty and students are given Rs. 20000/- if they present their papers in International Conferences conducted abroad.
- ❖ Quality of Students Projects is monitored by senior faculty members and experts from industry for upgrading to patent filing with sponsorship.

- ❖ Faculty Members are encouraged to carry out Industrial Consultancy work.

### Achievement in R & D:

Sponsored Research projects with a total grant of **Rs. 28,94,000/-** from **DST-SERB ,ISRO** and **DAE** were currently undertaken by our faculty members.

**Table 6.11 List of sponsored Research Projects**

S.No	Project Titled	Amount sanctioned in Lakhs	Funding Agency	Chief Investigator
1	Generation and dynamics of soliton pulse in resonant optical fiber media	14.46	DST - SERB	Dr.B.Kalithasan
2	Design and Implementation of Blind Detection Robust Watermarking for Multimedia Security in FPGA	12.98	ISRO	Dr.C.Arun
3	Studies on a new Subclass of Uniformly Spirallike Functions	1.5	NBHM- DAE Mumbai	Dr. Geetha Balachandar

### Community Engagement

Community Engagement is done by the participation of the staff and students in Blood Donation camps and tree plantation organised by Youth Red Cross club of our college. The student members of Youth Red Cross club teach the community on the importance of rain water harvesting, clean and green environment, health and hygiene and First Aid. All Our Institute drivers were given training in giving first aid and using Fire extinguisher.

### Human Resource Management

The College ensures that personnel are competent on the basis of appropriate education, training, skills and experience. Also all employees are expected to work in an environment stipulated by the service rules of the college. Feedback is sought from the students in the middle of every semester and appropriate corrective action such as skill advancement, counseling by HoD, are initiated to improve the performance of the faculty. The management identifies the gap if any while receiving the self-appraisal form given by the faculty at the end of the academic year .If gaps are identified theses gaps are bridged by providing appropriate counseling and training .The college maintains appropriate records of education, training, skill and experience of all it staff members. The following are the processes of the human resource management.

- ❖ Staff Selection & Recruitment
- ❖ Staff Training & Development
- ❖ Staff Appraisal

Staff Recruitment process is centralised for our group of institutions. The management recruits employees as detailed below:

- ❖ The Heads of various departments will communicate to the Principal, about the required number of faculty with the needed skill set.
- ❖ The number of vacancies in different cadres shall be communicated by the Principal to the management for approval. Vacancies shall be advertised in leading English newspapers. Selection will be made on merit based on qualification, experience, performance in written test and personal interview.
- ❖ Pay for the selected candidates shall be fixed by the Selection Committee as per the AICTE norms. Higher Pay Packages for exceptionally meritorious and well experienced candidates will be fixed by the Selection Committee subject to the approval of the Chairman of the Trust.
- ❖ Promotions are based on the vacancy and merit only. A Committee constituted especially by the Chairman of the Trust will consider the cases of such promotions and obtain the approval of the Principal and the Chairman of the Trust.
- ❖ During the selection process the candidates are informed about the staff welfare schemes such as EPF, Gratuity, salaried On Duty, Earned Leave etc,

### **Industry Interaction**

The Institution has been keen in establishing Institute Industry Interaction by various modules like MOUs, COEs. To bridge the Institute – Industry gap and make the students Industry ready experts from industry conduct workshops and training programmes which help the students to learn the current trends in technology. This enables them to come out with innovative projects. Faculty members who attend training in industries share their knowledge and experience with others in the department. Reviews of students' projects by industrial experts and their suggestions for improvement are incorporated. The students are allowed to internship in companies. The College also organizes number of industrial visits and In-plant Training to various industries. The students gain knowledge by visual learning from these visits.

#### **6.2.5 How does the Head of the institution ensure that adequate information (from feedback and personal contacts etc.) is available for the top management and the stakeholders, to review the activities of the institution?**

The Head of the Institution ensures the collection of information through the following means:

- ❖ On line feedback from the students
- ❖ Class Committee meetings
- ❖ HODs meetings with students
- ❖ Interaction of class advisors with the students
- ❖ Informal Interaction of counsellors with the students
- ❖ Faculty meetings
- ❖ Parents meet
- ❖ Alumni meet

- ❖ Interaction with recruiters and academicians
- ❖ Internal and external audits
- ❖ Report from regulatory bodies like AICTE, Anna University, etc.

The feedback is consolidated and forwarded to the Principal by the HoD. It will be reviewed by the Principal and submitted to the management for necessary action.

#### **6.2.6 How does the management encourage and support involvement of the staff in improving the effectiveness and efficiency of the institutional processes?**

- ❖ The contributions by the faculty towards the growth of the institution are duly acknowledged by the management by awarding timely promotions and increments.
- ❖ Training programmes and refresher courses are conducted regularly to the faculty to update their technical and personal skills.
- ❖ Faculty Members are encouraged to attend and organize guest lecture, workshops, faculty development programmes and conferences, etc.,
- ❖ Faculty members are encouraged and sponsored to publish their research findings in refereed journals and patent filing.
- ❖ Faculty are encouraged in preparing funding proposals and consultancy work.

#### **Support**

A well-equipped library with numerous books, journals, magazines, E-journals like ASTM, Springer, IEEE and Websites to help faculty in accessing research information. Details of the support extended to the faculty is given in section 6.3.5

#### **6.2.7 Enumerate the resolutions made by the Management Council in the last year and the status of implementation of such resolutions.**

Table 6.12 Management Council resolutions

Resolutions	Status of Implementation
❖ To strive to get accreditation from NAAC & NBA.	❖ In the process of applying to NBA and NAAC.
❖ Faculty members are encouraged to prepare more number of research proposals.	❖ The council resolved the decision authorizing the Principal to handle any financial assistance /grant received from the funding agencies for conduct of various Research Projects/Symposia/Seminar/Workshop and to spend the same for the specified purpose.
❖ Outcome based Education	❖ Designed and implemented OBE in the year 2016.
❖ To enhance the placements of students	❖ Organized orientation programme for newly joined first year students.

in multinational companies.	<ul style="list-style-type: none"> <li>❖ Special training &amp; Coaching is being given to the students for placements.</li> <li>❖ Various programmes and courses are organised/conducted to enhance the technical knowledge of the students.</li> <li>❖ BEC certification Program is conducted to enhance the English Proficiency of Students.</li> <li>❖ Motivations Programs are arranged for yet to be placed students after few companies visited the college.</li> <li>❖ Guest Lectures from reputed industries were arranged at regular intervals to cope the students with latest scenarios.</li> <li>❖ Establish CoE in collaboration with Major Giants.</li> </ul>
<ul style="list-style-type: none"> <li>❖ To sustain State of art infrastructure and upgrade to global standards.</li> </ul>	<ul style="list-style-type: none"> <li>❖ The Governing Council approves the request for procuring state of art equipment and its upgradation.</li> </ul>
<ul style="list-style-type: none"> <li>❖ To be a research hub in Engineering and Technology</li> </ul>	<ul style="list-style-type: none"> <li>❖ Encouraging Faculty members to submit to research proposals.</li> <li>❖ Enhance interdepartmental research.</li> <li>❖ Product promotion and Patent filing.</li> </ul>
<ul style="list-style-type: none"> <li>❖ To strengthen Institute Industry Interaction.</li> </ul>	<ul style="list-style-type: none"> <li>❖ Faculty members are encouraged to undergo training in reputed industries to upgrade their technical knowledge and there by Faculty members will impart the same to the students.</li> <li>❖ Industrial visits are arranged for students.</li> <li>❖ Consultancy form Industry.</li> </ul>
<ul style="list-style-type: none"> <li>❖ To retain the faculty with Doctoral and Non Doctorates and to ensure the overall growth of the institution</li> </ul>	<ul style="list-style-type: none"> <li>❖ DA has been revised annually.</li> <li>❖ Staff Quarters has been provided inside the College Campus.</li> <li>❖ Appreciation certificates are given for 100% result achievers.</li> <li>❖ The Governing Council approved the appointment of new faculty and promotions to the eligible faculty.</li> <li>❖ Wards of Faculty are considered for admission in Group Colleges and Schools.</li> </ul>

**6.2.8 Does the affiliating university make a provision for according the status of autonomy to an affiliated institution? If ‘yes’, what are the efforts made by the institution in obtaining autonomy?**

Yes, Anna University makes a provision for according the status of academic autonomy to an affiliating institution. But, the requirements such as

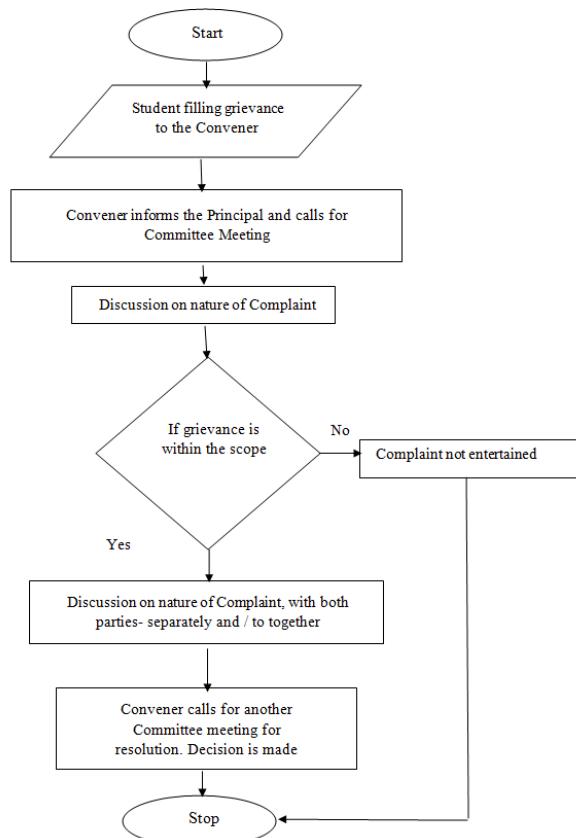
(i) The institution should have completed 10 years of existence and (ii) Accreditation by either NAAC or NBA are yet to be reached by our Institution. However, the efforts will be initiated by the institution for attaining the same at an appropriate time.

#### **6.2.9 How does the Institution ensure that grievances / complaints are promptly attended to and resolved effectively? Is there a mechanism to analyze the nature of grievances for promoting better stakeholder relationship?**

The Institution has set up a Complaints cum Redressal Committee (given in section 6.1.5) to ensure that grievances / complaints are promptly attended to and resolved effectively. Grievances redressal mechanism provides a platform for students to express and resolve misunderstanding, concerns, or grievances they have with any college employee in a prompt, fair and equitable manner. This procedure emphasizes an informal resolution.

- ❖ To protect each student's freedom of expression in classroom
- ❖ To protect each student from prejudice or arbitrary and capricious academic evaluation as evidenced by the student's final course grade
- ❖ To protect each student against improper disclosure of the student's views, beliefs and political associations.
- ❖ To protect a student's right to a learning environment that is free from unlawful discrimination.

The mechanism adopted to analyze the nature of grievances for promoting better stakeholder relationship is explained with the flow chart given below:



**Fig.6.2 Flow chart for Grievance Redressal Mechanism**

A student must file his/her grievance before the last day of the academic semester following the incident that gives rise to the grievance. Principal may overlook this rule under exceptional circumstances. All grievance records will be held in the Office of the convener for a period of the period of one year. At any time during the grievance procedure the student may withdraw the grievance. If the student is not satisfied with the decision of the Grievance Review Committee, he/she may appeal to the Principal, in writing. This appeal must be made within 5 working days of the student receiving the decision of the Grievance Review Committee.

**6.2.10 During the last four years, had there been any instances of court cases filed by and against the institute? Provide details on the issues and decisions of the courts on these?**

No

**6.2.11 Does the Institution have a mechanism for analyzing student feedback on institutional performance? If ‘yes’, what was the outcome and response of the institution to such an effort?**

Yes, Students feedback is taken from all students across branches and genders. Principal will take the feedback /Information if any, to the top management for necessary action.

**Process of Feedback**

Students of the college are given opportunity to record their impressions on the various functional areas of college where they are directly involved as stakeholders. The questionnaire is prepared covering all areas of faculty's ability of teaching, quality of learning, class-handling attitude and acceptance of authority by students. The students are asked to record their opinion directly online.

Apart from this, class committee meetings are conducted in each semester where student members express feedback related to teaching – learning, Infrastructure, facilities and other support services. A statement is prepared by the HoD based on the students' feedback. The issue arising out of the students' feedback and corrective actions proposed / taken are reviewed periodically in Management reviews.

**Table 6.13 List of feedback outcomes and response of the institution**

<b>Outcome of Feedback</b>	<b>Response of the institute</b>
❖ Areas to be improved by the faculty	<ul style="list-style-type: none"> <li>❖ Intimated to the faculty by the HoD.</li> <li>❖ HoD gives necessary suggestions and guidance for faculty improvement.</li> </ul>
❖ Whether the weakness is due to the deficiency in the system or of general nature	<ul style="list-style-type: none"> <li>❖ Discussed in the department meeting and a conclusion is arrived.</li> <li>❖ The suggestions are implemented.</li> </ul>
❖ Any complaints from the students regarding	<ul style="list-style-type: none"> <li>❖ Corrective actions are proposed by the Principal immediately.</li> </ul>

other facilities like Library, Hostel, Power Supply, Transport etc.,	❖ The same will be informed to the management. ❖ The issue and action taken are reviewed in Management reviews.
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### 6.3 FACULTY EMPOWERMENT STRATEGIES:

#### 6.3.1 What are the efforts made by the institution to enhance the professional development of its teaching and non-teaching staff?

The institution has been taking a lot of efforts for the professional development of the teaching and non-teaching faculty. Unlimited support is rendered by the Management for the academic enrichment of the faculty members.

##### Teaching Faculty:

- ❖ Faculty are encouraged to pursue Ph.D.
- ❖ The institution encourages and sanctions funds to conduct several development programmes for teaching faculties. It includes programmes on Faculty Development, Personality Development, Skill up gradation, Seminars, Workshops, guest lecture, Effective communication skills, Refresher Course, to name a few.
- ❖ The teaching faculty is motivated to apply and avail funding through projects from different funding agencies.
- ❖ The institution encourages faculty members to attend and present research papers in National/International conferences and also to publish research papers in refereed journals.
- ❖ The institution encourages and sanctions funds for faculty members to undergo trainings in CCNA, PLM, JAVA, Power Electronics and Embedded Systems.
- ❖ All departments have close interaction with professional bodies like IEEE, IET, CSI, and ISTE.

##### Non-teaching Staff:

- ❖ Non-teaching Staff (Technical) are encouraged to pursue higher studies.
- ❖ Non-teaching Staff (Technical) of each department are encouraged to attend training for servicing and maintenance of the equipment from the suppliers / vendors.

#### 6.3.2 What are the strategies adopted by the institution for faculty empowerment through training, retraining and motivating the employees for the roles and responsibility they perform?

- ❖ Faculty members are sponsored to attend the FDP programmes in their field of interest and subject allocated for that semester.
- ❖ They are motivated to attend/present research papers in National/International conferences with sponsorship.

- ❖ Faculty members are encouraged to publish their research findings in refereed journals.
- ❖ To attend International conference, Registration fee, 75% of economy class return air-fare and DA of Rs. 4000/-per day for a maximum of three days will be given to each faculty subject to a maximum of Rs.20000/- per person.
- ❖ An incentive of 10% of the value of funded projects (excluding MODROBS) will be given to the staff for meeting travel and other expenditure related to the Project.
- ❖ For every recognized text-book published in the relevant subjects, the authors of the book will be given an incentive of Rs.10, 000/-.
- ❖ The institution encourages and sanctioned funds for faculty members to undergo trainings in CCNA, PLM, JAVA, Power Electronics and Embedded Systems etc. Training programmes and refresher courses are conducted regularly to the faculty to update their skills. Industrial trainings and Industrial visits are arranged for Faculty Members. Faculty are encouraged to deliver special lectures at Industries and other Institutions.
- ❖ The contributions by the faculty towards the growth of the institution are duly acknowledged by the management.

**6.3.3 Provide details on the performance appraisal system of the staff to evaluate and ensure that information on multiple activities is appropriately captured and considered for better appraisal.**

The institution has a structured Performance appraisal form. Faculty members have been asked to present the annual performance appraisal report at the end of every academic year. Appraisal is based on the following criteria,

- ❖ Experience (Teaching )
- ❖ Activities and Contribution made in academic and administration (Institution level, Department level )
- ❖ Publications
- ❖ Academic Research Guidance
- ❖ Contributions towards Research & Development
- ❖ Memberships, Distinguished Achievements
- ❖ Self-appraisal of the respective faculty
- ❖ Feedback from students and HOD/Principal

**6.3.4 What is the outcome of the review of the performance appraisal reports by the management and the major decisions taken? How are they communicated to the appropriate stakeholders?**

- ❖ The faculty appraisal forms are reviewed by the respective Heads of the Department and the Principal.
- ❖ If the performance of the faculty is below par, they are counseled by the HoD and the Principal to improve their performance in the subsequent semester.
- ❖ The Principal conveys the performance of the faculty to the management.
- ❖ Performance appraisal is one of the criteria for promotions.

- ❖ The staff appraisal met HoD has also proved successful in improving the faculty's / institutional growth by
  - Publishing research papers in reputed journals
  - Submitting Research Proposals for reputed Funding Agencies
  - Participating and presenting papers in International and National Seminars and Conferences
  - Pursuing Ph.D by the faculty
- ❖ Communicated to the other stakeholders through website, Prospectus and Advertisement.

**6.3.5 What are the welfare schemes available for teaching and non-teaching staff? What percentage of staff have availed the benefit of such schemes in the last four years?**

- ❖ Fees concession is provided for wards of teaching and non-teaching faculty in RMK group of Institutions.
- ❖ Gratuity.
- ❖ EPF paid to all employees as per PF act.
- ❖ Promotion and increments are given to all the staff members regularly.
- ❖ 60 days' vacation with pay is provided for faculties, 20 days during winter and 40 days during summer.
- ❖ Each faculty can avail of 12 days of Casual Leave in an academic year and Earn leave.
- ❖ Special casual leave for special occasions like the employee's wedding or other such important functions granted for a period of 5 working days.
- ❖ Maternity leave is provided for women employees with pay.
- ❖ In campus quarters for Faculty.
- ❖ Hostel accommodation for single occupant.
- ❖ Medical leave is also provided for the faculty members.
- ❖ The Institute provides transportation, breakfast, lunch and refreshment every day to all the teaching and non-teaching staff.
- ❖ The faculty members, who attend workshops / seminars, are provided sponsorship and on duty leave. TA/DA also provided in case of paper presentation. The details of benefited are given below.

**Table 6.14 Percentage of staff availed benefits**

Academic year	Total number of staff	Number of staff availed benefits (Conference, Workshops, Seminars, Special leaves, Promotions, etc.)	Percentage of staff availed by benefits
<b>Department of Computer Science and Engineering</b>			
2013-14	16	11	69%
2014-15	20	12	60%
2015-16	24	15	63%
2016-17	20	12	60%
<b>Department of Electronics and Communication Engineering</b>			
2013-14	28	17	60%
2014-15	32	22	68%
2015-16	36	26	72%
2016-17	30	20	66%

<b>Department of Electrical and Electronics Engineering</b>			
2013-14	12	07	58%
2014-15	12	08	67%
2015-16	12	10	83%
2016-17	11	4	36%
<b>Department of Mechanical Engineering</b>			
2013-14	20	03	15%
2014-15	24	15	62.5%
2015-16	24	06	25%
2016-17	21	09	42.85%

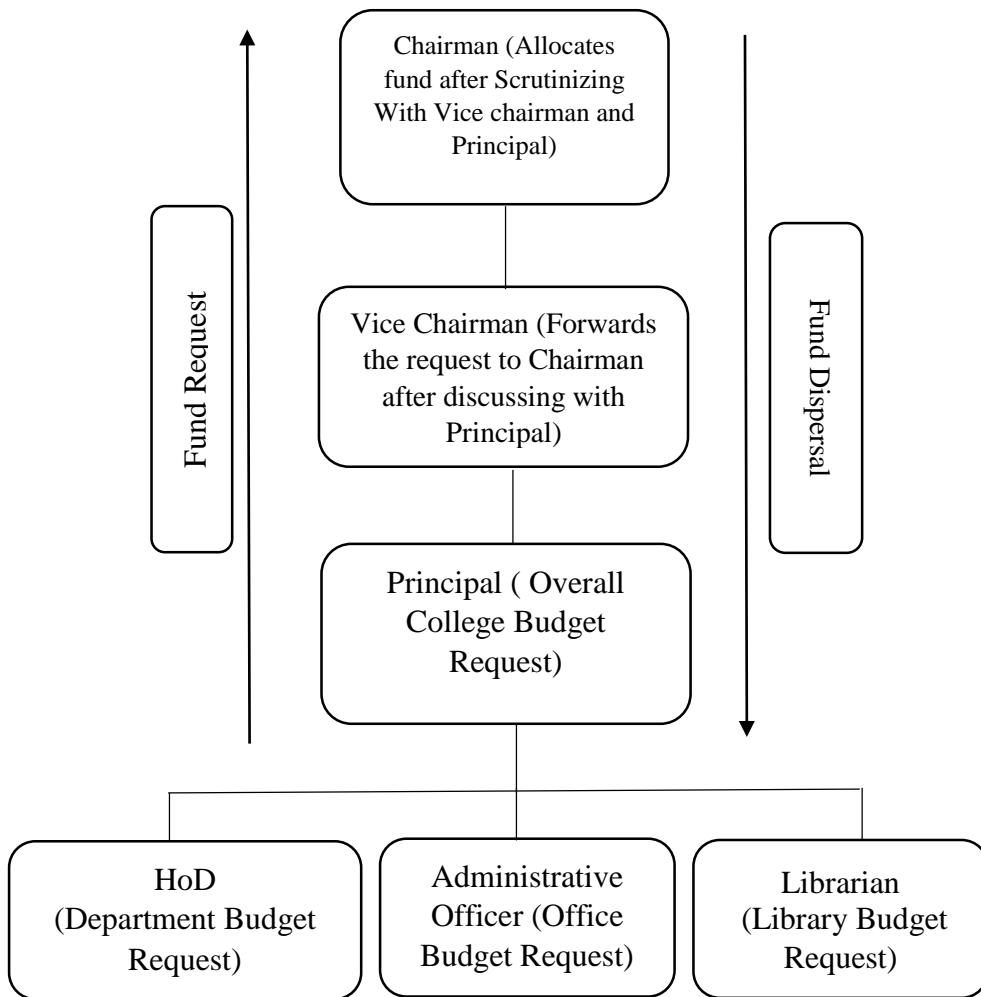
### 6.3.6 What are the measures taken by the Institution for attracting and retaining eminent faculty?

- ❖ 6th Pay Commission Salary.
- ❖ Higher starting salary for deserving candidates.
- ❖ Gratuity
- ❖ Separate ICT enabled A/C room for Professors
- ❖ EPF/Pension schemes
- ❖ Staff quarters
- ❖ Air Conditioned pooled vehicle for HODs and Professors.
- ❖ Financial assistance for research publications.
- ❖ Fees concession for wards admitted in group institutions.
- ❖ Academic freedom.
- ❖ Providing flexible working and conducive environment to perform academic responsibilities.
- ❖ Winter/ summer vacation, Maternity leave, Medical leave, special casual leave for special occasions like the employee's wedding or other such important functions.

## 6.4 FINANCIAL MANAGEMENT AND RESOURCE MOBILIZATION

### 6.4.1 What is the institutional mechanism to monitor effective and efficient use of available financial resources?

- ❖ In the beginning of every financial year all the departments submit their annual budget proposals with all the recurring and non-recurring requirements for that year.
- ❖ The departments then submit their proposals with the details of equipment, furniture, software, academic activities, research activities, travel, consumables and other miscellaneous items.
- ❖ Similarly, Annual budget proposals for the library will be submitted by librarian and annual budget proposals for the office will be submitted by Administrative officer.
- ❖ Then, the consolidated proposals are sent to the management for approval.
- ❖ Allocation of funds by the management, commensurate with the projected growth of the Institution.



**Fig 6.3 Top down approach of Financial Resource Management**

After getting the management approval, the departments/library/office invite quotations from the suppliers for the approved items in the budget with detailed specifications and purchase orders are issued to the least quoted supplier to procure them.

**6.4.2 What are the institutional mechanisms for internal and external audit? When was the last audit done and what are the major audit objections? Provide the details on compliance.**

**Internal audits:**

- ❖ Internal audits will be conducted once in a year.
- ❖ The audit will be done by head of the accounts team of RMK group of Institutions.
- ❖ The accounts and procedures of internal control of finance are audited.
- ❖ There are no audit objections since the institution follows a good system of internal controls like calling quotations, comparison of rates, preparation of purchase order etc., and approvals at every stage of such implementation and due verification of goods and services that are obtained after delivery or completion of works.

**External audits:**

- ❖ External audit is conducted every year by a qualified auditor.
- ❖ Income tax returns are filed every year.

**6.4.3 What are the major sources of institutional receipts/funding and how is the deficit managed? Provide audited income and expenditure statement of academic and administrative activities of the previous four years and the reserve fund/corpus available with Institutions, if any**

The major sources of funds are:

- ❖ Fees collected from students
- ❖ Grants obtained by the funding agencies
- ❖ Bank interest

The major expenditures are:

- ❖ Salary
- ❖ Books and periodicals
- ❖ College maintenance
- ❖ Electricity charges
- ❖ Mess expenses
- ❖ Repairs and maintenance
- ❖ Stationeries
- ❖ Telephone and Internet charges
- ❖ Staff welfare
- ❖ Vehicle maintenance
- ❖ Membership and subscription

There is no major deficit for the past four years.

**6.4.4 Give details on the efforts made by the institution in securing additional funding and the utilization of the same (if any).**

- ❖ The institution encourages faculty members to do consultancy services for various industries and organizations.
- ❖ Faculty members are motivated to apply for research projects to various funding agencies such as ISRO, IET, DRDO, CSIR, DSIR, DST, ICMR, etc.
- ❖ The college also receives funding from various central and state government agencies for conducting seminars, workshops and short term training programs.
- ❖ Audited statement and utilization certificate are submitted to the respective agency after the completion of the event

## 6.5 INTERNAL QUALITY ASSURANCE SYSTEM (IQAS)

### 6.5.1 Internal Quality Assurance Cell (IQAC)

**a. Has the institution established an Internal Quality Assurance Cell (IQAC)? If ‘yes’, what is the institutional policy with regard to quality assurance and how has it contributed in institutionalizing the quality assurance processes?**

Yes, the institution has established an Internal Quality Assurance Cell (IQAC) on 01-03-2017. It is a cell that works on evolving strategies to remove deficiencies and enhance quality, thus channelizing the efforts towards achieving holistic academic excellence.

The objectives of the IQAC are

- ❖ To develop a system for consistent improvement of the academic and administrative performance of the Institution.
- ❖ To help the management in achieving the Quality Objectives
- ❖ To plan and execute development programs
- ❖ To assist the institute for applying and complying to the National/ International Accreditation

**Table 6.15 List of IQAC members**

<b>Sl. No •</b>	<b>Name</b>	<b>Designatio n/ Departmen t</b>	<b>Category</b>	<b>Position (Chairma n/ Member)</b>
1	Dr.Rengaraja T	Principal	Head of the Institution	Chairman
2	Dr. Inbamalar T M	Professor /ECE	Senior teacher as the coordinator/Director of the IQAC	Coordinator / Director
3	Dr.Geetha Balachander	Academic coordinator	Member from the Management	Member
4	Mr.Shanmugasundaram M	ASP/ CSE	Teaching Faculty	Member
5	Mr. Gunalan K	ASP/ EEE	Teaching Faculty	Member
6	Ms. Kannagi V	ASP/ ECE	Teaching Faculty	Member
7	Mr.Loganathan T G	ASP/ ME	Teaching Faculty	Member
8	Dr. Devi G	ASP/ S&H	Teaching Faculty	Member
9	Mr.Chandrababu N M	Manager	Senior administrative officer	Member
10	Dr.Sridhar	Chairman, IET Chennai Network	Local Society Nominee	Member
11	Mr.Venkatesh Perumal Pranay Chandragiri	Student	Students Nominee	Member

12	Er. Sivasubramanian A R	Alumni	Alumni Nominee	Member
13	Mr.Subramanian Sadasivan	Vice President, iNautix Technologi es India Private Limited	Employers Nominees	Member
14	Mr.Tamilchelvan R	Director, Vidhara Secure Com pvt. Ltd.	Industrialists stake holders Nominee	Member
15	Mr.Saravanan S	Xerionlabs, Chennai	Industrialists stake holders Nominee	Member

**b. How many decisions of the IQAC have been approved by the management / authorities for implementation and how many of them were actually implemented?**

Since the IQAC started functioning from 01-03-2017, no decision has yet been approved / implemented.

**c. Does the IQAC have external members on its committee? If so, mention any significant contribution made by them.**

Yes, the IQAC have external members on its committee.

**d. How do students and alumni contribute to the effective functioning of the IQAC?**

Students and Alumni facilitate the creation of a learner-centric environment conducive to quality education and support faculty to adopt the required knowledge and technology for participatory teaching and learning process.

**e. How does the IQAC communicate and engage staff from different constituents of the institution?**

IQAC communicate among different constituents of the Institution through the

- a. College Website
- b. Official e-mail
- c. Minutes of the Review Meetings.
- d. Existing Committees
- e. Temporary Sub-Committees
- f. Annual General Body Meetings
- g. Circulars
- h. Periodic staff meetings convened by Principal

**6.5.2 Does the institution have an integrated framework for Quality assurance of the academic and administrative activities? If ‘yes’, give details on its operationalisation.**

Yes, the institution has an integrated framework for Quality assurance of the academic and administrative activities.

- ❖ IQAC works in collaboration with Planning and Monitoring Board, Discipline and Welfare Committee, Complaints cum Redressal Committee, Alumni Association, Research Cell, Placement Cell, Entrepreneurship Development Cell and Share reports for improvement of Academic and Administrative Activities.
- ❖ Every department has IQAC Coordinator and ISO Coordinator to carry out the activities prevailing in the department jointly with HoD and IQAC coordinator/Director.
- ❖ The quality of the system adopted is monitored by the ISO coordinator and Director of the IQAC under the leadership of Principal. Principal initiates necessary actions facilitating continual improvements of academic and administrative activities.

**6.5.3 Does the institution provide training to its staff for effective implementation of the Quality assurance procedures? If ‘yes’, give details enumerating its impact.**

Yes. The college provides training programs to our Faculty members for effective implementation of quality assurance procedures. Details of the programmes organized in the campus are given below:

Table 6.16 List of Quality Assurance Programmes

S.N o	Date	Name of Training Program	Expert name
1	06.08.2016& 07.08.2016		Dr.Baskar S , Professor and Head EEE, Thiagarajar College of Engineering
2	25.07.2016	NBA previsit workshop	
3	13.07.2016	QMS awareness as per ISO 9001:2015	Mr.Iyer R N , BMQR Certifications Pvt. Ltd
4	20.11.2012	Internal auditing of Quality Management System as per ISO 9001:2008	

The impact is that our quality objectives have been fulfilled and the continuous quality improvement has been achieved which is evident from the feedback of stakeholders.

**6.5.4 Does the institution undertake Academic Audit or other external review of the academic provisions? If ‘yes’, how are the outcomes used to improve the institutional activities?**

Yes, the institution undertakes Academic Audit to the review the academic provisions. The procedure adopted are as follows:

- ❖ Internal audits will be conducted once in a semester by an audit team constituted by the Principal. The team comprises of senior faculty member from each department and trained internal auditors.
- ❖ The observations, opportunities for improvements and Nonconformance are recorded and made available to the HOD and Principal.
- ❖ Principal discusses with academic coordinator and HODs, preventive measures and corrective actions are initiated.
- ❖ The observations from external audits such as ISO certification audit, Anna University Inspection and AICTE Inspection, etc are taken care of to improve the quality of the institutional activities.

**6.5.5 How are the internal quality assurance mechanisms aligned with the requirements of the relevant external quality assurance agencies/regulatory authorities?**

- ❖ The Institution has evolved its quality assurance system based on ISO9001:2015, a widely accepted quality assurance model across the globe.
- ❖ The ISO 9001:2015 also provides guidelines for planning, scheduling, conducting and reporting of internal quality audits.
- ❖ Every year an audit is carried out by external auditors. The observations, opportunity for improvements and non-conformity if any indicated by the auditors are rectified at the earliest.

**6.5.6 What institutional mechanisms are in place to continuously review the teaching learning process? Give details of its structure, methodologies of operations and outcome?**

The Institution regularly collects the feedback from different means through the HoDs. The feedbacks are collected from

- ❖ Students feedback
- ❖ Class committee Meeting
- ❖ Class room observation
- ❖ Review of lesson plan by HoD
- ❖ Internal test result analysis
- ❖ University result analysis
- ❖ ISO Audit
- ❖ Academic audit
- ❖ The HoD reviews the feedback at regular intervals regarding the progress and effectiveness of teaching learning process and takes immediate action.
- ❖ Periodical tests are conducted as per the calendar and the performance of students are analyzed. In order to improve the performance, remedial classes will be conducted.
- ❖ Practical classes are also constantly reviewed by HoD in order to enable the students gaining practical knowledge.

- ❖ All the co-curricular and extra-curricular activities are reviewed by HoD periodically and proper directions are given whenever needed.
- ❖ Outcome attainment are being evaluated to quantify Teaching Learning process
- ❖ These mechanism enable the institution
  - To secure the position among the top ten in university exam in the recent years
  - Progressive rise in placement higher education etc.
  - Increased number of university ranks

#### **6.5.7 How does the institution communicate its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders?**

The institution communicates its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders through

- ❖ Institute website
- ❖ Circulars
- ❖ Notice Boards
- ❖ Library
- ❖ Mails
- ❖ Prospectus and Brochures
- ❖ Magazines and Newsletters
- ❖ Calendar
- ❖ Displaying in prominent places inside and outside the institute
- ❖ Parent and Alumni meets
- ❖ Newspapers

# **Criterion VII**

## **Innovations and Best Practices**



**CRITERIA VII: INNOVATIONS AND BEST PRACTICES****7.1 ENVIRONMENT CONSCIOUSNESS****7.1.1 Does the Institute conduct a Green Audit of its campus and facilities?**

Yes, the Institution conducts green audit of its campus and facilities. It is carried out by the committee constituted by the Principal once in a year. Green audit has been initiated with the concern of health issues as the consequence of environmental pollution. The goal of the green audit is “Protecting the environment and reducing the threats to human health”.

The green audit is typically undertaken in three phases in our Institution as detailed below:

**1. Pre-audit**

- ❖ Plan the audit
- ❖ Constitute the audit team
- ❖ Schedule the audit facility
- ❖ Visit the site

**2. On-Site**

- ❖ Conduct the audit
- ❖ Evaluate the observations
- ❖ Prepare a report of observation

**3. Post-audit**

- ❖ Prepare a final report of the observations and the inference
- ❖ Prepare an action plan to overcome the flaws
- ❖ Submit the final report to management for further action
- ❖ Follow up on the action plan

The following are the criteria evaluated during the audit

**Water audit:** The facilities of raw water intake and water treatment are evaluated. Water harvesting has been taken into account. The audit team investigates the relevant methods to balance the demand and supply of water.

**Energy audit:** It deals with the energy conservation and methods to reduce its consumption. The audit team evaluates the energy consuming methods adopted and checks whether these methods are using the energy in a conservative way.

**Waste audit:** The waste clearance measures associated to hazardous wastes and recycling are reviewed. The audit team analyzes the prevailing waste disposal method and suggests the best way to combat the problems.

**Environment audit:** It analyzes the air quality, noise level and programs undertaken by the Institute for plantation.

**Renewable energy audit:** The resources such as rain, sunlight, wind, etc. and their use in the campus as renewable energy source is reviewed.

**Carbon audit:** It undertakes the measure of bulk of carbon dioxide equivalents exhaled by the Institution through which the carbon accounting is done. The audit team considers several efforts practiced by the Institute to lower the greenhouse gases in the atmosphere in order to make the campus more environmental friendly.

The benefits of the audit are

- ❖ Helps to protect the environment
- ❖ Waste minimizing and managing
- ❖ Identify prevailing and forthcoming threats
- ❖ Alertness for environmental duties

#### **7.1.2 What are the initiatives taken by the college to make the campus eco-friendly?**

- ❖ Energy conservation
- ❖ Use of renewable energy
- ❖ Water harvesting
- ❖ Check dam construction
- ❖ Efforts for Carbon neutrality
- ❖ Plantation
- ❖ Hazardous waste management
- ❖ E-waste management

We have a green environment with numerous trees and plants planted in the campus. The College has been taking many steps to make the environment eco-friendly. **The initiatives taken by the college to make the campus eco-friendly are:**

#### **Energy Conservation:**

- ❖ The students and staff members are aware of the importance of energy conservation. The students have been made self-responsible by switching off the lights and fans and air conditioners whenever not in use.
- ❖ Boards are displayed in every class room reminding students/faculty to switch off electrical appliances when not in use.
- ❖ Building structures are designed with high natural lighting and ventilation to minimize lighting needs.
- ❖ Star rated air conditioners are provided in our college campus to ensure the energy conservation.
- ❖ Electrical equipment are periodically checked and monitored to ensure energy saving.
- ❖ Inefficient, aged and de-rated motors were removed and new motors are commissioned.
- ❖ Fuel checking is regularly done for generators
- ❖ The batteries of the UPS are maintained in good condition which reduces current in charging the batteries.

- ❖ Most of the computers available are with TFT monitors.
- ❖ Compact Fluorescent Lamps (CFL) and Light emitting diode (LED) bulbs instead of Tungsten lamps are used wherever possible in the college as well as hostel.
- ❖ Speed regulators are installed in all the college buses to save on fuel consumption.
- ❖ All buses are operated to their full capacity.
- ❖ Steam cooking is done for preparing food in the mess.

### **Use of Renewable Energy:**

- ❖ Researches on biodiesel and solar energy are being carried out by faculty members and students.
- ❖ The Institution is in the process of setting up of solar street lights inside the campus.
- ❖ The lawns and saplings in the garden are watered by the recycled waste water from Sewage Treatment Plant (STP).
- ❖ Waste water from the three RO plants with total capacity 4000 litres/hour is used for plants and trees in the College
- ❖ Paper waste is sold off to vendors for recycling.

### **Water Harvesting:**

- ❖ Rain water harvesting facility is provided in the main block in order to increase the water table, as part of conservation and preservation of natural water.
- ❖ The drainage system within the campus is designed in such a way that the rain water is diverted into sink pits within the campus which contributes to rising of ground water level.

### **Check Dam Construction:**

- ❖ One check dam is constructed in the college campus.

### **Efforts for Carbon Neutrality:**

- ❖ All vehicles owned by the College are regularly tested to ensure that the carbon emission is at minimum level.
- ❖ College provides bus facilities to the faculty members and non-teaching staff with an aim to avoid the use of extra vehicles and thus reduce carbon emission.
- ❖ The Institution maintains lush green lawns, trees and flowering bushes. So, the environment containing CO<sub>2</sub> is absorbed by the greenery, releasing O<sub>2</sub> into the environment and strives towards carbon neutrality.
- ❖ Generators of the college are located in a separate power house provided with enclosures to avoid carbon emission and to eliminate the noise pollution as well.

### Plantation:

- ❖ The campus is filled with greenery in and around. More than 1500 plants and trees are grown all over the campus.
- ❖ Well-trained team of gardeners maintain the plantation within the campus.
- ❖ Whenever the dignitaries visit the College, they are requested to plant saplings in honor their visit.



**Fig.7.1 Tree Plantation by YRC**  
**Hazardous Waste Management**

- ❖ Even though there are no hazardous wastes produced within the campus, the campus has a good waste disposal system.
- ❖ The scavengers are given separate disposal bins to collect degradable waste and cleaners are also provided with safety materials like gloves and shoes.

### E-waste Management:

- ❖ In normal practice, e-waste i.e., electrical and electronic waste items are returned to the manufacturer if possible or sold as scrap every year.
- ❖ The UPS batteries are recharged till the maximum number of cycles. Once they outlive their utility, they are exchanged for a nominal cost (buy back offers) with the vendor for the new batteries or given to the authorized dealers who purchase the scrap.
- ❖ Printer Cartridges are generally refilled and not disposed. Wherever refilling is not possible, the cartridge is returned to the vendor.
- ❖ Computer parts and peripherals are reused in other systems by our skilled lab technicians.

## 7.2 INNOVATIONS:

### 7.2.1 Give details of innovations introduced during the last four years which have created a positive impact on the functioning of the college.

The Vision of the Institution is to provide quality technical education and to promote innovation and research capabilities. To achieve the vision and to make the Institution a Knowledge hub, a number of innovative steps have been adopted. Any new idea, practice or technique proposed by the stakeholders is always appreciated, encouraged and implemented, if found practically feasible.

#### Innovations in Academics:

- ❖ Introduced Outcome Based Assessment and Evaluation of teaching – learning process from the academic year 2015- 2016.
- ❖ Software assisted question paper setting from the question bank provided by the subject faculty for internal assessment tests.
- ❖ Based on gap analysis contents beyond the syllabus are taught to the students.
- ❖ Usage of NPTEL video lectures and Open Course Ware of world class universities.
- ❖ Teaching methods such as Hands-On, Demonstration, Tutorials, etc. are practiced by Faculty to make the students understand the engineering concepts.
- ❖ Guest lectures, Seminars, Workshops and Industrial visits are arranged to meet the industrial requirements.
- ❖ Bridge courses are offered to the lateral entry students for enabling them to understand easily the basic concepts in the problem oriented subjects.
- ❖ Remedial teaching and intensive coaching is offered to the students who need extra and special attention.
- ❖ Internet / Wi-Fi facility is provided for students.
- ❖ The Institute mail server for effective communication between the staff and the students.
- ❖ Campus Performance Tracker (CPT), an Intranet facility to monitor academic and non-academic activities.
- ❖ Adjunct faculty from industry delivers lectures periodically to inculcate industry interaction.
- ❖ Effective Counseling is done regularly by motivating the students to excel in academics and personality.
- ❖ All departments of the Institution have a Department Advisory Committee comprising industry experts.

#### Innovations in Library:

- ❖ The Library Services are automated through the Standard Library Software package called “Autolib 5.2 version” The Circulation System is fully computerized and all the documents are bar-coded.
- ❖ Our Institution has subscribed to e-journals, magazines and e-books from Science Directory, ASME, and IEEE, Science direct, Springer, J-

GATE, N-LIST, DELNET and McGraw Hill.

### **Online Information Sharing System:**

- ❖ The Institution posts the information about academic events, exam dates, holidays etc., in the dedicated College website.
- ❖ Academic Calendar is prepared well in advance and posted in the college website.
- ❖ The academic performance of the students is regularly updated in the Institution portal and it is intimated to their parents through SMS.
- ❖ Group mail ID is created for each batch of students. All the necessary information is posted in the group.

### **Centres of Excellence**

#### **Digital Enterprise Centre of Excellence (DECoE):**

The objective is to develop programming skills and mobile app development skills of students that match the industry expectations. Cognizant has sponsored 30 Apple Systems for setting up IoS lab in our campus.

#### **Front End Technologies Centre of Excellence:**

The objective is to develop User Interface Design skills of students that match with the industry expectations. It has been established in partnership with M/s Virtusa Polaris.

#### **Big Data Analytics Centre of Excellence (BDCoE):**

The objective is to develop data science skills of students that match the industry expectations. It has been established in partnership with M/s iNAUTIX Technologies India Ltd.

The objective of BDCoE are:

- ❖ To provide Big Data Analytics Course to the students in collaboration with iNautix.
- ❖ To create a platform for the students in acquiring the technology trends in the field of Big Data Analytics through Industry Internship.
- ❖ To motivate the students to do projects in Big Data Analytics.
- ❖ To establish a state of the art laboratory in collaboration with iNautix.
- ❖ To prepare the students for a successful career in Big Data Analytics technology as expected by the Industry

#### **Product Life Cycle Management Centre of Excellence (PLM CoE):**

- ❖ It is an authorized training centre for Parametric Technologies Corporation (PTC) product namely, CREO.

- ❖ Its objective is to bridge the gap between Industry requirements & curriculum.
- ❖ Faculty members who are trained by PTC offer training to aspiring students on various modules of CREO and Wind chill PDM Link.
- ❖ Students are provided with 125 hours of in-depth training and accessibility to software for a period of one year.

#### **Telecom Centre of Excellence:**

The objective is to develop telecom skills of ECE students that match with the industry expectations. It has been established in partnership with M/s WIPRO Technologies Ltd.

#### **Factory Automation Centre of Excellence:**

The objective is to develop factory automation skills of EEE students that match the industry expectations. It has been established in collaboration with M/s Mitsubishi Electric Corporation.

#### **AC/DC Electrical Drives Centre of Excellence:**

The objective is to develop technical skills of EEE students and to enable the students to work in M/s Mitsubishi Electric Corporation lab for developing real-time projects.

#### **Information Security Centre of Excellence:**

- ❖ The objective is to educate on the recent trends in Security (e.g., cloud, mobile, web, social media and IoT) and investigate the security exposures they create - and how those exposures can be mitigated.
- ❖ To target hard security problems that is at the forefront of the industry.
- ❖ The outcomes are working software prototypes, architectures, and applications.
- ❖ The contributions of the Center to the science and practice of information security are well recognized globally by the security community.

#### **Embedded Systems Centre of Excellence:**

RMK Group of Institutions has signed an MOU with Wipro Embedded Technologies. The objective is:

- ❖ To enhance the campus recruitment.
- ❖ To provide training programs for the faculty members in the current technology.
- ❖ To develop the programming skills for the students by giving conducting training programs in the pre final year.

#### **Automotive Electronics Centre of Excellence (AECoE):**

RMK Group of Institutions has signed a MOU with KPIT Technologies Pvt Ltd to achieve the academic excellence at par with industrial expectations.

Faculty members trained through Train the Trainer Program offers training to the students on the curriculum crafted by industrial experts from KPIT Technologies.

The objective is

- ❖ To develop the skill set of the students in the field of Automotive Electronics.
- ❖ To create a platform for the students in acquiring the technological trends of automotive electronics through a state of the art laboratory established in collaboration with KPIT Technologies
- ❖ To equip the student in designing, modeling and analyzing the various modules of automotive.
- ❖ To motivate the student community to develop application oriented project as a part of their curriculum.

**We have the following COEs in line for future implementation:**

- ❖ Building Management Systems Centre of Excellence (BMSCoE)
- ❖ Lab View Centre of Excellence
- ❖ ARM® Technology Centre of Excellence
- ❖ Internet of Things (IoT) Centre of Excellence
- ❖ Mixed Signal Design Centre of Excellence

### **Entrepreneur Development Cell:**

- ❖ The curriculum based projects and additional mini projects are assigned to the students to develop their entrepreneur skills.
- ❖ Guest Lectures by experts from industries and MNCs are regularly arranged to motivate the students about entrepreneur skill development.
- ❖ In-Plant training and industrial visits are encouraged to motivate the students to become entrepreneur.
- ❖ Learn wise / e-learning online courses are being conducted for interested students.

### **Research Orientation and Project Based Learning:**

Our Institution has been emphasizing on Research and Consultancy (R&C) in various areas of Engineering through

- ❖ Research projects funded by the external agencies like ISRO, DST etc.
- ❖ Organizing International and National Conferences, Seminars and Workshops funded by the college and external agencies like AICTE, IET, and ISTE etc.
- ❖ Encouraging Faculty Members and Students to apply for Patents.
- ❖ Encouraging Faculty Members to pursue Ph.D.
- ❖ Mandatory UG level mini projects.
- ❖ Students are motivated to submit innovative projects in various competitions conducted by other Institutions / organizations.

### **Placement Cell:**

- ❖ The Institution provides excellent placement activities both on campus and off campus.
- ❖ Mission Possible Interview Skills Workshop is conducted for the third

year students.

- ❖ Aptitude training Program by SMART Resources for pre-final year and final year students.
- ❖ Resume Writing Skills Workshop.
- ❖ Infosys Campus Connect Training for Interested Students.
- ❖ Mock Interview (Tech & HR) by senior faculty from the respective department.
- ❖ Mock Refresher Course in Core Subjects.
- ❖ Certificate course for Pre-final Year Students (CISCO-CCNA, PLM, EMC<sup>2</sup> etc.)
- ❖ Online Aptitude test for campus interview preparation.
- ❖ Company specific training before campus interview.
- ❖ Motivation and Aptitude training for yet to be placed students even after the visit of ten companies for campus recruitment.
- ❖ To enhance the programming skills in C/C++, Wipro is conducting Project Readiness Program (PRP) to the Pre-final year students of all the branches. Students passing the PRP test will be given the opportunity to attend Direct HR interview to get Wipro offer.

#### **Feedback System:**

- ❖ Online Student feedback system is collected every semester for all subjects. Student's feedback is analyzed and improvement plans are initiated to enhance quality of education.
- ❖ Class committee meetings are conducted periodically and feedback on quality of education, provision of resources etc. is collected to improve the teaching-learning process.
- ❖ The feedback is discussed and reviewed between teachers and the Principal in a confidential manner and corrective actions if any are taken accordingly.

#### **Facilitation of Leadership Development and Social Responsibility:**

- ❖ Students are encouraged to organize department level programmes like national conference, workshops, symposium etc., to improve their organizing leadership qualities.
- ❖ Institutional membership in Professional bodies like IEEE, ISTE, IETE, IET, CII involvement, Institution of Engineers, India.
- ❖ Youth Red Cross unit is actively functioning. The members of this unit conduct tree planting programmes, blood donation camps, health awareness programmes, etc.

#### **Internal Academic Audit:**

- ❖ All the teaching staff members submit course delivery plan for the subjects allocated to them before the commencement of classes to their respective Heads of the Department.
- ❖ Counseling records are maintained by the individual counselors.
- ❖ The internal academic audit team members will audit the course files and counseling records to maintain quality evaluation.

**Earn While You Learn:**

- ❖ Students are motivated to undergo Internship training in the companies like iNAUTIX Technologies, Infosys, Wipro, etc.

**7.3 BEST PRACTICES**

**7.3.1 Elaborate on any two best practices in the given format at page no. 98, which have contributed to the achievement of the Institutional Objectives and/or contributed to the Quality improvement of the core activities of the college.**

**Best Practice No. I****1. Title of the Practice****“Improving the Quality of Student’s Project”**

Project is defined as the application of knowledge, skills, tools, and techniques to the activities in order to meet with or exceed stakeholder needs and expectations to achieve the target. It is also an effective way to integrate technology into the curriculum. Adopting a project-learning approach in classroom can invigorate learning environment, energizing the curriculum with real-world relevance and sparking students' desire to explore, investigate, and understand their world.

**2. Goal**

- ❖ To improve the practical knowledge of students on learnt concepts
- ❖ To enhance innovation and creativity among students
- ❖ To induct research culture among students
- ❖ To encourage the students to improve their communication skills
- ❖ To encourage the students to develop real-time projects
- ❖ To undertake inter disciplinary projects
- ❖ To allow the students to enrich their knowledge with respect to their interest
- ❖ To provide a concrete description of the project's effects at the impact level

**3. The Context**

We may define good teaching as instruction that leads to effective learning, which in turn means thorough and lasting acquisition of the knowledge, skills, and values the instructor or the Institution, has set out to impart. A good educational Institution should establish an environment conducive to learning, and leverage available resources outside as well as inside the classroom. Project-based learning helps students apply what they learn to real-life experiences and provides an all-around enriching education. It is a dynamic approach to teaching in which students explore real-world problems and challenges, simultaneously developing cross-curriculum skills while working in small collaborative groups. As project-based learning is filled with

active and engaged learning, it inspires students to obtain a deeper knowledge of the subjects they're studying.

#### 4. The Practice

- ❖ The project development starts in the first year itself as a mini project, where students implement the learnt concepts for an application.
- ❖ Science exhibition on Science Day is conducted every year giving opportunity for the students to showcase their work.
- ❖ Department level Mini-project competitions are held every year to motivate the students.
- ❖ Student is honored with cash prizes for best projects from the mini project contest conducted every semester.
- ❖ To understand industry needs, they are taken for 4 industrial visits leading to the visit of 12 industries per student.
- ❖ In addition, they undergo In-plant training twice a year. So, during their course, they are expected to undergo 6 industrial trainings.
- ❖ College has access to several e-journals to enhance research and project work.
- ❖ In the final year, students are required to develop main projects for real time applications.
- ❖ Internship training is also arranged by the college.
- ❖ Based on their interest, students are encouraged to do projects in the Government sector like BSNL, Central Government organization like BEL, BHEL, NIOT, ISRO, etc.
- ❖ The projects are reviewed periodically to evaluate innovation. Suggestions for improvement will be given by the experts for the ongoing development process. The review committee includes industry professionals, alumni, experts etc.
- ❖ One project from each department is chosen and awarded as Best Project.
- ❖ Students are encouraged to submit their project work to Project contests, symposium, National Conference and International Conferences across the country. Registration fee, TA/DA are provided if selected.
- ❖ Students are encouraged to publish their project work as a research paper in national and international journals.



**Fig 7.2 Mini project competition conducted on 27.02.2017**



**Fig 7.3 Mini project competition conducted on 30.03.2016**



**Fig 7.4 Mini project competition conducted on 07.03.2014**

### 5. Evidence of Success

- ❖ Generally, development of a project makes every student to take lot of effort for successful molding of the end product which enriches their knowledge manifold.
- ❖ The statistics of progressively improved average percentage of project marks obtained by the students every year testifies to the quality level of their projects.
- ❖ The number of students who participated in the mini project contest is rising as given below:

**Table 7.1 List of Students Participated in Miniproject Contest**

Sl.No.	Academic Year	Department	No. of Students Participated	Total Students
1.	2013-2014	CSE	10	355
		ECE	80	
		IT	127	
		MECH	138	
2.	2014-2015	CSE	08	504
		ECE	121	
		EEE	127	
		IT	109	

		MECH	139	
3.	2015-2016	CSE	05	515
		ECE	237	
		EEE	90	
		IT	47	
		MECH	136	
4.	2016-2017	CSE	03	599
		ECE	335	
		EEE	119	
		MECH	142	

- ❖ There has been a tremendous increase in the number of batches presenting their main project to National and International conferences. The details are given below:

**Table 7.2 List of Project Batches participated in conferences**

Sl.No.	Academic Year	Department	No of Batches Participated	Total No of Batches
1	2012-2013	CSE	02	06
		ECE	02	
		EEE	02	
2	2013-2014	CSE	05	19
		ECE	08	
		EEE	05	
		IT	01	
3	2014-2015	CSE	09	25
		ECE	09	
		EEE	02	
		MECH	05	
4	2015-2016	CSE	12	79
		ECE	55	
		EEE	02	
		MECH	10	

## 6. Problems Encountered and Resources Required

- ❖ Identifying problems that lead to solution/products for societal cause
- ❖ Challenges are faced while implementing some of the abstract theoretical ideas into actual practice
- ❖ Projects in which Government/private bodies are involved; meeting the requirement of these bodies within the deadline is a real challenge.

## 7. Notes (Optional)

- ❖ Students are more likely to retain the knowledge gained through this approach than through traditional textbook-centered learning.
- ❖ Students develop confidence and self-direction as they move through both team-based and independent work.

- ❖ Students also hone their organizational and research skills, develop better communication with their peers and seniors, and often work within their surrounding communities enjoying the positive effect of their work.
- ❖ They quickly see how academic work can connect to real-life issues and may even be inspired to pursue a career or engage in activism that relates to the project they developed.

## **Best Practice No. 2**

### **1. Title of the Practice**

#### **“Counseling, Training and Placement”**

Counseling, Training and Placement Cell provides guidance, support and motivation to make the students of RMKCET employable. This cell has several important roles to play in addition to organizing job interviews and securing job placements: organizing industry visits which could make a substantial difference to student learning and attitudes; getting good guest lecturers; obtaining ‘real live’ projects from industries; and securing internships for students in summers.

### **2. Goal**

The goal is to integrate

- ❖ Enhanced technical performance
- ❖ Efficient placement performance
- ❖ Effective career performance
- ❖ Enriched social performance into the engineering and management curriculum for success.

### **3. The Context**

As educators, we realize that we cannot make a student a complete individual just by educating him/her with knowledge included in the academic curriculum. Being an affiliated Institution, we are forced to follow the curriculum specified by Anna University. In addition, they should acquire extra skills, engineering knowledge on par with International standards and should satisfy the expectations of renowned organizations. So, there should be a place where they can interact with an active placement officer, trained friendly counselors, other faculty, fellow students, alumni and industry representatives to get advice on future careers. They should be aware of how they should prepare them throughout four years of college and not just “at the tail end”.

### **4. The Practice**

Apart from the regular academic curriculum RMK College of Engineering and Technology takes an extra step to make the students experts in co-curricular and extracurricular activities.

**Table 7.3 Special Courses offered to our students by various departments**

<b>S.No</b>	<b>Course Offered</b>	<b>Course Duration</b>
1.	Engineering Skills - Beginner Level	1 Year
2.	Engineering Skills - Intermediate Level	1 Year
3.	Engineering Skills- Advance Level	1 Year
4.	BEC	1 Year
5.	Soft Skill & Technical Training	4 years
6.	Stepping stone Programme	6 Months
7.	Mini Projects	1 year
8.	Hands on training in Robotics and Embedded technologies	6 Months
9.	Placement & Training	4 years
10.	GATE Coaching	1 year
11.	Skill rack test	1 year
12.	Campus Connect	2 Years
13.	Contest Registration	4 Years

To describe a few special courses

### **Aptitude**

The student's aptitude test has been compiled to assist the companies in identifying good quality students. This test should be used in conjunction with other interviewing techniques. The aptitudes and abilities measured by verbal and numeric reasoning tests can easily be related to real world tasks and jobs, as many jobs require some degree of skill with words and numbers

### **BEC - Business English Certificates**

The Business English Certificates (BEC) from Cambridge ESOL is for individual learners who want to have a business-related English language qualification. By taking an internationally recognized business qualification like BEC, Students can show that they have learned English to an appropriate level and can use it in a professional context. BEC is available at three levels: BEC Preliminary, BEC Vantage and BEC Higher. BEC Preliminary is set at Level B1 of the Common European Framework of Reference for Languages (CEFR).

### **Skills Set**

Skills Set typically fall into four categories

1. Problem Solving Skills
2. Communication Skills
3. Personal Qualities and work Ethics
4. Interpersonal and Teamwork Skills

### **5. Evidence of Success**

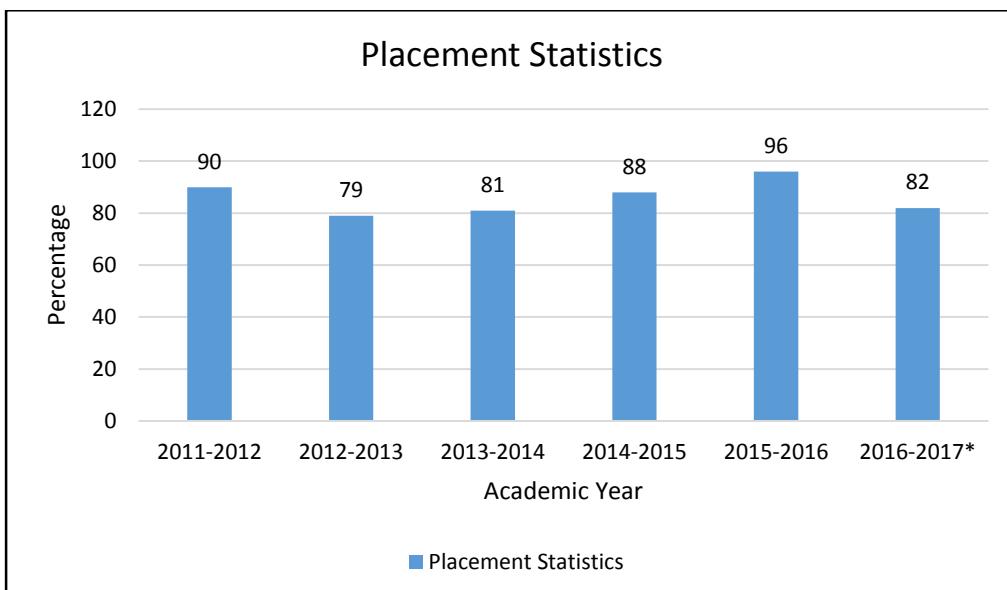
#### **1. Placement**

The placement records show that our students' performance is increased in technical and other aspects to satisfy our vision and mission.

**Table 7.4 Placement details**

<b>Sl.No</b>	<b>Academic Year</b>	<b>Eligible Students</b>	<b>Placed Students</b>	<b>Percentage (%)</b>
1	2011-2012	185	166	90
2	2012-2013	185	146	79
3	2013-2014	219	178	81
4	2014-2015	335	296	88
5	2015-2016	347	334	96
6	2016-2017*	315	256	82

\*Placements activity is in progress

**Fig 7.5 Placement details**

## 2. Ranking

Our Institution is continuously producing remarkable number of Anna University rank holders from its inception with the sustained efforts of our dedicated and efficient faculty members with the able guidance of our Principal and the encouragement and support extended by the Management.

**Table 7.5 Number of department –wise university rank holders**

<b>Sl.No</b>	<b>Academic Year</b>	<b>Department</b>	<b>No of Students</b>	<b>Total</b>
1	2011-2012	CSE	04	22
		ECE	04	
		EEE	08	
		IT	06	
2	2012-2013	CSE	06	29
		ECE	14	
		EEE	05	
		IT	04	
3	2013-2014	CSE	04	18

		ECE	07	
		EEE	03	
		IT	04	
4	2014-2015	CSE	09	33
		ECE	04	
		EEE	02	
		IT	09	
		MECH	09	
5	2015-2016	CSE	03	22
		ECE	10	
		EEE	04	
		IT	02	
		MECH	03	

### 3. Higher Education

Our College motivates the students to go for higher studies by making them to attend various higher study programs inside and outside the campus through Higher Education Cell (HEC)

Table 7.6 Higher studies details

Sl.No	Academic Year	No. of students opted Higher Studies
1	2011-2012	4
2	2012-2013	18
3	2013-2014	24
4	2014-2015	31
5	2015-2016	33

### 6. Problems encountered and Resources Required:

- ❖ Recession
- ❖ Sector Specific jobs
- ❖ Profile Specific jobs
- ❖ Salary Expectations

### 7. Notes (Optional):

Students are proud and happy that “Training, Counseling and Placement Cell” provided guidance, support and motivation. A database on students, present and past, helps them make contacts not only with prospective employers but with others who took up jobs in particular industries, companies etc. The cell also inculcates in the students measures that would assure a clear and mature mindset, healthy habits and the indomitable spirit to pursue goals without any diffidence in addition social skills, morality, aesthetics and cognitive skills. This will help them achieve the maximum in the near future.

*This is not an “END” but a “START” to an infinite Journey*

## 8. Contact Details

<b>Name of the Principal</b>	:	Dr.T.Rengaraja
<b>Name of the Institution</b>	:	R.M.K. College of Engineering and Technology
<b>City</b>	:	Off Chennai
<b>Pin code</b>	:	601206
<b>Accredited Status</b>	:	Applied
<b>Work Phone</b>	:	044 3330 3630
<b>Website</b>	:	<a href="http://www.rmkcet.ac.in">www.rmkcet.ac.in</a>
<b>Mobile</b>	:	94441 42611

# Evaluative Report of the Departments



## EVALUATIVE REPORT OF THE DEPARTMENT

**1. Name of the department :** Computer Science and Engineering (CSE)

**2. Year of Establishment :** 2008

**3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)**

UG: Bachelor of Engineering in Computer Science and Engineering

**4. Names of Interdisciplinary courses and the departments / units involved**

There is no Interdisciplinary course available

**5. Annual / semester / choice based credit system (programmewise)**

Semester based credit system prescribed by Anna University

**6. Participation of the department in the courses offered by other departments**

S.No	Subject Code	Subject / Lab	The department in which the courses is offered
1.	GE6151	Computer Programming	S & H
2.	GE6161	Computer Practices Lab	S & H
3.	EC6301	Object Oriented Programming and Data Structures	ECE
4.	EC6312	OOPS and Data Structures Lab	ECE
5.	CS6303	Computer Architecture	ECE
6.	CS6456	Object Oriented Programming	EEE
7.	CS6461	Object Oriented Programming Lab	EEE

**7. Courses in collaboration with other universities, industries, foreign institutions, etc.**

S. No	Courses	Collaborative Industry / University
1.	Project Readiness Programme	Wipro
2.	Oracle	Oracle

3.	Center of Excellence - Mobility Lab	CTS
4.	Center of Excellence - Big Data Analytics	iNautix
5.	Center of Excellence - Information Security	TCS
6.	British English Council	British Council
7.	DB2	IBM
8.	Infosys Campus Connect	Infosys
9.	NPTEL Course	IITs
10.	JADE	Personality Development
11.	SMART	Placement Training

#### 8. Details of courses/programmes discontinued (if any) with reasons:

There is no discontinuity of courses

#### 9. Number of Teaching Posts:

S.No	Designation	2013 – 14		2014 – 15		2015 – 16		2016 – 17	
		S	F	S	F	S	F	S	F
1	Professors	1	1	2	2	2	2	2	2
2	Associate Professors	2	2	4	2	4	4	4	4
3	Asst. Professors	9	9	18	20	18	18	14	14
4	Adjunct Faculty	-	-	-	-	-	-	4	4
<b>Total</b>		<b>12</b>	<b>12</b>	<b>24</b>	<b>24</b>	<b>24</b>	<b>24</b>	<b>24</b>	<b>24</b>

**10. Faculty profile with name, qualification, designation, specialization  
B.E, B.TECH / M.E, M.TECH. / Ph.D. Etc.,)**

S. No	Name of the Faculty	Qualification	Designation	Specialization	No. of Years of Experience	No Of Ph.D Students Guide d for the last 4 Years
1	Dr.Paulraj D	B.E.,M.E ., Ph.D	Professor & Head	Service Oriented Architecture, Cloud Computing	23	12
2	Dr.Faritha Banu	B.E.,M.E ., Ph.D	Professor	Networking	15.6	-
3	Mr.Shanmugas undaram M	B.E.,M.E , (Ph.D)	Associate . Prof.	Data Mining	27	-
4	Ms.Akila K	B.E., M.E	Associate . Prof.	Image Processing	11.6	-
5	Mr.Naresh Sammeta	B.E., M.E	Associate . Prof.	Algorithm Design	9.6	-
6	Mr.Chitti babu K	B.Tech., M.E	Associate . Prof.	Cloud Security	9.6	-
7	Ms.Karthik.E	B.E., M.E	Asst. Prof.	Data Minimg	9.2	-
8	Ms.Nandakuma ri.R	B.E., M.E	Asst. Prof.	Computer Science & Engg.	8.6	-
9	Ms.Indra priyadarshini S	B.E., M.E	Asst. Prof.	Computer Science & Engg.	9.6	-
10	Ms.Saranya R	B.E., M.E	Asst. Prof.	Computer	4.5	-

				Science & Engg.		
11	Mr.Ranjith Kumar M	B.E., M.E	Asst. Prof.	Computer Science & Engg.	4.5	-
12	Ms.Indra G	B.E., M.E	Asst. Prof.	Computer Science & Engg.	6.9	-
13	Ms.Shiny Irene D	B.E., M.E	Asst. Prof.	Computer Science & Engg.	3.5	-
14	Mr.Kumaran V	B.E., M.E	Asst. Prof.	Computer Science & Engg.	3.5	-
15	Ms.Suriya Praba T	B.E., M.E	Asst. Prof.	Computer Science & Engg.	3.6	-
16	Ms.Prianka R R	B.E., M.E	Asst. Prof.	Computer Science & Engg.	2.9	-
17	Ms.Vaishnavi S	B.E., M.E	Asst. Prof.	Computer Science & Engg.	2.7	-
18	Ms.Anjana Devi J	B.E., M.E	Asst. Prof.	Computer Science & Engg.	1.6	-
19	Ms.Kavitha C	B.E., M.E	Asst. Prof.	Computer Science & Engg.	1.6	-
20	Ms.Pradheeba U	B.E., M.E	Asst. Prof.	Computer Science & Engg.	1.5	-

<b>Adjunct Faculty</b>						
21.	Mr. Selvaprabu J	B.E., M.E	Asst. Prof.	Computer Science & Engg.	10.6	-
22.	Mr. Saravanan P	B.E., M.E	Asst. Prof.	Computer Science & Engg.	12.7	-
23.	Mr. Kaushik Raghavan	B.E., M.E	Asst. Prof.	Computer Science & Engg.	10.11	-
24.	Ms. Aarthi D	B.E., M.E	Asst. Prof.	Computer Science & Engg.	-	-

**11. List of senior visiting faculty:**

S.No	Name of Visiting Faculty	Designation	Organization
1	Mr.Selvaprabu J	Web Designer	I-Link Multitech Solutions Pvt. Ltd, Chennai
2	Mr. Saravanan P	Senior Programmer	I-Link Multitech Solutions Pvt. Ltd, Chennai
3	Mr. Kaushik Raghavan	Senior Quality Manager	Appedo Technologies, Chennai

**12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:**

All lectures and practical classes are handled by permanent faculty of our college. Adjunct faculties from industries are also handling partial workload.

**13. Student -Teacher Ratio (programme wise):**

Courses	Programmes	Student -Teacher Ratio
UG	Computer Science and Engineering	15:1

**14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:**

Cadre	Sanctioned	Filled
Academic Support Staff	05	05
Administrative Staff	01	01

**15. Qualifications of teaching faculty with M.E, M.TECH. /Ph.D.,**

S.No	Year	Qualification					
		D.Sc. / D.Litt.	Ph.D .	M. Phil.	PG	Total	Pursuing Ph.D
1	2013 – 14	-	1	-	11	12	03
2	2014 – 15	-	1	-	23	24	06
3	2015 – 16	-	2	-	22	24	12
4	2016 – 17	-	2	-	22	24	13

**16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:**

NIL

**17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received:**

NIL

**18. Research Centre /facility recognized by the University:**

NIL

### 19. Publications: Publication per faculty: for 4 years

S.No	Name of the Faculty Member	Total No of papers Published		Citation indices range				
		Conference	Journal	Citation Index	Impact Factor	Latest SJR	Latest SNI P	Latest h index
1.	Dr.Paulraj D	10	7	50	5.74 6	2.99 6	2.5	3
2.	Dr.Faritha Banu J	13	8	14	0.25	0.15	0.25	3
3.	Mr.Shanmugasundaram M	20	15	-	-	-	-	-
4.	Ms.Akila K	6	15	15	6.57 7	0.03 4	0.07 2	1
5.	Mr.Naresh Sammeta	4	8	-	-	-	-	-
6.	Mr.Chitti babu K	4	4	-	-	-	-	-
7.	Ms.Karthik.E	1	4	-	-	-	-	-
8.	Ms.Nandakumari.R	2	2	-	-	-	-	-
9.	Ms.Indra priyadarshini S	7	5	-	-	-	-	-
10.	Ms.Saranya R	4	6	-	-	-	-	-
11.	Mr.Ranjith Kumar M	4	5	-	-	-	-	-
12.	Ms.Indra G	2	2	-	-	-	-	-
13.	Ms.Shiny Irene D	4	2	-	-	-	-	-
14.	Mr.Kumaran V	1	4	-	-	-	-	-
15.	Ms.Suriya Praba T	3	5	-	-	-	-	-
16.	Ms.Prianka R R	2	2	-	-	-	-	-
17.	Ms.Vaishnavi S	4	4	-	-	-	-	-
18.	Ms.Anjana Devi J	4	4	-	-	-	-	-
19.	Ms.Kavitha C	5	5	-	-	-	-	-

20.	Ms.Pradheeba U	5	3	-	-	-	-	-
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**Number of papers published in peer reviewed journals (National / International) by student:**

S.No	Academic Year	No. of papers published by students	
		Conference	Journal
1	2013 – 2014	17	0
2	2014 – 2015	28	3
3	2015 – 2016	46	0
4	2016 – 2017	15	5

**Books with ISBN/ISSN numbers with details of publishers:**

S.No	Title of Book	Author	Publisher	Year of Publication
1	Design and Analysis of Algorithm	Ms. Prianka R R	Shahara Publications	2016
2	Software Engineering	Dr.N.Sankar Ram	Magnum Publications	2015

#### **21. Areas of consultancy and income generated:**

S.N o.	Acade mic Year	Name of faculty	Client Organiza tion	Area of Consulta ncy	Title of Consulta ncy of project	Amo unt receiv ed (in Rupe es)
1.	2014 – 15	Dr. Sankar Ram N Mr. Shanmugasundaram M Ms. Indra Priyadharshini	Sunlite Software Solutions Pvt Limited, Chennai	Mobile Application Development	IBUG	10,00 0
2.	2015 – 16	Mr.Naresh Sammeta	Sunlite Software Solutions Pvt Limited, Chennai	IOT & Robotics	ROBO PI	15,00 0

**21. Faculty as members in a) National committees b) International Committees c) Editorial Boards.**

**a) National Committees:**

S.No	Name of the staff	Memberships in National and International professional bodies
1.	Dr.Paulraj D	ISTE
2.	Dr.Faritha Banu J	ISTE
3.	Mr.Shanmugasundaram M	ISTE ,CSI, IAENG
4.	Ms.Akila K	ISTE ,CSI, IAENG, UACEE
5.	Mr.Naresh Sammeta	ISTE, IACSIT, The IRED
6.	Mr.Chitti babu K	ISTE
7.	Ms.Karthik.E	ISTE
8.	Ms.Nandakumari.R	ISTE
9.	Ms.Indra priyadarshini S	ISTE , IAENG, IACSIT
10.	Ms.Saranya R	ISTE, ISRD,IAENG
11.	Mr.Ranjith Kumar M	ISTE , CSI
12.	Ms.Indra G	ISTE , CSI
13.	Ms.Shiny Irene D	ISTE
14.	Mr.Kumaran V	ISTE
15.	Ms.Suriya Praba T	ISTE
16.	Ms.Prianka R R	ISTE
17.	Ms.Vaishnavi S	ISTE
18.	Ms.Anjana Devi J	ISTE
19.	Ms.Kavitha C	ISTE
20.	Ms.Pradheeba U	ISTE

**b) International Committees:**

NIL

**c) Editorial Boards**

S. No	Faculty Name	Name of the Journal/Publishers	Membership in Editorial Board
1.	Dr.D.Paulraj	The Computer Journal – OXFORD International Journal.	Reviewer
		Computational Intelligence, an International Journal (Wiley – Blackwell)	
		Concurrency and Computation: Practice and Experience (Wiley)	
2.	Dr.Faritha Banu	American Journal of Applied Science	Reviewer
		Journal of computer science	
		International Journal of Trend in Research Development	

**22. Student projects:**

**a) Percentage of students who have done in-house projects including inter Departmental / Programme.**

S. No	Percentage of In-House Projects			
	2010 – 2014	2011 – 2015	2012 – 2016	2013 – 2017
1.	89	95	96	95

**b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories / Industry / other agencies:**

S. No	Percentage of Outside Institution Projects			
	2010 – 2014	2011 – 2015	2012 – 2016	2013 – 2017
1.	11	5	4	5

**23. Awards / Recognitions received by faculty and students:****Faculty:**

Sl. No.	Name of the Faulty	Organization	Awards/Recognitions received by faculty	Year
1.	Dr. Paulraj D	Registrar of Co-Operative Societies, Govt. of Kerala	Technical Advisor	2004
2.	Dr. Paulraj D	COSTECH, Trivandrum	Advisory Board Member	2005
3.	Dr. Paulraj D	Kannur University.	Board of Study Member	2005
4.	Dr. Paulraj D	IET, Chennai Network	Men Engineer Award	2012
5.	Dr. Paulraj D	National Board of Accreditation (NBA), New Delhi	Evaluator	2013
6.	Mr. Shanmugasundaram M	II Prize in Online Mobile App Objective Test	TCS, Siruseri.	2016

7.	Mr. Chittibabu K	I prize	Content guru Event (Individual), Infosys Technologies, Chennai	2016
8.	Mr. Chittibabu K	JAVA Trainer	Wipro Certified PBL	2016
9.	Mr. Chittibabu K	Silver Partner Faculty	Infosys Campus Connect	2016
10.	Ms Suriya Praba T	I prize	Content guru Event (Individual), Infosys Technologies, Chennai	2016
11.	Ms Suriya Praba T	Bronze Partner Faculty	Infosys Campus Connect	2016
12.	Mr. Karthik E	Bronze-Partner Faculty	Infosys Campus Connect	2016
13.	Mr. Shanmugasundaram M	Certified Auditor	IAO ( International Assessment Organization	2017
14.	Mr. Shanmugasundaram M	Anna University, supported by NASSCOM	Certified Master Trainer in “Foundation studies in Integrated Product Development”	2017
15.	Mr. Shanmugasundaram M	Reviewer & Member - Technical Committee	Intelligent Communication and Computational Techniques ICCT'17, Manipal University, Jaipur	2017
16.	Dr. Paulraj D	National Level Award Coordinator	Dr. Kalam Educational Trust	2017

**Students:**

Academic Year	Awards / Recognitions received by students		
	University Rank	Awards	Prize Won in Co-curricular & Extra Curricular Activities
2013 – 14	6	-	12
2014 – 15	4	-	7
2015 – 16	9	1	9
2016 – 17	3	-	15

**Awards**

S.No	Name of the Student	Organization	Awards / Recognitions received by Students	Year
1.	Rizwan Ahamed	ISTE	Best Student Award	2016

**24. List of eminent academicians and scientists / visitors to the department:**

<b>2013 – 14</b>			
Sl. No.	Eminent Academicians, Scientists and Visitors with Designation	Specialization	Name of the University/ Institute/Industry
1.	Mr. Prem Kumar	Special Lecture on Big Data	TCS.
2.	Mr.Jagadeeswaran	Special Lecture on Big Data	TCS
3.	Mr. Srikanth	Special Lecture on Mobile Android Workshop	IT Analyst, TCS
4.	Mr. P. Mehta	Special Lecture on Mobile Android with JAVA	Software Engineer, Patni
5.	Dr.M.P. Pillai,	Special Lecture on IOT	Director ,NIELIT, Chennai
6.	Shri Jupdi Srinivasa Rao	Special Lecture on ANDROID , IOS	Head – Information Security, Tata Consultancy Services, Chennai.
7.	Mr. Kathiresan,	Special Lecture on Grid Computing	Senior Manager , Society of India
<b>2014 – 15</b>			
1.	Mr. G. Ramakrishna Assistant Professor,	Special Lecture on Design and Analysis of Algorithms	IIIT Sri City
2.	Mr.Prabhakar	Special Lecture on Cloud Infrastructure and Services	A.V.S., Vice-President, Federal Information Service

3.	MR. E.P Subhash	Special Lecture on High Dimensional Data Analytics with AWS	Founder and Head of Technology , TechV Training
4.	Dr.M.P. Pillai, Director ,	Special Lecture on IOT	NIELIT, Chennai
5.	Er. S.Ramaswamy	Special Lecture on Web Services	Chairman, IETE Chennai Center.
<b>2015 – 16</b>			
1.	Dr.Tamil Parithi M,	Special Talk on Tamil Computing	Tamil Virtual Academy
2.	Mr. S. Dinakaran	Special Talk on Tamil Computing	Tamil Virtual Academy
3.	Dr Somasundaram P	Special Lecture on Cloud Computing	Zonal Officer from Anna University
4.	Dr Gokula Krishnan	Special Lecture on Cloud Computing	Joint Director, Software Technology Park of India
<b>2016 – 17</b>			
1.	Dr.K.Jayaraman	Sixth National Conference on Computing Technologies Todays and Beyond (NCCTTB'17)	Distinguished Scientist , DRDO Chennai
2.	Mr. S. Kailash	Special Lecture on Grid and Cloud Computing	Senior Engineer, CDAC, Chennai
3.	Dr. Mahendran E	Special Lecture on IOT	Senior Engineer, CDAC, Chennai
4.	Shri. B. Anbuthambi	Special Lecture on Grid Computing	Vice President-Education Initiatives, ICTACT, Chennai
5.	Kaushik Raghavan	Special Lecture on OOAD Testing	APPEDO Chennai
6.	Mr.J.Selvaprabu	Special Lecture on Web services Soap-UI-Demo	ILink Multitech Solutions Chennai
7.	Mr.Saravanan.P	Special Lecture on Project management methodology	ILink Multitech Solutions Chennai
8.	Mr.S.Prabakaran	Special Lecture on Web development and Web services	Harbha's Technologies Chennai
10.	Mr. Arun Prakash	Special Lecture on Open Source Software	Technology Analyst, Cognizant Chennai

11.	Dr. Mahendran E	Special Lecture on Web Technologies	Senior Engineer CDAC, Chennai
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**International:**

Sl. No.	Date	Seminars / Conferences / Workshops organized	Funded by
1.	15.12.2014 & 16.12.2014	International Conference on Recent Trends in Electrical, Electronics, Computing and Communication (ICRTEECC-2014)	IEEE & IET

**25. Seminars / Conferences / Workshops organized & the source of funding****a) National****b) International**

Sl. No.	DATE	Seminars / Conferences / Workshops organized	Funded by
<b>2013 – 14</b>			
1.	16.10.2014	One Day workshop on Big Data Analytics	RMKCET
2.	09.12.2013	One day workshop on Mobile Android	TCS
3.	01.10.2013	Seminar on Cloud Computing	RMKCET
4.	05.09.2013	Seminar on Mobile Android OS	RMKCET
5.	16.09.2013	National level technical symposium - XENIOZ-13	CSI
6.	10.02.2014	National Conference on Computing Technologies – Today's & Beyond (NCCTTB -14)	CSI
7.	10.06.2014 to 16.06.2014	One Week FDTP on Programming Paradigms	Anna University, Chennai
8.	03.08.2013	One Day Seminar on Professional Ethics	RMKCET
9.	16.10.2014	One Day workshop on Big Data Analytics	RMKCET
<b>2014 – 15</b>			
1.	06.02.2015.	One day Workshop on Design and Analysis of Algorithms	CSI
2.	22.06.15 to 26.06.15	Staff Development and Training Programme on Cloud Infrastructure and Services	ISTE
3.	10.10.15	Workshop on High Dimensional Data Analytics with AWS'	RMKCET
4.	14.03.2015	Seminar on Awareness of Cancer	ISTE
5.	11.03.2015	One day motivational talk on Personality Development	ISTE

6.	07.03.2015	ISTE Sponsored International Women's Day	ISTE
7.	14.06.2014	Motivational program called This Too Shall Pass	ISTE
8.	08.09.2014	National Level Technical Symposium - XENIOZ-14	CSI
9.	09.03.2015	National Conference on Computing Technologies – Today's & Beyond (NCCTTB -15)	CSI
10.	23.04.2014	One day Seminar on Voice Disorder less Oral Aural Transfer of Information in Classrooms	ISTE
11.	06.02.2015	One day workshop on Algorithm and Analysis	RMKCET
<b>2015 – 16</b>			
1.	09.03.2016 and 10.03.2016	Workshop on Big Data Analytics	RMKCET
2.	10.03.16	Inaguration of Association for KaniTamil Peravai	TVA
3.	07.03.2016	National Conference on Computing Technologies Todays and Beyond – NCCTTB16	CSI
<b>2016 – 17</b>			
1.	6.3.2017	National conference on Computing Technologies Todays and Beyond – NCCTTB17	CSI
2.	27.07.2016	Workshop on Grid and Cloud Computing	RMKCET
3.	26.09.2016	XENIOZ-16 - National Level Technical Symposium	CSI
4.	20-08-2016	Seminar on OOAD Testing	RMKCET
5.	20-08-2016	Seminar on Web services SOAP-UI-Demo	RMKCET
6.	20-08-2016	Seminar on Project management methodology	RMKCET
7.	02.09.2016	Workshop on Web development and Web services	RMKCET
8.	31.12.2016	Seminar on Open Source Software	RMKCET

**International:**

Sl. No.	Date	Seminars / Conferences / Workshops organized	Funded by
1.	15.12.2014 & 16.12.2014	International Conference on Recent Trends in Electrical, Electronics, Computing and Communication (ICRTEECC-2014)	IEEE & IET

**26. Student profile programme/course wise:**

Academic Year	Application received/ Selected	Enrolled (MQ+DTE+LE)	
		M	F
2013 – 2014	111	48	63
2014 – 2015	120	56	64
2015 – 2016	119	47	72
2016 – 2017	119	63	56

\*M = Male \*F = Female

**27. Diversity of Students**

Academic Year	% of students from the same state	% of students from other States	% of students from abroad
2013 – 2014	90.99	9.01	-
2014 – 2015	85.83	14.17	-
2015 – 2016	84.87	15.13	-
2016 – 2017	86.55	13.45	-

**28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?**

Sl. No.	Year of Passing	Competitive Examinations	No of students cleared
1	2013 – 2014	TANCET	2
		GRE	4
2	2014 – 2015	TANCET	3
		GRE	3
3	2015 – 2016	TANCET	2
		GRE	6
4	2016 – 2017	GRE	5
		MAT	1
		CIVIL SERVICE	1
		GATE	6
		TOEFL	2
		CAT	2

**29. Student progression:**

S.No	Student progression	Against % enrolled			
		2013 – 14	2014 – 15	2015 – 16	2016 – 17
1.	UG to PG	5.5%	3.125%	6.25%	11.7%
2.	Employed through Campus selection	47.22%	74.26%	52.34%	49.5%

3.	Other than campus recruitment	33%	7.57%	11.71%	-
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### 30. Details of Infrastructural facilities

- ❖ Library
- ❖ Internet facilities for staff & Students
- ❖ Class rooms with LCD facility
- ❖ Laboratories

#### a) Library

S.No	Year	No. of Books added	No. of Journals	
			National	International (e-journal)
1.	2013 – 2014	641	12	150
2.	2014 – 2015	523	12	40
3.	2015 – 2016	569	12	150
4.	2016 – 2017	364	12	150

#### b) Internet facilities for Staff & Students

Name of the Internet provider	:	Reliance, Tata Indicom
Available bandwidth	:	170 Mbps Reliance 25 Mbps Tata Indicom = 195 Mbps
Access speed	:	Download 35Mbps Upload: 9Mbps
Availability of internet in an exclusive lab	:	Available
Availability in most computing labs	:	Available
Availability in departments and other units	:	Available
Availability in faculty rooms	:	Available
Institute's own e-mail facility to faculty / students	:	Yes
Security/ privacy to e-mail/internet users	:	Security and privacy provided by firewall
Wi Fi Connection	:	Available (195 Mbps)
Total Number of Systems with Internet Facility	:	606

#### c) Class rooms with ICT Facility:

LCD projectors for multimedia presentation	:	05 Nos.
Overhead projector	:	04 Nos.

#### d) Laboratories:

S.No	Name of the Subject	Name of the Lab	Area
1.	Computer Programming Lab	Computer Lab – 1	171.75

	Programming and Data Structures lab - I Programming and Data Structures lab – II Communication lab		
2.	Database Management Systems Lab Networks Lab Operating Systems Lab	Computer Lab – 2	2 x 111.66
3.	Case Tools Lab Internet Programming Lab Computer Graphics Lab Mobile Application Development lab Compiler lab Security lab Grid and Cloud Lab	Computer Lab – 3	2 x 80.28

**31. Number of students receiving financial assistance from college, university, Government or other agencies**

S.No	Year	No. of Students receiving financial assistance from			
		College	University	Government	Other Agencies
1.	2013 – 14	4	-	27	-
2.	2014 – 15	5	-	34	-
3.	2015 – 16	6	-	67	-
4.	2016 – 17	6	-	79	-

**32. Details on student enrichment programmes (Special lectures/ workshops/ seminar) with external experts.**

Sl. No.	Date	Title of the Special Lecture / Workshop / Seminar	Name of the Resource Person
<b>2013 – 2014</b>			
1.	27.02.2014	Intramural Competition	Rajesh Marthandam , Director, CTS
2.	09.12.2013	Mobile Android Workshop	TifacCore, Ms.P.Mehta, System Engineer, TCS Bangalore and Mr.Srikanth, IT Analyst, TCS Bangalore.
3.	01.10.2013	Seminar on Cloud Computing	Mr. Abhilash Mohapatra, SVATAS Innovations.
4.	11.09.2013	CSI Student Chapter Inauguration	Mr.S.Ramasamy, CONSULTANT- CSI

5.	27.07.2013	Students' Association	DR. P.M Shariff , CEO Chairman, Qteem Techno Solutions
6.	05.09.2013	Mobile Android OS	MR. Sreekanth , TCS
7.	16.09.2013	XENIOZ-13	Dr.M.P. Pillai, Director, NIELIT
8.	10.02.2014	Computing Technologies – Today's & Beyond (NCCTTB -14)	Shri Jupdi Srinivasa Rao, Head – Information Security, Tata Consultancy Services
9.	10.06.2014 to 16.06.2014	Programming Paradigms	Dr.Swamynathan, Profesor Anna University, Chennai
10.	27.07.2013	Awareness Program of CSI	Dr.P.M.Shereef, CEO - QTeem Technologies
<b>2014 – 2015</b>			
1.	06.02.2015.	Design and Analysis of Algorithms	Dr.G.RamaKrishna, AP/CSE, IIIT-Sri city
2.	22.06.15 to 26.06.15	Cloud Infrastructure and Services	Mr.K.Subash
3.	09.03.2015	Computing Technologies – Today's & Beyond (NCCTTB -15)	<b>S.Ramaswamy</b> , Chairman, IETE Chennai Center
4.	28.01.2014	Special Lecture on Pipelining-Computer Architecture	Dr.Manimagalai R Prof, Park College Of Engineering & Technology- Coimbatore
5.	01.02.2015	Special Lecture on Web Technology	Mr.Kishan Chaitanya
6.	19.02.2015	Special Lecture on Micro Processor & Micro Controller	Mr.Pursothaman, Training Manager, EPR Labs
7.	28.02.2015	Special Lecture on Artificial Intelligence	Ms.K.S Gayathri Associate Professor, SVCE
8.	11.07.2015	Special Lecture on Theory of Computation	Dr. N. Sadagopan IITDM - Kancheepuram
9.	26.08.2015	Special Lecture on Computer Graphics	Dr. R.Parvathi,VIT, Chennai, on
10.	29.08.2015	Special Lecture on Internet Programming	Mr. Srikanth, TCS - Chennai
11.	28.08.2015	Special Lecture on Mobile and Pervasive Computing	Mr. Premkumar, Sunlite Software Solutions, Chennai

12.	05.09.2015	Special Lecture on Database Management Systems	Mr.Srinivas Bharathi and Mr. Vinoth, Spintum Technologies, Chennai
<b>2015 – 2016</b>			
1.	09.03.2016 and 10.03.2016	Big Data Analytics	Mr Raman G., Trainer, Cloud Madurai Technologies
2.	10.03.16	KaniTamil Peravai	Dr Thamizh Paridhi, State Coordinator of Tamil Virtual Academy and Mr Siva.Dinakaran, Research Associate of Tamil Virtual Academy
3.	07.03.2016	Computing Technologies Todays and Beyond – NCCTTB16	Dr Gokula Krishnan R., Joint Director, Software Technology Parks of India, Chennai, Dr Somasundaram P., Zonal Officer from Anna University
4.	17.03.2016	Intramural Competitions	CSI
5.	05.03.2016	Special Lecture on Micro Processors and Micro Controllers	Mr. Purushothaman R., EPR Labs
6.	18.03.2016	Special Lecture on Artificial Intelligence	Ms. Kujaini T Associate Professor, S K R Engineering College
7.	24.03.2016	Special Lecture on Digital Signal Processing	Dr Subramaniam N P, Professor, Pondicherry Engineering College
8.	04.02.2016	Special Lecture on Principles of Compiler Design	Mr Narayanan S Assistant Professor, Velammal Engineering College
9.	06.02.2015.	Special Lecture on Design and Analysis of Algorithms	Dr.G.RamaKrishna, AP/CSE, IIIT-Sri city
10.	22.06.15 to 26.06.15	Special Lecture on Cloud Infrastructure and Services	Mr.K.Subash
<b>2016 – 2017</b>			
1.	27.07.2016	Grid and Cloud Computing	Mr Kailash S., Senior Engineer, C-DAC

2.	27.07.2016	Computer Science and Engineering Student's Association and CSI Students Association of CSE	Dr. Mahendran E., Senior Engineer, C-DAC
3.	26.09.2016	XENIOZ-16	Shri. B. ANBUTHAMBI Vice President- Education Initiatives, ICTACT
4.	20-08-2016	Special Lecture OOAD Testing	Mr.Kaushik.R ,Manager,Appedo
5.	20-08-2016	Special Lecture Web services Soap-UI-Demo	Mr.J.Selvaprabu.,ILink Multitech Solutions pvt Ltd
6.	20-08-2016	Special Lecture “Project management methodology	Mr.Saravanan.P.,ILink Multitech Solutions pvt Ltd
7.	02.09.2016	Special Lecture “Web development and Web services	Mr.S.Prabakaran., Harbha’s Technologies,
8.	31.12.2016	Special Lecture Open Source Software	Mr. Arun Prakash, Technology Analyst, Cognizant and Ms. Tamarai K, HR – Inautix

### 33. Teaching methods adopted to improve student learning

- ❖ Chalk and Board Method
- ❖ Class test / Improvement test
- ❖ Industrial Visits
- ❖ Demonstration method of teaching
- ❖ NPTEL or Video based presentations
- ❖ Online multiple choice questions for placement training.

### Paradigm shift in Teaching

- ❖ The traditional teaching method of **chalk and talk** is predominantly used in all lecture classes.
- ❖ The lecture sessions are adequately supplemented by **modern electronic teaching gadgets**.
- ❖ For effective class room teaching, **Power Point Presentation and Video Lectures** are used.
- ❖ The college library is fully equipped, keeping pace with the latest trends. It has many **e-resources** with **e-journals** and databases for the use of the faculty and students.
- ❖ Sophisticated and well equipped laboratories in the campus invigorate the students to do research activities.
- ❖ Interactive and participatory activities are adopted by the teachers to make the learning process student-centric.
- ❖ Through **Seminars, Debates and Group Discussions**, students are

encouraged to practice both individual and collaborative learning process.

- ❖ Students are taken to **Industries and Research Institutes and Field Visits** to expose them to the latest developments in their discipline.

### **34. Participation in Institutional Social Responsibility (ISR) and Extension activities**

#### **YRC Club Activities**

- ❖ Every Academic Year YRC Conducts Blood Donation Camp and Tree Plantation Camp.
- ❖ Youth Red Cross Unit of the college received “**Best Performance in Youth Red Cross Unit**” Award from the Indian Red Cross Society on 06.01.2015.

S.no	Date	Program	No of Students Participated
1.	05-10-2013	Blood Donation Camp	50
2.	22-02-2014	Tree Plantation Programme and First Aid Awareness	33
3.	24-01-2015	Tree Plantation Programme and First Aid Awareness	46
4.	07-03-2015	Blood Donation Camp	49
5.	11-03-2016	Blood Donation Camp and First Aid Awareness Programme.	45
6.	06-04-2016	Tree Plantation Programme.	51

### **35. SWOC analysis of the department and Future plans**

#### **Strength:**

- ❖ Computer Science and Engineering is the most sought after branch as the students getting placed in core IT companies is on an increasing trend and the overseas opportunities for students for education and placements is very bright.
- ❖ The Department has highly qualified and dedicated faculty members.
- ❖ The faculty has a great sense of belongingness for the institution, especially for the students.
- ❖ The department invites distinguished industrialists as well as academicians from Institutes of Higher Learning such as IIT, IITDM etc.,
- ❖ The Department has the unique distinction of three Centers of Excellence in the cutting edge technologies such as Big Data, Mobility, and Information Security.
- ❖ The Department has entered into Memorandum of Understanding with leading industries to bridge the gap between academia and industry.
- ❖ Students' placement in product based industries such as iNautix, Zoho Corporation fascinates the prospective students to join this department to get the dream offers.
- ❖ Students are given more opportunities to undergo in-plant training in various industries and value added courses to fill the gap between

industries and institution.

- ❖ Students actively participate in many paper presentations at various colleges to enrich their knowledge and gain world class learning experience.

**Weaknesses:**

- ❖ Professional skills of the students need to be improved.
- ❖ Quality Research Publications in International peer reviewed research journals
- ❖ Consultancy and funded projects from top class research organizations to be obtained
- ❖ Research Centre facility

**Opportunities:**

- ❖ Encouraging more number of students and faculty to attend national / International seminars and conferences
- ❖ Digital learning management systems projects, research, knowledge updating and entrepreneurship development
- ❖ Student academic projects are to be converted as products.
- ❖ Enhance the Industry Institute Partnership.

**Challenges:**

- ❖ All eligible students to be made employable
- ❖ Modifying rural students into full-fledged employable engineers.
- ❖ Entrepreneurship development

**Future Plan:**

- ❖ Collaboration with international universities and companies.
- ❖ Placement of our students in multinational companies.
- ❖ More emphasis on R&D Development.
- ❖ Improving professional skills of our students by special training classes.
- ❖ Motivating the students towards research based learning.
- ❖ Encouraging staff and students towards achieving consultancy and funded project

## EVALUATIVE REPORT OF THE DEPARTMENT

**1. Name of the department** : Electronics and Communication Engineering (ECE)

**2. Year of Establishment** : 2008

**3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)**

UG: Bachelor of Engineering in Electronics and Communication Engineering

**4. Names of Interdisciplinary courses and the departments/units involved:**

There are no Interdisciplinary courses

**5. Annual / semester / choice based credit system (Programme wise):**

Semester Based Credit System prescribed by Anna University

**6. Participation of the department in the courses offered by other departments**

Sl. No.	Subject Code	Subject Name	The Department in which the course is offered
1.	GE6162	Engineering Practices Lab	S&H
2.	CS6201	Digital Principles and System Design	S&H
3.	EC6202	Electronic Devices and Circuits	EEE
4.	EE6303	Linear Integrated Circuits	EEE
5.	CS6304	Analog & Digital Communication	CSE
6.	EE6403	Discrete Time Systems and Signal Processing	EEE
7.	IT6502	Digital Signal Processing	CSE
8.	EC6651	Communication Engineering	EEE
9.	EC6504	Microprocessor and Microcontroller	CSE

**7. Courses in collaboration with other universities, industries, foreign institutions, etc.**

S.No	Course	Collaborative Industry / University
1.	BEC	Cambridge University

2.	CCNA	CCNA-Cisco Certification Course
3.	KPIT-Automotive Electronics	KPIT -Industry
4.	WIPRO TELECOM	WIPRO-Industry
5.	CoE Digital Enterprises (Mobility Test)	CTS-Industry
6.	NPTEL Course	IIT
7.	WIPRO EMBEDDED	WIPRO-Industry
8.	Infosys Campus Connect	Infosys- Industry
9.	SMART Training	SMART Training Resources
10.	JADE Programme	JADE Training Resources

#### 8. Details of courses / programmes discontinued (if any) with reasons:

There is no discontinuity of courses

#### 9. Number of Teaching Posts

S.No	Designation	2013 – 14		2014 – 15		2015 – 16		2016 – 17	
		S	F	S	F	S	F	S	F
1.	Professors	3	3	3	3	4	4	4	4
2.	Associate Professors	6	6	6	6	8	8	8	8
3.	Asst. Professors	19	19	23	23	24	24	21	21
4.	Adjunct faculty	-					7	7	7
<b>TOTAL</b>		<b>28</b>	<b>28</b>	<b>32</b>	<b>32</b>	<b>36</b>	<b>36</b>	<b>40</b>	<b>40</b>

#### 10. Faculty profile with name, qualification, designation, specialization

S.N o	Name of the Faculty Member	Qualification	Designation	Specialization	No of Years of Experience	No. of Ph.D Students guide d for the last 4 years
1.	Dr. Gangatharan N	M.E,M .E., MBA,P h.D	Professor & Head	Telecommunication/Digital Signal Processing	28.3	5
2.	Dr. Arun C	M.E., Ph.D	Professor	VLSI Design	14.6	14

3.	Dr. Inbamalar T M	M.E., Ph.D	Professor	Signal Processing	17.7	-
4.	Dr.Shanthi K G	M.E., Ph.D	Professor	VLSI Design	16.4	-
5.	Ms. Kannagi V	M.E., (Ph.D)	Associate Professor	VLSI Design	15.3	-
6.	Ms. SeshaVidhya S	M.E., (Ph.D)	Associate Professor	Applied Electronics	13.10	-
7.	Ms. Praveena N G	M.E., (Ph.D)	Associate Professor	Communication Systems	14.8	-
8.	Mr. Muthumanic kam S	M.E., (Ph.D)	Associate Professor	Applied Electronics	14.5	-
9.	Dr.Arulanant h T S	M.Tec h., Ph.D	Associate Professor	Image Processing	12.5	-
10.	Mr.Kannan K	M.E., (Ph.D)	Associate Professor	Optical Communication	14.7	-
11.	Mr.Manikand an A	M.E., (Ph.D)	Associate Professor	Communication Systems	10.5	-
12.	Mr.VijayAna ndh R	M.E., (Ph.D)	Associate Professor	Applied Electronics	11.9	-
13.	Ms.Indumath y T	M.E.,	Assistant Professor	Medical Electronics	13.7	-
14.	Ms. Sangeethalak shmi K	M.E., (Ph.D)	Assistant Professor	VLSI Design	7.9	-
15.	Mr.Sathyaraj P	M.E,M BA., (Ph.D)	Assistant Professor	Applied Electronics	6.7	-
16.	Mr. Sudharsanam V	M.E.,	Assistant Professor	Applied Electronics	6.5	-
17.	Mr.SathishK umar G	M.E.,	Assistant Professor	VLSI Design	5.4	-
18.	Ms. Dhivya K	M.E., (Ph.D)	Assistant Professor	Communication Systems	9.5	-
19.	Ms. Chitra A	M.E., (Ph.D)	Assistant Professor	VLSI Design	4.6	-
20.	Ms.Poovizhi S	M.E., (Ph.D)	Assistant Professor	Applied Electronics	4.6	-
21.	Ms.Sandhiya G	M.E.,	Assistant Professor	VLSI Design	4	-
22.	Ms.Parvathy G	M.E.,	Assistant Professor	VLSI Design	8.2	-

23.	Mr. Ramachandra n R	M.E., (Ph.D)	Assistant Professor	Embedded System Technologies	8	-
24.	Mr. Babu M	M.E., (Ph.D)	Assistant Professor	VLSI Design	4.4	-
25.	Ms. Nimitha N	M.E., (Ph.D)	Assistant Professor	Communication Systems	7.2	-
26.	Mr. Hedayath Basha S	M.E., M.Tec h, (Ph.D)	Assistant Professor	Applied Electronics	8.8	-
27.	Mr. Jaiganesh S	M.E., (Ph.D)	Assistant Professor	Communication Systems	3.6	-
28.	Mr. Kumar T	M.E., (Ph.D)	Assistant Professor	Computer and Communication	3.6	-
29.	Ms. ArthiDevarani	M.E.,	Assistant Professor	Communication Systems	1.6	-
30.	Ms. CiyamalaKus hbu S	M.E., (Ph.D)	Assistant Professor	Communication and Networking	1.6	-
31.	Ms.Mekala Thirunellai Selvi J	M.E.,	Assistant Professor	Computer and Communication	4.6	-
32.	Mr.Manikandan K	M.E.,	Assistant Professor	Applied Electronics	2.10	-
33.	Ms.Bhayasre e M	M.E.,	Assistant Professor	VLSI Design	3 Month s	-

**Adjunct Faculty**

34.	Mr. Tamil Chelvan R	M.E.,	Adjunct faculty	Communication Systems	20.3	-
35.	Dr.Ravindra Babu S	Ph.D	Adjunct faculty	Surveying and Spatial Information Systems	22.7	-
36.	Mr. Saravanan S	M.E., (Ph.D)	Adjunct faculty	Medical Electronics	23.7	-
37.	Mr.Ganaesh E	M.E.	Adjunct faculty	Embedded System Technologies	4.9	-
38.	Mr.Baskar S	M.E	Adjunct faculty	Computer Science Engineering	12	-

39.	Mr.Antony Prakash A	M.E	Adjunct faculty	Applied Electronics	7.8	-
40.	Ms.Revathy Gajendran	M.E	Adjunct faculty	Micro Electronics	2.8	-

**11. List of senior visiting faculty:**

Sl.No.	Name of the Faculty	Designation	Organization
1.	Dr. S.Ravindra Babu	Managing Director	Coovum Smart Systems and Services Private Limited, Chennai – 40
2.	Mr. R.Tamil Chelvan	Director	Vidhara Secure Com Pvt Ltd, Chennai-95
3.	Mr. S.Saravanan	Proprietor	SMK Instruments and Machine Inc, Chennai-110

**12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:**

All lectures and practical classes are handled by permanent faculty of our college. Adjunct faculties from industries are also handling partial workload.

**13. Student -Teacher Ratio (programme wise)**

Course	Programme	Student –Teacher Ratio
UG	Electronics and Communication Engineering	15:1

**14. Number of academic support staff (technical) and administrative staff; sanctioned and filled**

Sl.No.	Designation	Sanctioned	Filled
1.	Academic Support Staff	04	04
2.	Administrative Staff	01	01

**15. Qualifications of teaching faculty with D.Sc./ D.Litt./ Ph.D./ M. Phil. / PG.**

S.No	Year	Qualification				Total	Pursuing Ph.D
		D.Sc. / D.Litt	Ph.D.	M. Phil.	PG		
1.	2013 – 14	-	3	-	25	28	5

2.	2014 – 15	-	3	-	29	32	8
3.	2015 – 16	-	4	-	32	36	14
4.	2016 – 17	-	5	-	35	40	19

**16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:**

S.No	Funding Agency	Number of Faculty	Grants Received
1.	ISRO National Funding Agency	2	12.98L

**17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received:**

S. N o	Principal Investigators / Co Investigators	Project Title	Fund ing Agen cy	Durati on	Amount in Rs		Curr ent Status
					Sanctio ned	Utiliz ed	
1.	Dr. Arun C Mr.Muthumani S	Design and Implementation of Dual Blind Detection Robust Watermarking for Multimedia security in FPGA	ISRO	2 Years (2015-2017)	12.98L	In Progress	On Going

**18. Research Centre / facility recognized by the University:**

NIL

**19. Publications:**

Number of papers published in peer reviewed journals (national / international) by faculty and students

**Number of papers published in peer reviewed journals (national / international) by faculty:**

S.No	Name of the Faculty Member	Total No of papers Published		Citation indices range				
		Conf erenc e	Journ al	Citati on Index	Impa ct Facto r	Late st SJR	Late st SNI P	Late st h inde x
1.	Dr. Gangatharan N	26	25	60	1.683	0.589	1.207	5
2.	Dr. Arun C	56	63	145	2.5	0.17	0.42	6
3.	Dr. Inbamalar T M	12	10	10	0.77	0.31	0.38	3
4.	Dr. Shanthi K G	10	6	4	1	0.3	0.33	1
5.	Ms. Kannagi V	7	3	-	-	-	-	-
6.	Ms. SeshaVidhya S	5	4	-	1.65	-	-	-
7.	Ms. Praveena N G	3	5	2	0.627	0.31	-	1
8.	Mr. Muthumanickam S	13	5	-	2.59	-	-	-
9.	Dr.Arulananth T S	7	2	-	-	-	-	-
10.	Mr.Kannan K	9	2	-	-	-	-	-
11.	Mr.Manikandan A	11	4	2	1.823	0.2	0.401	1
12.	Mr.VijayAnand h R	2	2	-	-	-	-	-
13.	Ms.Indumathy T	6	1	-	-	-	-	-
14.	Ms. Sangeethalakshmi K	8	4	-	-	-	-	-
15.	Mr.Sathyaraj P	5	4	-	-	0.156	-	-
16.	Mr. Sudharsanam V	1	-	-	-	-	-	-
17.	Mr.SathishKumar G	2	4	-	-	-	-	-
18.	Ms. Dhivya K	14	9	-	-	-	-	-
19.	Ms. Chitra A	6	4	-	-	-	-	-
20.	Ms.Poovizhi S	7	7	-	-	-	-	-
21.	Ms.Sandhiya G	12	7	-	-	-	-	-

22.	Ms.Parvathy G	2	2	-	1.65	-	-	-
23.	Mr. Ramachandran R	6	2	-	-	-	-	-
24.	Mr. Babu M	6	7	-	-	-	-	-
25.	Ms. Nimitha N	11	7	-	1.65	-	-	-
26.	Mr. Hedayath Basha S	5	2	-	-	-	-	-
27.	Mr. Jaiganesh S	4	2	-	-	-	-	-
28.	Mr. Kumar T	5	2	-	-	-	-	-
29.	Ms. Arthi Devarani P	4	2	-	-	-	-	-
30.	Ms. CiyamalaKushb u S	4	2	-	-	-	-	-

**Number of papers published in peer reviewed journals (National / International) by Student:**

S.No	Academic Year	No of papers Published by Students	
		Conference	Journal
1.	2013 – 2014	5	3
2.	2014 – 2015	7	8
3.	2015 – 2016	53	11
4.	2016 – 2017	59	6

**Books Published**

S.No	Title of Book(s)	Authors	Publisher & Year of Publication
1.	Circuit Theory	Dr.T.V.Padmavathy	Kamalmani Publisher-2014
2.	Transmission Lines and Waveguides	Dr.K.G.Shanthi	ISBN13:9788192707617 Sruthi Publisher -2015(R 2013)
			Sruthi Publisher- 2012(R 2008)
3.	Microprocessor and Microcontroller	Dr.T.S.Arulananth Mr. R.Ramachandran	ISBN 9788193230688 Sahara Publications-2015
4.	Principles of Digital Signal Processing	Dr.T.S.Arulananth	ISBN 9788193230688 Sahara Publications-2015

5.	Antenna and Wave Propagation	Dr.K.G.Shanthi	ISBN- 13 9788193371053 Sruthi Publisher- 2017(R 2013)
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**20. Areas of consultancy and income generated:**

S.N o.	Acade mic Year	Name of faculty	Client Organiza tion	Area of Consultancy	Title of Consulta ncy of project	Amo unt recei ved (in Rupee s)
1.		Dr.C.Arun & Mr.R.Ramachandran	Respro Labs, Chennai	IOT	Data Interpretation and Analysis of Agriculture using IOT combined with Embedded Systems	10,000
2.	2016-17	Dr.N.Gangatharan & Mr.S.Muthumaniakam	Vidhara Secure Com, Vanagaram	Image Processing	Image watermarking for data security using MATLAB	10,000
3.		Dr.T.M.Inbamalar & Mr.P.Sathyaraj	Techso Technologies, Chennai	Image Processing	DNA Sequencing to analyze NIR Spectroscopy	10,000

**21. Faculty as members in a) National Committees b) International Committees c) Editorial Boards.**

**a) National committees and b) international committees**

S.No	Name of the Faculty Member	Membership in National and International Professional Bodies (ISTE,IET,IETE,IAENG or any other)
1.	Dr. Gangatharan N	ISTE, IET,IEEE,IAENG,FIE
2.	Dr. Arun C	ISTE, IET,IAENG
3.	Dr. Inbamalar T M	ISTE, IACSIT, IAENG
4.	Dr. Shanthi K G	ISTE,IACSIT,SDIWC,IAENG,ISRD
5.	Ms. Kannagi V	ISTE, IACSIT, IAENG
6.	Ms. SeshaVidhya S	ISTE,SDIWC,ISRD, IAENG
7.	Ms. Praveena N G	ISTE
8.	Mr. Muthumanickam S	ISTE
9.	Mr. Arulananth T S	ISTE,IAENG,ISRD
10.	Mr. KannanK	ISTE
11.	Mr. Manikandan A	ISTE
12.	Mr. VijayAnandh R	ISTE,IAENG,ISRD,NSPE
13.	Ms. Indumathy T	ISTE
14.	Ms. Sangeethalakshmi K	ISTE,IAENG,ISRD
15.	Mr. Sathyaraj P	ISTE,IAENG,ISRD
16.	Mr. Sudharsanam V	ISTE
17.	Mr. SathishKumar G	ISTE
18.	Ms. Dhivya K	ISTE,IAENG,ISRD
19.	Ms. Chitra A	ISTE,IET,IAENG
20.	Ms. Poovizhi S	ISTE,IET,IAENG, ISRD
21.	Ms. Sandhiya G	ISTE, IAENG,ISRD
22.	Ms. Parvathy G	ISTE
23.	Mr. Ramachandran R	IEEE, IETE, ISTE
24.	Mr. Babu M	ISTE
25.	Ms. Nimitha N	ISTE,IAENG,ISRD
26.	Mr. Hedayath Basha S	ISTE
27.	Mr. Jaiganesh S	ISTE
28.	Mr. Kumar T	ISTE
29.	Ms. Arthi Devarani S	ISTE
30.	Ms. Ciyamala Kushbu S	ISTE,ISRD,IAENG

**c) Editorial Boards**

S. No	Faculty Name	Name of the Journal / Publishers	Membership in Editorial Board
1.	Dr. N.Gangatharan	IEEE Transactions on Signal Processing	Reviewer
2.		International Journal of Biometrics (IJBM)	
3.		Science Alert Journals	
4.		Multimedia Cyberscape Journal	
5.		IEE Proceedings of Vision, Signal and Image Processing	
6.	Dr.C.Arun	European Conference on Circuit Theory and Design (ECCTD), Istanbul University, Antalya, Turkey.	Reviewer
7.		International Journal of Computer Science and Information Security , USA	
8.		International Journal of Recent Scientific Research, ISSN No: 0976-3031	
9.		The Journal of Cases on Information Technology (JCIT), ISSN: 1548-7717	
10.		Australian Journal of Electrical & Electronics Engineering, Institution of Engineers Australia, ISSN No. 1448837X	
11.	Dr.T.M.Inbamalar	British journal of Applied Science and Technology, Science Domain International, 207, regent Street, London.	Reviewer
12.		Asian Journal of Mathematics and Computer Research, International Knowledge Press, S107, 3 Hardman Square, Spinning fields, Manchester,	
13.		Journal of Biology and Nature, International Knowledge Press, S107, 3 Hardman Square, Spinning fields, Manchester,	

14.		Plant Cell Biotechnology and Molecular Biology, International Knowledge Press, S107, 3 Hardman Square, Spinning fields, Manchester,	
15.		Journal of scientific research and reports, Science Domain International, 207, regent Street, London.	
16.		FEBS Letters,Heidelberg University, Heidelberg,	
17.	Dr.T.M.Inbamalar	International Journal of Emerging Trends in Engineering Research ( IJETER ). ISSN ( ONLINE ) : 2347 -	Editorial Board Member
18.	Dr.K.G.Shanthi	Research script and IJMTES - ISRD Allied Journals (IJRE   IJREE   IJRCS   IJRME   IJMH   IJMTE)	Reviewer
19.	Dr.T.S.Arulananth	ISRD Allied journals (IJRE)	Reviewer
20.	Mr.A.Manikandan	Journal - ACES - The Applied Computational Electromagnetics Society	Reviewer

## 22. Student projects

- a) Percentage of students who have done in-house projects including inter departmental / programme

S. No	Percentage of in-house projects			
	2013 – 2014	2014 – 2015	2015 – 2016	2016 – 2017
1.	96	91	94	74

- b) Percentage of students placed for projects in organizations outside the institution i.e Research Laboratories / Industry / Other agencies.

S. No	Percentage of outside institution projects			
	2013 – 2014	2014 – 2015	2015 – 2016	2016 – 2017
1.	4	9	6	26

**23. Awards / Recognitions received by faculty and students****Awards/Recognitions received by Faculty:**

<b>Sl. No.</b>	<b>Name of the Faculty</b>	<b>Organization</b>	<b>Awards / Recognitions received by faculty</b>	<b>Year</b>
1.	Dr.C.Arun	IET Professional Society	Er.D.A.Rajan Ambition Award	2013
2.	Dr.N.Gangatharan	IET Professional Society	IET CLN Man Engineer Award	2014
3.	Ms.V.Kannagi	Lions Club of Madras Green Park	Best Teacher Award	2014
4.	Ms.R.Shimila	Engineering Students Innovation Challenge 2014(ISSRD)	Best Project Award	2014
5.	Dr.C.Arun	Venus International Foundation, Centre for Advanced Research and Design, VIFFA 2015	Young Faculty Award	2015
6.	Dr.T.V.Padma vathy	CTS (Cognizant Technology Solutions)	CTS Best Teacher Award	2015
7.	Ms. S. Poovizhi	IET Professional Society	Best Women Engineer Award	2016
8.	Dr.C.Arun & Mr.S.Muthumanickam	Dr.Kalam's Trust	Best Project Work	2017
9.	Dr.K.G.Shanthi	Dr.Kalam's Trust	Young Women Scientist Award	2017
10.	Ms.V.Kannagi	Dr.Kalam's Trust	Best Teaching Faculty Award	2017
11.	Dr.T.M.Inbamalar	Top Engineers Students &Faculty Award(TESFA- 2017)	Best Achievement Award	2017

**Awards/Recognitions received by Students:**

Academic Year	Awards, Recognitions By Students		
	University Rank	Awards	Prize Won in Co-curricular & Extra Curricular Activities
2013 – 14	14	11	23
2014 – 15	7	1	19
2015 – 16	4	9	8
2016 – 17	10	4	17

**Awards:**

S.No	Name of the Student	Organization	Awards / Recognitions received by Students	Year
1.	G Arunkumar	IET	Er. K.B Subramaniyam Regularity Award	2013
2.	E Lekshmi	IET	Michael Faraday Academic Performance Award	2013
3.	N C Padmanaabhan	IET	Mother Teresa Award	2013
4.	N C Padmanaabhan	IET	Sir C.V Raman Research Award	2014
5.	N C Padmanaabhan	IET	Dr. Rajendra Prasad Leadership Award	2014
6.	V R Manoj Kumar	IET	The Golden Salute Award	2014
7.	K MohideenAbdhul Lathif	IET	Mother Teresa Award	2014
8.	D Karthik	IET	Michael Faraday Academic Performance Award	2014
9.	V Kumaresan	IET	Er. K.B. Subramaniyam Regularity Award	2014
10.	P Kayalvizhi	CTS	CTS Best Outgoing Student Award	2014
11.	M Chithrath B Dinesh Kumar V Aravind Kumar M Ganeshwar Kumar	ISSRD	Best Project Award	2014
12.	H Saranya	ISTE	ISTE Chapter - Best Student Award	2015
13.	A Rubaina Afreen	IET	IET CLN YP Activity Award	2016
14.	S Sanjana	IET	IET CLN YP Academic Performance Award	2016

15.	S Gopala Krishnan	IET	IET CLN YP Trend Setter of the Year	2016
16.	G S Reshma	IET	IET CLN YP Leadership Award	2016
17.	G S Reshma	IET	Michael Faraday Academic Performance Award	2016
18.	D Raveena Reddy	IET	AVM Krishnaswamy Leadership Award	2016
19.	E Lekshmi	IET	IET YP Trendsetter of the Year Award	2016
20.	Y Girish	IET	Sir C.V.Raman Research Award	2016
21.	D Karthik	IET	Er. S. Govindarajan Activity Award	2016
22.	Ms J.Eunice Daphne	Dr.Kalam Educational Trust	Best Student Award	2017
23.	Ms. N Apoorva	Dr.Kalam Educational Trust	Best Student Award	2017
24.	Mr. V P P Chandragiri	Dr.Kalam Educational Trust	Best Student Award	2017
25.	G S Reshma	ISTE	ISTE Chapter Best Student Award	2017

#### 24. List of eminent academicians and scientists / visitors to the department

S . N o	Date	Eminent Academicians, Scientists and Visitors with Designation	Specialization / Subject / Event	Name of the University/ Institute/Industry
2013 – 2014				
1.	10.03.2014	Dr.R.Balasubramanian, Professor Vijayaraghavan Chief Editor Mr.Vineeth	Third National Conference on “Recent Advancements in Signal Processing and Communication (NCRASPC - 2014)”	IIT,Roorkee . Panchabuta Renewable Energy Resources Chennai.
2.	01.02.2014	Ms.Merlin John, Sub-Divisional Engineer,	Special Lecture on Computer Networks	BSNL

3.	15.02.2014	Dr.Krishnasamy T.Selvan Former Professor,	Special Lecture on Antennas and Wave Propagation	University of Nottingham Malaysia
4.	15.02.2014	Dr.K.Udhayakumar Assistant Professor	Special Lecture on Control Systems	Anna University
5.	25.01.2014	Mr.M.E.Rajamannickam, Managing Director,	Special Lecture on Analog ICs and its Applications	Shri Gemini kits and Spaare Pvt. Ltd.
6.	21.12.2013	Mr.Dominic Savo Sub- Divisional Engineer	Special Lecture on Wireless Networks and Mobile Adhoc Networks	BSNL, Chennai.
7.	02.12.2013 & 03.12.2013	Dr.K.Giridhar	National Seminar on “MIMO Wireless Communication and Future Networks”	IIT Madras, Chennai
8.	25.09.2013	Dr.P.Rajendran Managing Director	Special Lecture on Data Structures and OOPS	Paragon Dynamics Info systems (P) Ltd
9.	19.08.2013	SHRI R.Baskaran Chief Communication Engineer	National Level Technical Symposium “TWYSTRA 2k13”	Southern Railway, Chennai.
10.	19.08.2013	Dr.D.N.Ramachandran, Vice Chairman-	Inauguration of “IET STUDENTS’ CHAPTER	IET-UK
11.	10.08.2013	Dr.Selvaraj Assistant Professor	Special Lecture on Digital Communication	IIITDM, Kanchipuram
12.	03.08.2013	Dr.J.KluttoMill eth, Chief Technologist	Special Lecture on Wireless Communication	Center of Excellence In Wireless Technology , Chennai
13.	17.07.2013	Mr.R.Tamilchelvan Project Leader R&D	Special Lecture on Transmission Lines and Waveguides	Siemens, Chennai.
14.	18.07.2013	Mr.Britto L, Marceline,CEO,	Special Lecture on Cloud Computing	Synapticdots Solutions Pvt. Ltd

15.	27.07.2013	Mr.A.Vetrivel Sub-Divisional Engineer	Special Lecture on Optical Communication and Networks	BSNL
16.	01.04.2013	Dr.H.Ravishankar Senoir Scientist	Second National Conference on “Recent Advancements in Signal Processing and Communication (NCRASPC - 2013)”	Department of Computer Application Central Tobacco Research Institute, Rajahmundry, Andhra Pradesh
<b>2014 – 2015</b>				
1.	30.05.2015 to 06.06.2015	Mr.J.Santhanakrishnan Former Dy.General Manager,	Anna University approved 7 days FDTp on “Electronic Circuits-I (EC6304)”	Enterprise Business, BSNL & Chief Consultant, Knet Solutions, Chennai
2.	09.03.2015	Shri.S.Ramaswamy Chairman	Fourth National Conference on “Recent Advancements in Signal Processing and Communication (NCRASPC - 2015)”	IETE, Chennai Chapter & Former Chief Engineer of All India Radio, Doordarshan (South Zone)
3.	09.03.2015		IET Sponsored One Day Workshop on “XPLORE ROBOTICS” by EPR Labs	
4.	14.03.2015	Dr.J.KluttoMill eth, Chief Technologist	Special Lecture on Antennas and Wave Propagation	CEWiT, IIT Madras, Research Park
5.	21.02.2015	Dr.Mohammed Yacin HoD/BME	Special Lecture on Medical Electronics	Rajalakshmi Engineering college
6.	07.02.2015	Ms.J.P Vaishnavi	Special Talk on Placement tips	Inautix Technologies India Pvt. Ltd. (Alumini)

7.	07.02.2015	Mr.M.E.Rajamnickam, Managing Director,	Special Lecture on Analog ICs and its Applications	Shri Gemini kits and Spaare Pvt. Ltd.
8.	24.01.2015	Ms.S.Nancy Blessie, Engineer	Special Talk on Future Scope of Electronics in industries	Renault Nissan Technologies Ltd. (Alumini)
9.	26.12.2014	Mr.Dominic Savo, Sub-Divisional Engineer	Special Lecture on Wireless Networks and Mobile Adhoc Networks	BSNL, Chennai.
10.	6.09.2014	Dr.N.Sadagopan, Assistant Professor	Special Lecture on OOPs and Data Structures	IIITDM, Kanchepuram
11.	9.09.2014	Mrs.S.Jothi, AE	Special Lecture on Electrical Engineering and Instrumentation	TNEB
12.	12.08.2014	Dr. R. Balasubramanian Professor	Special Lecture on Digital Image Processing and Multimedia Compression Techniques	IIT, Roorkee.
13.	11.08.2014	Mr. Meganathan Kumar, DGM	National Level Technical Symposium “TWYSTRA 2k14”	Electrical & Electronics ,Mahindra & Mahindra Limited, Mahindra Research Valley, Mahindra World City, Chennai
14.	26.07.2014	Mr.R.Tamilchelvan Project Leader R&D	Special Lecture on Transmission Lines and Waveguides	Siemens, Chennai.
15.	19.07.2014	Dr.M.D.Selvaraj, Assistant Professor	Special Lecture on Digital Communication	IIITDM, Kanchepuram.
16.	16.07.2014	G.S.Ayyapan Sr.Scientist	Inauguration of Students' Association and Keynote address on Energy Conservation	CSIR

2015 – 2016				
1.	07.03.2016	Shri.V.Krishna murthy Additional Director	Fifth National Conference on “Recent Advancements in Signal Processing and Communication (NCRASPC - 2016)”	National Institute of Electronics and Information Technology , Chennai.
2.	07.03.2016		National Level Workshop on “Pioneer to Discover with Internet of Things (P2DIOT - 2016)”	
3.	07.03.2016		One day National Seminar on “Cloud Computing and Security Issues”	
4	12.03.2016	Dr.S.S.Karthik yan Assistant Professor  Ms.S NancyBlessie Engineer Mr.T.Srinivasan	Special Lecture on Antennas and Wave Propagation	IIITDM Renault- Nissan Technologies
5	19.03.2016		Special Lecture on Automobile Control Systems	
6	19.03.2016		Special Lecture on Computer Networks	Globsys software solutions
7	04.02.2016	Mr.Dominic Savo Sub- Divisional Engineer	Special Lecture on Wireless Networks	BSNL, Chennai.
8	19.09.2015	Dr.M.D.Selvara j,Prof.	Special Lecture on Digital Communication	IIITDM
9	26.09.2015	Dr.J.KluttoMill eth Chief Technologist	Special Lecture on Wireless Communication	CEWiT, IIT Madras,Res earch Park
10	31.08.2015	Dr.T.S. Rangan Founder and Managing Director	National Level Technical Symposium “TWYSTRA 2k15” national Level Technical Symposium “TWYSTRA 2k15”	RupaJan Management Consulting Private Limited, Chennai
11	31.08.2015		One Day Workshop on “ARDUINO and	

			IoTs' by EPR Labs, Pvt. Ltd	
12	11.07.2015	S.Jothi, AE	Special Lecture on Electrical Engineering	TNEB
13	04.07.2015	Mr.R.Tamilchel van Project Leader	Special Lecture on Transmission Lines and Waveguides	R&D, Siemens, Chennai.
<b>2016 – 2017</b>				
1.	27.02.2017	Dr.K.Jayaraman Distinguished Scientist	Sixth National Conference on Recent Advancements in Signal Processing and Communication (NC RASPC – 2017)	DRDO, Director DRDL (Retd), Hyderabad
2.	27.02.2017	Dr.K.Jayaraman Distinguished Scientist	IET, YPS Chennai Network and IEEE Madras Section Sponsored National Level Project Competition RACKET - 2017	DRDO, Director DRDL (Retd), Hyderabad
3.	26.09.2016 and 27.09.2016	Mr.P.Shabarinath Managing Director	Two days Hands-on Workshop on “INTELLIGENT ROBOTICS”	Respro Labs, Chennai.
4.	26.09.2016	Shri.B.Anbuthambi , Vicepresident,	National Level Technical Symposium “TWYSTRA 2k16”	Educationa Initiatives, ICTACT,Chennai.
5.	18.07.2016	Dr.S.Krishnakumar , Senior Technical Officer	Students' Association	Ministry of Defence, Defence Research & Development Organisation (DRDO), Chennai.
6.	17.06.2016	Shri.S.Janarthanam, Scientist	Two days National Level Workshop on “Embedded System Technologies”	VLSI and Embedded Systems Group, NIELIT, Chennai.

**25. Seminars / Conferences / Workshops organized & the source of funding**

**a) National**

Sl. No.	DATE	Seminars / Conferences / Workshops organized	Funded by
<b>2013 – 14</b>			
1.	10.03.2014	Third National Conference on “Recent Advancements in Signal Processing and Communication (NCRASPC - 2014)”	IET
2.	07.03.2014	Intra Department Mini Project contest	RMKCET
3.	02.01.2014 & 03.01.2014	Training Program on Embedded System by EPR LABS	EPR Labs
4.	02.12.13 & 03.12.13	National Seminar on “MIMO Wireless Communication and Future Networks”	AICTE
5.	19.08.2013	National Level Technical Symposium “TWYSTRA 2k13”	RMKCET
6.	01.04.2013	Second National Conference on “Recent Advancements in Signal Processing and Communication (NCRASPC - 2013)”	RMKCET
<b>2014 – 15</b>			
1.	30.05.2015 to 06.06.2015	Anna University approved 7 days FDTP on “Electronic Circuits-I (EC6304)”	Anna University
2.	09.03.2015	Fourth National Conference on “Recent Advancements in Signal Processing and Communication (NCRASPC - 2015)”	IET
3.	09.03.2015	IET Sponsored One Day Workshop on “XPLORE ROBOTICS” by EPR Labs	IET
4.	21.02.2015	Intra “Department Mini Project Contest”	IET
5.	03.01.2015	IET Sponsored One Day Workshop on “How to implement Solar Energy”	IET
6.	26.12.2014	Workshop on Network Simulator (NS2)	RMKCET
7.	05.09.2014	“Intra Department Mini Project Contest”	RMKCET
8.	11.08.2014	National Level Technical Symposium “TWYSTRA 2k14”	RMKCET
9.	27.08.2014	“One Day Workshop on Embedded System Product Design Technologies”	EPR Labs

<b>2015 – 16</b>			
1.	30.03.2016	“Intra Department Mini Project Contest”	IET
2.	07.03.2016	Fifth National Conference on “Recent Advancements in Signal Processing and Communication (NCRASPC - 2016)”	IET
3.	07.03.2016	National Level Workshop on “Pioneer to Discover with Internet of Things (P2DIOT - 2016)”	IET
4.	07.03.2016	One day National Seminar on “Cloud Computing and Security Issues”	IET
5.	19.09.2015	IET Sponsored One Day Workshop on “Awareness on Terahertz Technology” and “Brain Computer Interface Development and Simulation”	IET
6.	31.08.2015	National Level Technical Symposium “TWYSTRA 2k15” national Level Technical Symposium “TWYSTRA 2k15”	RMKCET
7.	31.08.2015	One Day Workshop on “ARDUINO and IoTs” by EPR Labs, Pvt. Ltd	EPR Labs
<b>2016 – 17</b>			
1.	27.02.2017	Sixth National Conference on Recent Advancements in Signal Processing and Communication (NCRASPC – 2017)	ISTE&IET
2.	23.02.2017 24.02.2017	IEEE & IET Sponsored Two days Hands on training on Internet of Things (IOT-2017)	IEEE & IET
3.	27.02.2017	IET, YPS Chennai Network and IEEE Madras Section sponsored National level Project Competition RACKET - 2017 on 27th February, 2017.	IET, YPS & IEEE
4.	26.09.2016 and 27.09.2016	Two days Hands-on Workshop on “INTELLIGENT ROBOTICS”	IET
5.	21.07.2016	One Day Workshop on “Embedded System Product Design”	ISTE
6.	16.07.2016	IET PATW Zone Competition (2015/16 Present Around The World)	IET
7.	26.09.2016	National Level Technical Symposium “TWYSTRA 2k16”	RMKCET
8.	17.06.2016	Two days National Level Workshop on “Embedded System Technologies”	IEEE & IET

9.	13.06.2016 to 19.06.2016	Anna University approved 7 days FDTDP on “Transmission Lines and Waveguides - EC 6503	Anna University
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**b) International**

Sl. No.	DATE	Seminars / Conferences / Workshops organized	Funded by
1.	15.12.2014 & 16.12.2014	The First International Conference on “Recent Trends in Electrical, Electronics, Computing and Communication(ICRTEECC- 2014)”	IEEE & IET

**26. Student profile programme / course wise**

Name of the Course/Programme	Application		Enrolled	
	Received	Selected	M	F
2013 – 2014	191	186	89	97
2014 – 2015	202	198	93	105
2015 – 2016	183	178	73	105
2016 – 2017	180	176	85	91

**27. Diversity of Students**

Year	% of students from the same state	% of students from other States	% of Students from abroad
2013 – 2014	92.47	7.53	-
2014 – 2015	92.42	7.58	-
2015 – 2016	87.08	12.92	-
2016 – 2017	78.98	21.02	-

**28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?**

Sl. No.	Batch	No. of students who have cleared Competitive Examinations	Number of students cleared
1.	2012 – 13	GRE	03
		IELTS	01
		TOEFL	01
		TANCET	01
2.	2013 – 14	IELTS	02
		TANCET	19

3.	2014 – 15	GRE	04
		TOEFL	04
		TANCET	25
4.	2015 – 16	GRE	08
		IELTS	03
		TOEFL	04
		GATE	01
		TANCET	5
5.	2016 – 17	GRE&TOEFL	01
		GATE	01

**29. Student Progression:**

S.No	Student progression	Against % enrolled			
		2013 - 14	2014 - 15	2015 - 16	2016 - 17
1	UG to PG	15	20.27	10.55	Awaiting for admission
2	PG to M.Phil	-	-	-	-
3	PG to Ph.D.	-	-	-	-
4	Ph.D. to Post-Doctoral	-	-	-	-
5	Employed Campus selection	81.01	85.56	96.5	81.95
6	Other than campus recruitment	1.2	-	0.8	-
7	Entrepreneurship/ Self-employment	-	-	2.51	-

**30. Details of Infrastructural facilities:****a) Library**

S.No	Year	No. of Books added	No. of Journals	
			National	International (E journal)
1	2013 – 2014	923	18	111
2	2014 – 2015	845	18	48
3	2015 – 2016	669	18	111
4	2016 – 2017	346	18	111

**b) Internet facilities for Staff & Students**

Name of the Internet provider : Reliance, Tata Indicom

Available bandwidth : 170 Mbps Reliance 25

Mbps Tata Indicom =

Access speed	195 Mbps
Availability of internet in an exclusive lab	: Download 35Mbps
Availability in most computing labs	: Upload: 9Mbps
Availability in departments and other units	: Available
Availability in faculty rooms	: Available
Institute's own e-mail facility to faculty / students	: Available
Security/ privacy to e-mail/internet users	: Yes
Wi Fi Connection	: Security and privacy provided by firewall
Total Number of Systems with Internet Facility	: Available (195 Mbps)
	: 606

**c) Classrooms with ICT Facility**

LCD projectors for multimedia presentation	: 03 Nos.
Overhead projector	: 04 Nos.

**d) Laboratories**

Total Number of Labs: 05

S.No	Name of the Subject	Name of the Lab	Area (sq.m)
1.	DSP Lab	DSP/VLSI LAB	160.56
2.	VLSI Design Lab		
3.	Embedded System Lab		
4.	Computer Networks Lab		
5.	Circuits and Devices	Electronics Lab	160.56
6.	Circuits and simulation		
7.	Communication System Lab		
8.	Analog and Digital Circuits	Digital and LIC Lab	160.56
9.	Linear Integrated Circuits Lab		
10.	Microprocessor and Microcontroller Lab	Microprocessor and Microcontroller Lab	160.56
11.	Optical and Microwave Lab		
12.	Engineering Practices Lab	Workshop	447.9

**31. Number of students receiving financial assistance from college, university, Government or other agencies**

S.No	Year	No. of Students receiving financial assistance from			
		College	University	Government	Other Agencies
1	2013 – 14	7	-	58	-

2	2014 – 15	8	-	51	-
3	2015 – 16	9	-	128	-
4	2016 – 17	9	-	88	-

**32. Details on student enrichment programmes (special lectures / workshops /seminar) with external experts**

Sl. No	Date	Title of the Special Lecture/Workshop/Seminar	Name of the Resource Person
<b>2013 – 2014</b>			
1.	15.02.2014	Antennas and Wave Propagation	Dr.Krishnasamy T.Selvan Former Professor, University of Nottingham Malaysia
2.	15.02.2014	Control Systems	Dr.K.Udhayakumar, Assistant Professor, Anna University
3.	1.02.2014	Computer Networks	Ms.Merlin John, Sub-Divisional Engineer, BSNL
4.	25.01.2014	Analog ICs and its Applications	Mr.M.E.Rajamanickam, Managing Director, Shri Gemini kits and Spaare Pvt. Ltd.
5.	21.12.2013	Wireless Networks and Mobile Adhoc Networks	Mr.DominicSavo, Sub-Divisional Engineer, BSNL, Chennai.
6.	02.12.13 & 03.12.13	National Seminar on “MIMO Wireless Communication and Future Networks”	Dr.K.Giridhar, IIT Madras, Chennai
7.	25.09.2013	Data Structures and OOPS	Dr.P.Rajendran, Managing Director, Paragon Dynamics Info systems (P) Ltd
8.	10.08.2013	Digital Communication	Dr.Selvaraj, AP/ IIITDM, Kanchipuram
9.	03.08.2013	Wireless Communication	Dr.J.KluttoMilleth, Chief Technologist, Center Of Excellence In Wireless Technology, Chennai
10.	27.07.2013	Optical Communication and Networks	Mr.A.Vetrivel Sub-Divisional Engineer BSNL
11.	18.07.2013	Cloud Computing	Mr.Britto L Marceline, CEO, Synapticdots Solutions Pvt. Ltd

12.	17.07.2013	Transmission Lines and Waveguides	Mr.R.Tamilchelvan Project Leader R&D Siemens, Chennai.
<b>2014 – 2015</b>			
1.	14.03.2015	Antennas and Wave Propagation	Dr.J.KluttoMilleth, Chief Technologist CEWiT, IIT Madras, Research Park
2.	09.03.2015	IET Sponsored One Day Workshop on “XPLORE ROBOTICS” by EPR Labs	Shri.S.Ramaswamy., Chairman IETE, Chennai Chapter & Former Chief Engineer of All India Radio, Doordarshan (South Zone)
3.	21.02.2015	Medical Electronics	Dr.Mohammed Yacin HoD/BME Rajalakshmi Engineering college
4.	07.02.2015	Placement tips	Ms.J.P Vaishnavi, Inautix Technologies India Pvt. Ltd.
5.	07.02.2015	Analog ICs and its Applications	Mr.M.E.Rajamanickam, Managing Director, Shri Gemini kits and Spaare Pvt. Ltd.
6.	24.01.2015	Future Scope of Electronics in industries	Ms.S Nancy Blessie Engineer, Renault-Nissan Technologies
7.	03.01.2015	IET Sponsored One Day Workshop on “How to implement Solar Energy”	Dr.S.R.S.Prabaharan., School of Electronics Engineering (SENSE),VIT University, Chennai
8.	26.12.2014	Wireless Networks and Mobile Adhoc Networks	Mr.DominicSavo, Sub-Divisional Engineer BSNL, Chennai.
9.	26.12.2014	Workshop on Network Simulator (NS2)	Mr.R.Ramesh, Nano Networks, Chennai
10.	9.09.2014	Electrical Engineering and Instrumentation	Mrs.S.Jothi, AE, TNEB
11.	6.09.2014	OOPs and Data Structures	Dr.N.Sadagopan, Assistant Professor, IIITDM, Kanchipuram
12.	27.08.2014	One Day Workshop on Embedded System Product Design Technologies	Mr.R.Purushothaman EPR Labs, Pvt. Ltd., Chennai,

13.	12.08.2014	Digital Image Processing and Multimedia Compression Techniques	Dr. R. Balasubramanian Professor, IIT, Roorkee
14.	26.07.2014	Transmission Lines and Waveguides	Mr.R.Tamilchelvan Project Leader R&D, Siemens, Chennai
15.	19.07.2014	Digital Communication	Dr.M.D.Selvaraj, Assistant Professor, IIITDM, Kanchipuram
16.	16.07.2014	Energy Conservation	G.S.Ayyapan Sr.Scientist, CSIR
17.	04.07.2015	Transmission Lines and Waveguides	Mr.R.Tamilchelvan Project Leader R&D, Siemens, Chennai
<b>2015 – 15</b>			
1.	19.03.2016	Automobile Control Systems	Ms.S Nancy Blessie Engineer Renault-Nissan Technologies
2.	19.03.2016	Computer Networks	Mr.T.Srinivasan, Globsys software solutions
3.	12.03.2016	Antennas and Wave Propagation	Dr.S.S.Karthikeyan Assistant Professor, IIITDM
4.	07.03.2016	National Level Workshop on “Pioneer to Discover with Internet of Things (P2DIOT - 2016)”	Shri.V.Krishnamurthy. Additional Director, National Institute of Electronics and Information Technology, Chennai.
5.	07.03.2016	One day National Seminar on “Cloud Computing and Security Issues”	Shri.V.Krishnamurthy. Additional Director, National Institute of Electronics and Information Technology, Chennai.
6.	05.03.2016	Electromagnetic Fields	Dr.K.Malathi, Assoc. Professor, Anna University
7.	03.02.2016	VLSI Design	Ms.G Revathy Engineer
8.	03.02.2016	Latest Technology Development across IT sector	Ms.E Vinitha Engineer
9.	04.02.2016	Wireless Networks	Mr.Dominic Savo, Sub-Divisional Engineer, BSNL, Chennai.
10.	26.09.2015	Wireless Communication	Dr.J.KluttoMilleth Chief Technologist CEWiT, IIT Madras, Research Park
11.	19.09.2015	Digital Communication	Dr.M.D.Selvaraj, Assistant Professor, IIITDM, Kanchipuram.
12.	19.09.2015	IET Sponsored One Day Workshop on “Awareness on	Dr.S.S.Karthikeyan , AP, Electronics

		Terahertz Technology” and “Brain Computer Interface Development and Simulation”	Engineering, IIITD & M, Kancheepuram
13.	05.09.2015	Placement	Ms.S Nancy Blessie Engineer, Renault-Nissan Technologies
14.	31.08.2015	One Day Workshop on “ARDUINO and IoTs’ by EPR Labs, Pvt. Ltd	Dr.T.S. Rangan Founder and Managing Director, Rupa Jan Management Consulting Private Limited, Chennai
15.	11.07.2015	Electrical Engineering	S.Jothi, AE, TNEB
16.	11.07.2015	Data structures and OOPs	Mr.Prakash Naveen, Engineer
17.	04.07.2015	Transmission Lines and Waveguides	Mr.R.Tamilchelvan Project Leader R&D, Siemens, Chennai
18.	30.05.2015 to 06.06.2015	Anna University approved 7 days FDTP on “Electronic Circuits-I (EC6304)”	Mr.J.Santhanakrishnan., Former Dy. General Manager, Enterprise Business, BSNL & Chief Consultant, Knet Solutions, Chennai.

**2016 – 2017**

1.	23.02.2017 24.02.2017	IEEE & IET Sponsored Two days Hands on training on Internet of Things (IOT-2017)	Mr.Shabarinath, Managing Director, Respro Labs, Chennai
2.	26.09.2016 and 27.09.2016	Two days Hands-on Workshop on “INTELLIGENT ROBOTICS”	Mr.P.Shabarinath Managing Director, Respro Labs, Chennai
3.	21.07.2016	One Day Workshop on “Embedded System Product Design”	Mr.R.Purushothaman EPR Labs, Pvt. Ltd., Chennai
4.	17.06.2016	Two days National Level Workshop on “Embedded System Technologies”	Shri.S.Janarthanam Scientist VLSI and Embedded Systems Group, NIELIT, Chennai.

**33. Teaching methods adopted to improve student learning**

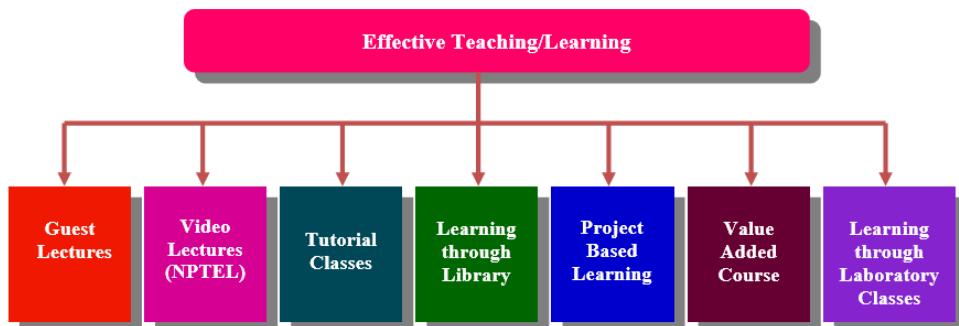
Innovations by the Faculty in Teaching and Learning

- ❖ Chalk and Board Method
- ❖ Class test /Improvement test
- ❖ Industrial Visits
- ❖ Demonstration method of teaching
- ❖ NPTEL or Video based presentations

- ❖ Online multiple choice questions for placement training.

### **Paradigm shift in Teaching**

- ❖ The traditional teaching method of chalk and talk is predominantly used in lecture classes.
- ❖ The lecture sessions are adequately supplemented by modern electronic teaching gadgets.
- ❖ For effective class room teaching methodology, Power Point Presentation and Video Lectures are used.
- ❖ The college library is fully equipped with sufficient books, journals and professional magazines; keeping pace with the latest trends. It has many e-resources with e-journals and databases for the use of the faculty and students.
- ❖ Sophisticated and well equipped laboratories in the campus invigorate the students to do research activities.
- ❖ Interactive and participatory activities are adopted by the teachers to make the learning process as student-centric approach.
- ❖ Through seminars, debates and group discussions, students are encouraged to practice both individual and collaborative learning process.
- ❖ Students are taken to Industries, Research Institutes and Field Visits to expose them to the latest developments in their discipline.



Also our institution engages the students and teachers in active learning throughout the academic year emphasizing more on training activities. The institution promotes active learning by organizing various programs like Seminars, Conference, Mini Project, Workshops on instructional objectives. Assignment preparation and practical activities make the students to be active participants in the process of learning.

### **34. Participation in Institutional Social Responsibility (ISR) and Extension activities**

#### **YRC Club Activities**

- ❖ Every Academic Year YRC Conducts Blood Donation Camp and Tree Plantation Camp.
- ❖ Youth Red Cross Unit of the college received “**Best Performance in Youth Red Cross Unit**” Award from the Indian Red Cross Society on 06.01.2015.

S.No	Date	Program	No of Student Participated
1.	05.10.2013	Blood Donation Camp	40
2.	22.02.2014	Tree Plantation Programme & First Aid Awareness Programme	34
3.	24.01.2015	Tree Plantation Programme & First Aid Awareness Programme	48
4.	07.03.2015	Blood Donation Camp	33
5.	11.03.2016	Blood Donation Camp & First Aid Awareness Programme	49
6.	06.04.2016	Tree Plantation Programme	53

### 35. SWOC analysis of the department and Future plans Strengths

#### Strengths:

- ❖ Highly qualified, experienced and dedicated Faculty Members.
- ❖ Well Equipped laboratory to support research activities.
- ❖ Guest Lectures by eminent Professors, Research Scientists & Industrial Experts.
- ❖ Well stocked library to augment the knowledge of students and faculty members.
- ❖ Maintains good record of campus placements.
- ❖ Students with high cut off marks are admitted in the department.
- ❖ Value added courses are conducted for students by experts to enrich their skills.
- ❖ Memoranda of Understanding signed with different Industries to enhance Institute Industry interactions.
- ❖ Conferences and workshops are conducted regularly to append the technical skill set of students.
- ❖ Patent have been filed jointly by students and faculty members.
- ❖ Centres of Excellence create a platform for the students in acquiring the technology trends in their core competencies.

#### Weakness

- ❖ Consultancy and funded projects are to be enhanced.
- ❖ Core industry placements to be improved.
- ❖ Students clearing GATE, IES and other competitive exams have to be increased.

#### Opportunities

- ❖ Encouraging the students and faculty members to attend National and International seminars, workshops and conferences.
- ❖ Motivating the students towards research based learning.
- ❖ Creating Platform for Interdisciplinary research.
- ❖ Establishing Centre of Excellence in thrust areas.

#### Challenges

- ❖ To develop knowledge based teaching learning methodology.
- ❖ Bridge the gap between academia and Industries.

- ❖ To train the faculty members with the rapidly developing digital technology.
- ❖ Entrepreneurship development.
- ❖ Attitude of present generation students towards learning.
- ❖ To attain 100% placements.

**Future Plan**

- ❖ Collaboration with premier Universities and industries.
- ❖ To enhance the Industry Institute Partnership for developing research skills of both faculty members and students.
- ❖ To improve the placement of our students in core companies through Centres of Excellence.
- ❖ More emphasis on Research and Development
- ❖ Improving professional skills of our students by special training classes.
- ❖ Encouraging staff and students towards achieving consultancy and funded projects.
- ❖ To strengthen social responsibilities and values.

## EVALUATIVE REPORT OF THE DEPARTMENT

**1. Name of the department :** Electrical and Electronics Engineering (EEE)

**2. Year of Establishment :** 2008

**3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)**

UG: Bachelor of Engineering in Electrical and Electronics Engineering

**4. Names of Interdisciplinary courses and the departments/units involved**

There is no Interdisciplinary course in the department of EEE

**5. Annual/ semester/choice based credit system (programme wise)**

Semester based credit system prescribed by Anna University

**6. Participation of the department in the courses offered by other departments**

Sl no	Subject Code	Subject / Lab	The department in which the course is offered
1.	GE6162	Engineering practices laboratory	Department of S&H
2.	GE6252	Basic electrical and electronics engineering	Department of Mechanical Engineering
3.	EE6351	Electrical drives and controls	Department of Mechanical Engineering
4.	EE6365	Electrical engineering laboratory	Department of Mechanical Engineering
5.	EE6352	Electrical engineering and instrumentation	Department of ECE
6.	EE5451	Electrical Engineering and Control System Laboratory	Department of ECE
7.	EE6251	Circuit Theory	Department of S&H
8.	EE6211	Electrical Circuits Laboratory	Department of S&H

**7. Courses in collaboration with other universities, industries, foreign institutions, etc.**

Sl No	Courses	Collaborative Industry/University
1.	British English Course (BEC)	University of Cambridge

2.	Factory Automation Lab – sponsored	MITSUBISHI Electric Pvt. Ltd. Industry
3.	Electrical Drives	MITSUBISHI Electric Pvt. Ltd. Industry
4.	KPIT – Automotive Electronics	KPIT - Industry
5.	Wipro Embedded	Wipro - Industry
6.	NPTEL Course	IIT - University
7.	CoE Digital Enterprise Mobility	I-Nautix - Industry
8.	CoE Digital Enterprise Big data	CTS - Industry
9.	Infosys Campus connect	Infosys - industry
10.	JADE programme	JADE Training Resources
11.	SMART training programme	SMART Training Resources

#### 8. Details of courses / programmes discontinued (if any) with reasons

NIL

#### 9. Number of Teaching Posts

Sl No	Designation	2013 – 14		2014 – 15		2015 – 16		2016 – 17	
		S	F	S	F	S	F	S	F
1	Professors	1	1	1	1	1	1	1	1
2	Associate Professors	2	3	2	3	2	4	2	3
3	Asst. Professors	9	8	9	8	9	7	8	7
4	Adjunct Faculty	-	-	-	-	-	-	-	1
<b>Total</b>		<b>11</b>	<b>12</b>						

**10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)**

Sl No	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students Guided for the last 4 years
1	Dr.N.Kalaiarasi	M.E., Ph.D	Professor and Head	Applied Electronics	24.1	8
2	Mr. K.Gunalan	M.E., (Ph.D)	Associate professor	Control and Instrumentation	16.6	-
3	Dr. J.Prakash	M.E., Ph.D	Associate professor	Renewable Energy	14.9	-
4	Mr. T.J.Catherine	M.Tech., (Ph.D)	Associate professor	Power Electronics	12.7	-
5	Mr. L.Umasankar	M.E., (Ph.D)	Assistant professor	Power Systems	12.4	-
6	Ms. K.V.Bindu	M.E., (Ph.D)	Assistant professor	Power Electronics	13.5	-
7	Ms. D.Nageswari	M.E., (Ph.D)	Assistant professor	Power Electronics	10.1	-
8	Mr. K.Dilavar Basha	M.E., (Ph.D)	Assistant professor	Power Electronics	11.2	-
9	Mr. N.Hariharan	M.E., (Ph.D)	Assistant professor	Power Electronics	10.4	-
10	Ms.G.Geetha mahalakshmi	M.E., (Ph.D)	Assistant professor	Power Electronics	7.8	-
11	Ms. B.Nagarani	M.E., (Ph.D)	Assistant professor	Control and Instrumentation	7.3	-
12	Mr. D. Krishnamurthy	M.E.	Adjunct faculty	High voltage Engineering	10	

**11. List of senior visiting faculty**

Sl.No.	Name of the Faculty	Designation	Organization
1	Mr. D. Krishnamurthy	Asst. Manager – Electrical	TATA Consulting Engineers Ltd. Chennai

**12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty**

Adjunct faculty and visiting faculty are handling partial workload for the last four years

**13. Student -Teacher Ratio (programme wise)**

Sl. No.	Programme	STR
1	UG-Electrical and Electronics Engineering	15:1

**14. Number of academic support staff (technical) and administrative staff; sanctioned and filled**

Designation	2016 – 2017	
	Sanctioned	Filled
Technical	3	3
Administrative	1	1

**15. Qualifications of teaching faculty with DSc / D.Litt / Ph.D / MPhil / PG.**

Sl. No	Year	Number of Faculty with Qualification					
		D.Sc. / D. Litt	Ph.D.	M. Phil.	PG	Total	Prusing Ph.D
1	2013 – 2014	-	1	-	11	12	7
2	2014 – 2015	-	1	-	11	12	7
3	2015 – 2016	-	1	-	11	12	11
4	2016 – 2017	-	2	-	10	12	9

**16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received**

NIL

**17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received**

NIL

**18. Research Centre /facility recognized by the University**

NIL

**19. Publications:**

Number of papers published in peer reviewed journals (national / international) by faculty:

S.N o	Name of the Faculty Member	No of papers Published		Citation indices range				
		Co nfe ren ce	Jour nal	Citati on index	Impa ct Fact or	Late st SJR	Late st SNI P	Late st h inde x
1	Dr.N.Kalaiarasi	5	14	29	8.39	3.49	6.14 3	4
2	Mr. K.Gunalan	3	0	-	-	-	-	-
3	Dr. J.Prakash	6	3	2	-	-	-	-
4	Ms. T.J.Catherine	11	4	-	-	-	-	-
5	Mr. L.Umasankar	2	9	4	-	-	-	-
6	Ms. K.V.Bindu	7	8	-	-	-	-	-
7	Ms. D.Nageswari	6	4	-	-	-	-	-
8	Mr. K.Dilavar Basha	2	2	-	-	-	-	-
9	Mr. N.Hariharan	3	4	-	-	-	-	-
10	Ms.G.Geetha mahalakshmi	3	3	-	-	-	-	-
11	Ms. B.Nagarani	3	3	-	-	-	-	-
12	Mr. D. Krishnamurthy	-	-	-	-	-	-	-

Number of papers published in peer reviewed journals (national / international) students

Academic Year	Journals	Conferences	Total
2013 – 14	-	-	0
2014 – 15	3	2	5
2015 – 16	1	4	5
2016 – 17	-	20	20

**20. Areas of consultancy and income generated:**

Academic Year	Name of faculty	Client Organization	Title of Consultancy of project	Amount received (in Rupees)
2014-2015	Ms. K.V. Bindu Mr. K. Dilavar Basha	Innovate Engineering Services	Auxiliary House Load Control	10,000
2016-2017	Dr. N. Kalaiarasasi Ms. T. J. Catherine	Vignesh Powder Coating	Training in electrical maintenance	5,000
2016-2017	Ms. K. Gunalan Dr. J. Prakash	Subham Industries	Energy Auditing	10,000

**21. Faculty as members in**

**a) National committees b) International Committees**

Sl No	Faculty	Name of the committee
1	Dr.N.Kalaiarasasi	ISTE, IE, IETE
2	Mr. K.Gunalan	ISTE, IETE
3	Dr. J.Prakash	ISTE
4	Mr. T.J.Catherine	ISTE, IAENG, ISRD
5	Mr. L.Umasankar	ISTE
6	Ms. K.V.Bindu	ISTE, ECS, IACSIT, IAENG
7	Ms. D.Nageswari	ISTE, ISRD, IAENG
8	Mr. K.Dilavar Basha	ISTE
9	Mr. N.Hariharan	ISTE, ISRD
10	Ms.G.Geetha mahalakshmi	ISTE, ISRD, IAENG
11	Ms. B.Nagarani	ISTE, ECS, IACSIT, IAENG

**b) Editorial boards**

S. No	Faculty Name	Name of the Journal/Publishers	Membership in Editorial Board
1	Dr.N.Kalaiarasasi	Elsevier, AMSE	Reviewer

## 22. Student projects

a) Percentage of students who have done in-house projects including inter departmental/programme

S. No	Percentage of In – House Projects			
	2013 – 14	2014 – 15	2015 – 16	2016 – 17
1	96%	81%	96%	95%

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies

S. No	Percentage of Outside Institution Projects			
	2013 – 14	2014 – 15	2015 – 16	2016 – 17
1.	4%	19%	4%	5%

## 23. Awards / Recognitions received by faculty and students

Sl. No.	Name of the Student	Organizati on	Awards/Recognitions received by faculty	Year
1.	Lavanya S.R	ISTE	Best Student Award	2015 – 16

### Awards/Recognitions received by Students

Academic Year	Awards, Recognitions received by Students		
	University Rank	Awards	Prize Won in Co- curricular & Extra Curricular
2013 – 14	5	-	6
2014 – 15	3	-	6
2015 – 16	2	1	-
2016 – 17	4	-	-

## 24. List of eminent academicians and scientists / visitors to the department

S. No	Date	Eminent Academicians, Scientists and Visitors with Designation	Specializ ation/Su bject/Ev ent	Name of the University/ Institute/Indus try
2013 – 2014				
1.	10.08.2013	Dr. Jeevanandhan S Associate Professor,	Simulation Based	PEC, Puducherry

			Power Electronics	
2.	03.08.2013	<b>Dr. Udhayakumar K</b> Assistant professor	Digital Signal Processing	Department of EEE Anna University, Chennai
3.	10.10.2013	<b>Mr. Mohammad Basha,</b> Associate Professor,	Electronic Devices and Circuits	VEC, Chennai
4.	28.12.2013	<b>Dr. Somasundaram P</b> Associate Professor	FACTS and PSoC	Department of EEE, Anna University, Chennai
5.	28.12.2013	<b>Dr. Vaithilingam C</b> Professor	Power System Analysis	Department of EEE, KCG College of Engineering and Technology, Chennai

**2014 – 2015**

1.	21.06.2014	<b>Dr. Somasundaram P</b> Associate Professor Department of EEE	Transmission and Distribution	Anna University, Chennai
2.	07.03.2015	<b>Dr. Udhayakumar K</b> Assistant Professor Department of EEE	Discrete Signal Processing	Anna University, Chennai
3.	23.01.2015	<b>Dr. Somasundaram P</b> Associate Professor Department of EEE	Power System Analysis	Anna University, Chennai
4.	10.01.2015	<b>Mr. Rameshkumar</b> Manager	Economic Aspects of Generation	Mahalakshmi Enterprise, Chennai
	7.02.2015		Business Ethics	
	21.02.2015		Basic Concepts in Rotating Machines	
5.	09.07.2015	<b>Dr. Prakashkumar D, DGM</b>	Present Scenario of Power	Thermal Training Institute NCTPS, Chennai

			Requirement	
6.	12.07.2014	<b>Mr. Titus Thanga Primus S</b> Senior Manager	File Systems	Cognizant Technology Solutions Chennai
	26.07.2014		Operator Overloading	
	23.08.2014		Introduction to Data Structures and Algorithms	
7.	04.03.2015	<b>Mr. Vijayakumar,</b> Manager, Marketing,	Global Energy Issues	Voltech Group Chennai
8.	21.02.2015	<b>Mr. Thamarai Selavan C B</b> Assistant Engineer	Power System Operation and Control	TNEB, Chennai
9.	07.03.2015	<b>Mr. Purushotham</b> CEO	High Voltage DC Transmission	EPR labs, Chennai
<b>2015 – 2016</b>				
1.	06.02.2016	<b>Dr. Somasundaram P</b> Associate Professor	Flexible AC Transmission System” /Guest lecture	Department of EEE Anna University, Chennai
2.	10.07.2015	<b>Dr. Jeevananthan S</b> Associate Professor,	Power Electronics	Pondicherry Engineering College
3.	10.07.2015	<b>Dr. Subramanian N P</b> Associate Professor	Digital logic circuits	Pondicherry Engineering College
4.	06.02.2016	<b>Mr. Chitrarasu K</b> Head-Light Engineering Division	Recent Trends in Industrial Automation	Lucas TVS Ltd
5.	27.04.2016	<b>Dr. Kalaivanan A</b>	“Transformer	TNEB, Chennai

		Superintendent Engineer (retd.)	operation and Design”	
6.	11.07.2015	<b>Mr. Thamarai Selavan C B,</b> Assistant Engineer	Electro Magnetic Theory	TNEB, Chennai
7.	12.08.2015	<b>Dr. Vijay Tharad</b> Training Consultant	Speed Governing Mechanism using Fly Ball Governor	Caterpillar India
8.	23.04.2016 . .	<b>Mr.Kingsley D</b> SAP Consultant	Embedded System	CMC Academy
<b>2016 – 2017</b>				
1.	29.08.2016 30.08.2016	Mr. R. Purushothaman, Managing Director	Hands on Training on Robotics and Cable Design	M/s Axis Global

**25. Seminars/ Conferences/Workshops organized & the source of funding****a) National:**

Sl. No.	DATE	Seminars / Conferences / Workshops organized	Funded by
1.	24.03.2014	National Conference on Recent Trends in Power Engineering, Power Electronics and Control Systems NCRTPPC'14	IETE
2.	16.09.2013	National Level Technical Symposium OPUZELEK'13	IETE
3.	05.09.2014	Intra Department Mini Project Contest	IETE
4.	08.09.2014	National Level Technical Symposium OPUZELEK'14	IETE
5.	15.12.2014 16.12.2014	National Conference on Recent Trends in Electrical, Electronics, Computing and Communication ICRTEECC'14	IETE
6.	14.02.2015	Intra Department Mini Project Contest	IETE
7.	23.02.2015	National Conference on Recent Trends in Power Engineering, Power Electronics and Control Systems NCRTPPC'15	IETE
8.	31.08.2015	Intra Department Mini Project Contest	IETE
9.	31.08.2015	National Level Technical Symposium OPUZELEK'16	IETE

10.	03.03.2016	National Conference on Emerging Trends and development in power system , Power Electronics and drives NCETDPSPED'16	IETE
11.	07.03.2016	Intra Department Mini Project Contest	IETE
12.	27.08.2016	Intra Department Mini Project Contest	IETE
13.	29.08.2016 30.08.2016	Hands on Training on Robotics and Cable Design	IETE
14.	26.09.2016	National Level Technical Symposium OPUZELEK'17	IETE
15.	27.02.2017	National Conference on Emerging Trends and development in power system, Power Electronics and drives NCETDPSPED'17	IETE
16.	23.03.2017	Intra Department Mini Project Contest	IETE

**b) International:**

1.	15.12.2014 4 16.12.2014	International Conference on Recent Trends in Electrical, Electronics, computing and Communication (ICRTEECC-2014)	IET, IEEE
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**26. Student profile programme /course wise:**

Name of the Course/programme	Applications received/ selected	Enrolled (MQ+DTE+LE)	
		*M	*F
2013-2014	60	42	18
2014-2015	72	44	26
2015-2016	72	57	14
2016-2017	58	33	25

\*M = Male \*F = Female

**27. Diversity of Students:**

Year	% of students from the same state	% of students from other States	% of students from abroad
2013 – 14	93.33	6.66	0%
2014 – 15	98.57	1.42	0%
2015 – 16	87.32	12.67	0%
2016 – 17	82.76	17.24	0%

**28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?**

Sl. No.	Year of Passing	Competitive Examination	No. of Students Qualified
1	2013 – 2014	-	0
2	2014 – 2015	GRE	02
3	2015 – 2016	GATE	02
		GRE	02
		AMIRTA	02
		TANCET	01
		SSC – All India Rank - 14	01
4	2016 – 2017	-	-

**29. Student progression:**

Sl.no	Details of Progression	Progression as a percentage during			
		2013-14	2014-15	2015-16	2016-17
1	UG to PG	0.055%	0.071%		
2	PG to Ph.D			NA	
3	Employed through campus Recruitment	72.5%	91.67%	95%	52.08(till March 2017)
4	Employed through other than campus recruitment	--	--	--	--

**30. Details of Infrastructural facilities**

**a) Library**

S.No	Year	No. of Books added	No. of Journals	
			National	International (e-Journal)
1	2013 – 14	329	6	110
2	2014 – 15	274	12	150
3	2015 – 16	325	18	260
4	2016 – 17	172	24	370

**b) Internet facilities for Staff & Students**

Name of the Internet provider : Reliance, Tata Indicom  
 Available bandwidth : 170 Mbps Reliance 25

Access speed	Mbps Tata Indicom = 195 Mbps
Availability of internet in an exclusive lab	: Download 35Mbps
Availability in most computing labs	: Upload: 9Mbps
Availability in departments and other units	: Available
Availability in faculty rooms	: Available
Institute's own e-mail facility to faculty / students	: Available
Security/ privacy to e-mail/internet users	: Yes
Wi Fi Connection	: Security and privacy provided by firewall
Total Number of Systems with Internet Facility	: Available (195 Mbps)
	: 606

### c) Classrooms with ICT Facility

LCD projectors for multimedia presentation	: 02 Nos.
Over head projector	: 02 Nos.

### d) Laboratories

S.No	Name of the Subject	Name of the Lab	Area in Sq.m
1.	Electrical Machines Lab	Electrical Machines Lab	332
2.	Control Systems Lab		160.56
3.	Linear And Digital Integrated Circuits Lab	Power Electronics and Circuits Lab	160.56
4.	Power Electronics Lab		160.56
5.	Measurements And Instrumentation Lab	Control and Instrumentation Lab	160.56
6.	Electron Devices And Electric Circuits Lab	Electronics Lab	160.56
7.	Power System Simulation Lab	Computer lab-III	66
8.	Engineering Practices Lab	Workshop	4447.9

### 31. Number of students receiving financial assistance from college, university, government or other agencies

S.No	Year	No. of Students receiving financial assistance from			
		College	University	Government	Other Agencies
1.	2013 – 14	3	-	15	-
2.	2014 – 15	3	-	21	-
3.	2015 – 16	3	-	40	-
4.	2016 – 17	3	-	54	-

**32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts**

S. No.	Date of Lecture	Title of Lecture	Name and Designation of Resource Person	Beneficiary (Students)	
<b>2013 – 2014</b>					
<b>Guest Lecture by Academicians</b>					
1.	03.08.2013	Digital Signal Processing	Dr. Udhayakumar K Assistant professor	III Year	
2.	10.08.2013	Simulation Based Power Electronics	Dr. Jeevanandhan S Associate Professor,	III Year	
3.	10.10.2013	Electronic Devices and Circuits	Mr. Mohammad Basha, Associate Professor	II Year	
4.	28.12.2013	FACTS and PSOC	Dr. Somasundaram P Associate Professor	IV Year	
5.	28.12.2013	Power System Analysis	Dr. Vaithilingam C Professor	III Year	
<b>Guest Lecture by Industry Experts</b>					
6.	03.08.2013	Electromagnetic Relays	Mr. Prakashkumar D DGM Chennai	III Year	
7.	24.08.2013	Modelling and Performance of Transmission Lines		IV Year	
8.	14.09.2013	Electro-dynamic Fields	Mr. Prakashkumar D DGM,	II Year	
9.	16.09.2013	Recent developments in Energy Scenario	Dr. Pillai M P Director,	II, III, IV Year	
10.	28.12.2013	Power Plant Engineering	Mr. Vijayagopal R PSO(D),	II Year	
11.	04.01.2014	TCSC and Applications	Mr. Sridharan K S Chief Engineer	IV Year	
	08.01.2014	Design of Controllers for Drives		III Year	
	22.02.2014	AC and DC servomotors		II Year	
<b>2014 – 2015</b>					
<b>Guest Lecture by Academicians</b>					
1.	21.06.2014	Transmission and Distribution	Dr. Somasundaram P Associate Professor	III Year	
2.	07.03.2015	Discrete Signal Processing	Dr. Udhayakumar P Assistant professor	II Year	
3.	23.01.2015	Power System Analysis	Dr. Somasundaram P Associate Professor	III Year	

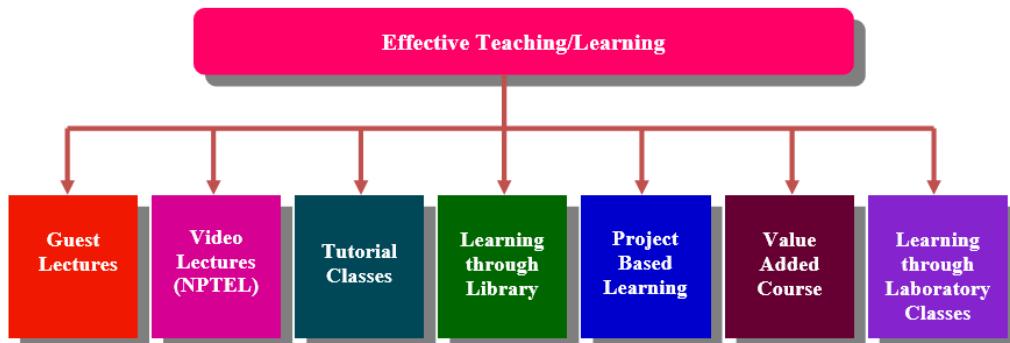
<b>Guest Lecture by Industry Experts</b>				
4.	09.07.2014	Present Scenario of Power Requirements	Dr. Prakashkumar D DGM	II Year
5.	12.07.2014	File Systems	Mr. Titus Thanga Primus Manager	IV Year
	26.07.2014	Operator Overloading		III Year
	23.08.2014	Introduction to Data Structures and Algorithms		IV Year
	12.07.2014	File Systems		
6.	10.01.2015	Economic Aspects of Generation	Mr. Rameshkumar	IV Year
7.	21.02.2015	Power System Operation and Control	Mr. ThamaraiSelavan C B Assistant Engineer	II year
8.	04.03.2015	Global Energy Issues	Mr. Vijayakumar M	III year
<b>2015 – 2016</b>				
<b>Guest Lecture by Academicians</b>				
1.	10.07.2015	Power Electronics	Dr. Jeevananthan S Associate Professor	III Year
2.	10.07.2015	Digital logic circuits	Dr. Subramanian N P Associate Professor,	II Year
3.	06.02.2016	Flexible AC Transmission System	Dr. Somasundaram P Associate Professor	III & IV Year
<b>Guest Lecture by Industry Experts</b>				
4.	06.02.2016	Recent Trends in Industrial Automation”	Mr. Chitrarasu K Head-Light Engineering Division	II Year
5.	27.04.2016	Transformer operation and Design	Dr. Kalaivanan A Superintendent Engineer (retd.)	II Year
6.	11.07.2015	Electro Magnetic Theory	Mr. Thamarai Selavan C B Assistant Engineer	II Year
7.	12.08.2015	Speed Governing Mechanism using Fly Ball Governor	Dr. Vijay Tharad Training Consultant, Caterpillar India	IV Year
8.	23.04.2016.	Embedded System	Mr.Kingsley D SAP Consultant, CMC Academy	III Year
<b>2016 – 2017</b>				
1.	29.08.2016 30.08.2016	Hands on Training on Robotics and Cable Design	M/s Axis Global	All EEE students

### 33. Teaching methods adopted to improve student learning

Innovations by the Faculty in Teaching and Learning

#### **Paradigm shift in Teaching**

- ❖ The traditional teaching method of chalk and talk is predominantly used in lecture classes.
- ❖ The lecture sessions are adequately supplemented by modern electronic teaching gadgets.
- ❖ For effective class room teaching methodology, Power Point Presentation and Video Lectures are used.
- ❖ The college library is fully equipped with sufficient books, journals and professional magazines; keeping pace with the latest trends. It has many e-resources with e-journals and databases for the use of the faculty and students.
- ❖ Sophisticated and well equipped laboratories in the campus invigorate the students to do research activities.
- ❖ Interactive and participatory activities are adopted by the teachers to make the learning process as student-centric approach.
- ❖ Through seminars, debates and group discussions, students are encouraged to practice both individual and collaborative learning process.
- ❖ Students are taken to Industries, Research Institutes and Field Visits to expose them to the latest developments in their discipline.



Also our institution engages the students and teachers in active learning throughout the academic year emphasizing more on training activities. The institution promotes active learning by organizing various programs like Seminars, Conference, Mini Project, Workshops on instructional objectives. Assignment preparation and practical activities make the students to be active participants in the process of learning.

### 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

#### **YRC Club Activities:**

- ❖ Every Academic Year, YRC Conducts Blood Donation Camp and Tree Plantation Camp.

- ❖ Youth Red Cross Unit of the college received “**Best Performance in Youth Red Cross Unit**” Award from the Indian Red Cross Society on 06.01.2015.

S.No	Date	Program	No of Student Participated
1.	05.10.2013	Blood Donation Camp	46
2.	22.02.2014	Tree Plantation Programme & First Aid Awareness Programme	44
3.	24.01.2015	Tree Plantation Programme & First Aid Awareness Programme	52
4.	07.03.2015	Blood Donation Camp	39
5.	11.03.2016	Blood Donation Camp & First Aid Awareness Programme	54
6.	06.04.2016	Tree Plantation Programme	61

### 35. SWOC analysis of the department and Future plans Strengths

The RMKCET is located at Puduvoyal village at a distance of about 33 km from Chennai on the Chennai-Vijayawada National Highway. It is easily reachable from Chennai by buses proceeding to Gummidi poondi/ Sulurpet/ Nellore / Nayudupet / Sri Kalahasti / Thirupathi. The suburban trains between Chennai and Gummidi poondi stop at Kavaraipettai station and from there the college is 1 km away.

The institute has a huge complex that houses class rooms, air conditioned seminar halls, central library, departmental libraries and Internet with 2Mbit/s connectivity. There are separate hostels for men and women.

#### Strengths:

- ❖ Adequate budget and efficient utilization
- ❖ Best infrastructure
- ❖ Filling of seats within a week of counseling
- ❖ Spacious and well ventilated class rooms
- ❖ State of the art laboratories, especially the electrical machines lab
- ❖ Very effective and proven academic system.
- ❖ Well-equipped laboratories conducive for research with additional equipment
- ❖ Large fleet of buses covering all the major areas of Chennai
- ❖ Value added courses apart from regular courses
- ❖ Centre of Excellence from various industries

#### Weaknesses:

- ❖ The location of the college which is almost 35km away from the city; but the large fleet of buses cover almost every part within a radius of 60km.
- ❖ Inability to redefine courses with latest trends in electrical technology

- ❖ Lower alumni contribution to the institution in kind and deed being a new college

### Opportunities

- ❖ Can start PG courses in Power Electronics and Drives and Embedded System
- ❖ Research activities related to power production and energy utilization in collaboration with Industries of North Chennai.

### Challenges

- ❖ Campus placement for all those have enrolled for the course
- ❖ To produce a minimum of 25% entrepreneurs from each batch
- ❖ Being a young self-financed college, to procure consultancy projects from government organizations.

### Future Plans

- ❖ To enhance the industry- institute partnership, more collaboration with international universities and companies.
- ❖ Better placement opportunities for the EEE students in multinational companies.
- ❖ More emphasis on R&D as well as consultancy related services to the industry.
- ❖ Training the students towards research based learning.

## EVALUATIVE REPORT OF THE DEPARTMENT

- 1. Name of the department :** Mechanical Engineering (ME)
- 2. Year of Establishment :** 2010
- 3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)**

UG: Bachelor of Engineering in Mechanical Engineering

- 4. Names of Interdisciplinary courses and the departments / units involved**

There is no Interdisciplinary course available

- 5. Annual / semester / choice based credit system (programmewise)**

Semester based credit system prescribed by Anna University

- 6. Participation of the department in the courses offered by other departments**

S.No	Subject code	Subject /lab	The department in which the courses is offered
1.	GE6162	Engineering Practices Lab	S & H
2.	GE6152	Engineering Graphics	S & H
3.	GE2152	Basic Civil & Mechanical Engineering(Regulation-2008)	S & H
4.	GE6251	Basic Civil & Mechanical Engineering(Regulation-2013)	S & H

- 7. Courses in collaboration with other universities, industries, foreign institutions, etc.**

Sl No	Courses	Collaborative Industry/University
1.	PLM(Product Life Cycle Management)	Parametric Technology Corporation
2.	BEC	Cambridge University
3.	Infosys Campus Connect	Infosys
4.	NPTEL	IIT
5	JADE Programme	JADE Training Programme
6	SMART Training	SMART Training Programme

**8. Details of courses / programmes discontinued (if any) with reasons**

NIL

**9. Number of teaching posts**

Sl No	Designation	2013 – 2014		2014 – 2015		2015 – 2016		2016 – 2017	
		S	F	S	F	S	F	S	F
1.	Professors	2	2	2	3	2	2	2	2
2.	Associate Professors	4	4	4	4	4	4	5	5
3.	Asst. Professors	15	15	18	17	18	18	14	14
4.	Adjunct Faculty	-	-	-	-	-	-	4	4
<b>Total</b>		<b>21</b>	<b>21</b>	<b>24</b>	<b>24</b>	<b>24</b>	<b>24</b>	<b>25</b>	<b>25</b>

**10. Faculty profile with name, qualification, designation, specialization**

S. No	Name of the Faculty	Qualification	Designation	Specialization / Industry	No. of Years of Experience	No of Ph.D Students Guided for the last 4 Years
1.	Dr.M.Balasubramanian	M.E.,Ph.D	Professor & Head	Manufacturing Engg.	19.3	6
2.	Dr.P.K.Devan	M.E.,Ph.D	Professor	Thermal Engg.	27.4	6
3.	Mr.T.G.Loganathan	M.E.,(Ph.D)	Associate Professor	CAD	18.2	-
4.	Mr.S.Senthilkumar	M.E.,(Ph.D)	Associate Professor	I.C Engines	17.3	-
5.	Mr.S.Senthil Gavaskar	M.E.,M.B.A	Associate Professor	Industrial Engg Marketing & HR	19.0	-
6.	Mr.C.Bibin	M.E.,(Ph.D)	Associate Professor	Thermal Engg	13.1	-
7.	Mrs.K.Renugadevi	M.E. (Ph.D)	Associate Professor	Product Design Development	11.4	-
8.	Mr.Vasa Ramu	M.E.,	Assistant Professor	Engg Design	8.4	-

9.	Mr.M.Krishnakumar	M.E.,	Assistant Professor	Manufacturing Engg	7.1	-
10.	Mr.R.Ashok Kumar	M.E.,(Ph.D)	Assistant Professor	CAD	8.5	-
11.	Mr.A.Senthil Kannan	M.E.,	Assistant Professor	CAD	11.11	-
12.	Mr.S.Arun Kumar	M.E.,(Ph.D)	Assistant Professor	Engg Design	5.6	-
13.	Mr.K.Rajesh	M.E., Ph.D)	Assistant Professor	Automobile Engg	6.5	-
14.	Mr.C.Hemadri	M.E.	Assistant Professor	Manuf Systems & Management	4.5	-
15.	Mr.M.Saravanan	M.E.M.B.A .., (Ph.D)	Assistant Professor	Comp Integrated Manufacturing	9.4	-
16.	Mr.K.Vinoth Kumar	M.E.(Ph.D)	Assistant Professor	Product design & Manufacturing	4.8	-
17.	Mr.A.Balajikrishn abharathi	M.E.,	Assistant Professor	CAD / CAM	4.8	-
18.	Mr.V.Dillibabu	M.E., (Ph.D)	Assistant Professor	Energy Engg	4.5	-
19.	Mr.N.Sadasivan	M.TECH., (Ph.D)	Assistant Professor	Advanced Manufacturing	5.5	-
20.	Mr.N.Aravindhan	M.E., (Ph.D)	Assistant Professor	Production Engg	3.6	-
21.	Mr.S.Gopinath	M.E.,(Ph.D)	Assistant Professor	Thermal Engg	2.7	-
<b>Adjunct Faculty</b>						
22.	Mr.V.Sudharsan	M.E.,	Adjunct Faculty	Industrial Consultant	34.9	-
23.	Mr.M.M.Shah	M.Des	Adjunct Faculty	D Cube Designs	15.1	-
24.	Mr.R.Arularasan	M.E.,	Adjunct Faculty	Vidhun Foundation	14.10	-
25.	Mr.A.Gurusamy	M.E.,	Adjunct Faculty	Rane Engine Valve Ltd	10.9	-

### 11. List of senior visiting faculty:

Sl.No.	Name of the Faculty	Designation	Organization
1.	Mr.V.Sudharsan	Consultant	Industrial Consultant, Former Vice - President, Wheels India Ltd. Chennai – 53

2.	Mr.M.M.Shah	Industrial Designer	D – Cube Designs, Chennai – 25
3.	Mr.R.Arularasan	Senior Engineer	Vidhun Foundation, Chennai – 24
4.	Mr.A.Gurusamy	Deputy Manager	Rane Engine valves Chennai – 32

**12. Percentage of lectures delivered and practical classes handled (programmewise) by temporary faculty:**

All Lectures and practical class are handled by permanent faculty of our institution. Adjunct / Visiting faculties from industries have handling partial work load

**13. Student –Teacher Ratio (programme wise):**

Courses	Programmes	Student –Teacher Ratio
UG	Mechanical Engineering	15:1

**14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:**

Designation	Sanctioned	Filled
Academic Support Staff	04	04
Administrative Staff	01	01

**15. Qualifications of teaching faculty with M.E, M.TECH. / Ph.D.,**

S.N o	Year	Qualification				Total	Pursuing Ph.D
		D.Sc. / D.Litt .	Ph.D.	M. Phil.	PG		
1	2013 – 14	-	2	-	21	23	6
2	2014 – 15	-	2	-	22	24	9
3	2015 – 16	-	2	-	22	24	12
4	2016 – 17	-	2	-	23	25	14

**16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:**

NIL

**17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received:**

The grants received from various funding agencies for organizing research oriented Conferences, Workshops, Seminars, etc for enhancing research activities is Rs. 8,85,000

**18. Research Centre / facility recognized by the University:**

NIL

**19. Publications:**

**Number of papers published in peer reviewed journals (national / international) by faculty:**

S. No	Name of the Faculty Member	Total No of papers Published		Citation indices range					
		Conf eren ce	Jour nal	Cita tion Inde x	Imp act Fact or	Late st SJR	Late st SNI P	Late st h inde x	
1.	Dr.M.Balasubramanian	12	45	491	3.99 7	1.91 6	2.52 6	13	
2.	Dr.P.K.Devan	6	11	446	5.74 6	2.99 8	2.43 9	5	
3.	Mr.T.G.Loganathan	4	4	-	0.47 1	0.35 3	0.41 7	1	
4.	Mr.S.Senthilkumar	8	7	-	-	0.33 0	0.77 3	-	
5.	Mr.S.Senthil Gavaskar	9	4	-	-	-	-	-	
6.	Mr.C.Bibin	27	12	-	-	0.13 0	0.26 0	-	
7.	Mrs.K.Renugadevi	4	2	-	-	0.13 0	0.26 0	-	
8.	Mr.Vasa Ramu	0	0	-	-	-	-	-	
9.	Mr.M.Krishnakumar	0	1	-	-	-	-	-	
10.	Mr.R.Ashok Kumar	6	3	-	-	-	-	-	
11.	Mr.A.Senthil Kannan	0	0	-	-	-	-	-	
12.	Mr.S.Arun Kumar	5	2	-	-	-	-	-	
13.	Mr.K.Rajesh	3	2	-	-	-	-	-	
14.	Mr.C.Hemadri	1	3	-	-	0.37 6	0.73 9	-	
15.	Mr.M.Saravanan	2	2	-	-	-	-	-	

16.	Mr.K.Vinoth Kumar	12	8	-	-	0.13 0	0.26 0	-
17.	Mr.A.Balajikrish nabharathi	0	0	-	-	-	-	-
18.	Mr.V.Dillibabu	6	1	-	-	-	-	-
19.	Mr.N.Sadasivan	0	4	-	-	-	-	-
20.	Mr.N.Aravindhan	1	3	-	-	-	-	-
21.	Mr.S.Gopinath	3	7	-	-	0.13 0	0.26 0	-

**Number of papers published in peer reviewed journals (national / international) by faculty and students**

2013 – 2014	2014 – 2015	2015 – 2016	2016 – 2017
-	4	5	14

**Total Number of papers published in peer reviewed journals (national/international) by Student:**

S.No	Academic Year	Total No of Papers Published by Students	
		Conference	Journal
1.	2013 – 2014	-	-
2.	2014 – 2015	5	4
3.	2015 – 2016	10	5
4.	2016 – 2017	36	14

**Books with ISBN / ISSN numbers with details of publishers:**

S.No	Name of the author	Title of the book	ISBN Number	Year of Publication	Name of the Publishers
1	Mr.S.Senthil Gavaskar	Production and Materials Management		2004	University of Madras
2	Mr.S.Senthil Gavaskar	Supply Chain Management		2006	Tamil Nadu Open University
3	Mrs.K.Renugadevi	Engineering Practices Lab		2008	TLF Printers
4	Mr.S.Senthil Gavaskar	Rural Marketing		2009	University of Madras
5	Mr.S.Senthil Gavaskar	World Class Manufacturing		2013	University of Madras

6	Mr.S.Senthil Gavaskar	Resilience Management		2015	University of Madras
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**20. Areas of consultancy and income generated:**

S.No	Name of the Institute/Industry	Area of Consultancy	Income Generated in Rs
1.	Mailam Engineering College Villupuram	Composite Testing	13,000
2.	Chennai Poles	Fabrication & Testing of Composite material	25,000
3.	Abide Industries	Tool & Die Design	70,000
4	Wear Coat Technologies	Erosion Measuring Test Ring	25,000

**21. Faculty as members in a) National Committees b) International Committees c) Editorial Boards.**

**a) National Committees b) International Committees**

S.No	Faculty Name	Name of the Committee
1.	Dr. Balasubramanian M	ISTE, IIPE, IIW, IWS, FIE, SFA, ASME
2.	Dr. Devan P K	ISTE, SAE
3.	Mr. Loganathan.T.G	ISTE
4.	Mr Senthil Kumar.S	ISTE, SAE, IRED, IAENG
5.	Mr Senthil Gavaskar S	SAE, IIPE, ISTE, IAENG, ISQEM, IRED
6.	Mr.Bibin C	ISTE, IAENG, ISQEM, ISRD, IRED, IASTER
7.	Ms. Renugadevi.K	ISTE
8.	Mr. Vasa Ramu	ISTE
9.	Mr. Krishnakumar M	ISTE, IAENG, ISQEM, ISRD, IRED
10.	Mr. Ashok Kumar R	ISTE, ISQEM, ISRD, IRED
11.	Mr.Senthil Kannan A	ISTE
12.	Mr. Arunkumar S	ISTE, IAENG, ISQEM, ISRD, IRED
13.	Mr. Rajesh. K	ISTE, IAENG, ISQEM, ISRD, IRED
14.	Mr. Hemadri Chadalavada	ISTE
15.	Mr. Saravanan M	ISTE

16.	Mr.Vinoth Kumar K	ISTE, IAENG, ISQEM, ISRD, IRED
17.	Mr.Balajikrishnabharathi A	IAENG, ISQEM, ISRD, IRED, ISTE
18.	Mr.Dillibabu V	ISTE
19.	Mr.Aravindhan N	ISTE
20.	Mr. Gopinath S	IRED, IAENG,MISTE
21.	Mr.Sadasivan N	IRED, ISTE,IAENG, ISQEM

**c) Editorial Boards / Reviewer**

S. No	Faculty Name	Name of the Journal / Publishers	Membership in Editorial Board
1.	Dr.M.Balasubramanain	Journal of Materials Processing Technology, Elsevier Science.	Reviewer
		Journal Of Material Science And Technology.	
		The Journal Materials And Design, Elsevier Science.	
		The Journal Of Materials Letters. Elsevier Science	
		The Journal Of Transactions Of Non Ferrous Materials Society Of China, Elsevier Science	
2.	Dr.P.K.Devan	Bio fuels, Taylor & Francis	Reviewer
		Journal of Science and Technology Transactions of Mechanical Engineering	
		Transportation Research Part D: Transport and Environment (Elsevier)	
		National Conference on Evolution of Green and Material Processing Technology (NCEGMPT 2K17)	
		Emerging Technologies in Mechanical & Manufacturing Engineering ( ETIMME2KJ7 )	

**22. Student projects:**

**a) Percentage of students who have one in house projects including inter Departmental / Programme.**

S. No	Percentage of in - house projects			
	2013 – 2014	2014 – 2015	2015 – 2016	2016 – 2017
1	46	30	76	97

**b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories / Industry / other agencies:**

S. No	Percentage of outside institution projects			
	2013 – 2014	2014 – 2015	2015 – 2016	2016 – 2017
1	54	70	24	3

**23. Awards/Recognitions received by faculty and students:**

**Awards/Recognitions received by Faculty:**

Sl. No	Name of the Faculty	Organization	Awards/Recognitions received by faculty	Year
1.	Dr.M.Balasubramanian	CTS	Best Teacher Award	2016
2.	Mr.M.Krishnakumar	IIPPE	Training and Placement Activities	2016
3.	Mr.R.Ashokkumar	IIPPE	Best Teacher Award	2016
4.	Mr.C.Hemadri	IIPPE	Training and Placement Activities	2016
5.	Mr.A.BalajiKrishanaBharathi	IIPPE	Training and Placement Activities	2016
6.	Mr.N.Aravindhan	NASSCOM	Certifies Master Trainer in FSIPD	2016
7.	Mr.S.Gopinath	IIPPE	Best Overall Performer Award	2016
8.	Dr. M. Balasubramanain	Dr. APJ Abdul Kalam Trust for Tribal Chennai	Best Administrator	2017

9.	Ms.K. RenugaDevi	Venus International	Young Woman in Engineering	2017
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**Awards/Recognitions received by Students:**

Academic Year	Awards, Recognitions By Students		
	University Rank	Awards	Prize won in Co-Curricular & Extra Curricular Activities
2013 – 14	-	-	15
2014 – 15	-	-	41
2015 – 16	9	5	34
2016 – 17	3	1	17

S.No	Name of the Student	Organization	Awards / Recognitions received by Students	Year
1.	Mr.G.P.Saiabiram	Anna University	Dr.Kalam Young Achiever	2016
2.	Mr.K.Vinoth Kumar	Anna University	Dr.Kalam Young Achiever	2016
3.	Mr.V.Hariharan	Anna University	Dr.Kalam Young Achiever	2016
4.	Mr.A.Karthick	Anna University	Dr.Kalam Young Achiever	2016
5.	Mr.P.Aravind	Cognizant Technology Solutions	Best Out Going Student Award	2016
6.	Mr.Mayazhan	ISTE	ISTE Best Student Award	2017

**24. List of eminent academicians and scientists / visitors to the department:**

S. No.	Eminent Academicians, Scientists and Visitors with Designation	Specialization	Name of the University / Institute / Industry
1.	Dr.S.Suresh Assistant Professor	Mechanical	NIT ,Trichy
2.	Dr.D Brahadeeswaran, Professor	Mechanical	Head –Dept. of policy planning & education research, NITTTR, Chennai

3.	Mr.A.R.Subramani	CNC	UCAL FUEL SYSTEMS LIMITED Chennai.
4.	Dr.C.Balaji, Professor	Production	IITM, Chennai
5.	Dr.R.Velmurugan, Professor	Aerospace Engg	IITM, Chennai
6.	Dr.V.Balasubramanian, Professor,	R & D	Centre for Metal Joining and Research, Annamalai University
7.	Dr.S.Velmurugan,	Chemistry	Head, Water Chemistry division BAARC, IGCAR, Kalpakkam.
8.	Dr.Durga Janakiram Gabbita, Assistant Professor	Materials and Metallurgical	IITM, Chennai
9.	Dr.P.Siva kumar, Scientist-H	Mechanical	Director CVRDE, Avadi Chennai
10.	Dr.N.Murugan, Professor	Mechanical	CIT, Coimbatore
11.	Dr.B.Arivazhagan, Scientific Officer	Welding	IGCAR, Kalpakkam,
12.	Dr.Anil Kumar Sharma, Scientific Officer/Engineer,	Mechanical	IGCAR
13.	Mr.AR.Subramani, Deputy Manager	Mechanical	FANUC India Pvt. Ltd., Chennai
14.	Mr.S.B.Venkhatesh, Divisional Manager,	Mechanical	Total Quality Management, TAFE, Chennai
15.	Dr.R.Krishnamurthy, Former Professor,	Mechanical	IITM
16.	Dr.Anil Kumarsharma, Scientific Officer,	Mechanical	IGCAR
17.	Dr.M.R.Swaminathan,Asst Prof	Mechanical	Anna University, Chennai– 25
18.	Mr.S.Sidharth,Manager,	Quality	TAFE
19.	Dr.M.M.Shah,	Product Design	Director Incubation center, Anna University.
20.	Mr.V.Sudharsan	Manufacturing Engineering	Advisor & Former Senior Vice President Wheels India
21.	Dr.P.Palanichamy, Sr. Scientist,	Mechanical	IGCAR, Kalpakkam.
22.	Dr. P. Iyamperumal, Executive Director	Mechanical	Tamil Nadu Science & Technology Centre,
23.	Dr. S. Gomathinayagam	Structural Engineering	Director General, National Institute of Wind Energy, Ministry of New and Renewable

			Energy, Government of India, Chennai
24.	Shri.P.Veluchamy, Assistant General Manager In MechatronicsDept	Mechanical	Ashok Leyland

**25. Seminars / Conferences / Workshops organized & the source of funding a) National b) International**

Sl. No.	DATE	Seminars / Conferences / Workshops organized	Funded by
1.	29.01.2013	One day workshop on Non-destructive Testing (NDT)	M/s Supertech Scientific Metallurgical Services
2.	11.03.2013	National Conference (FAME 2013) Fascinating Advancements in Mechanical Engineering	Indian Society For Technical Education (ISTE), Board of Research in Nuclear Sciences (BRNS)
3.	15.04.2013	One Day Workshop (ROMJ 2013) Research Opportunities in Material Joining	Council of Industrial and Scientific Research (CSIR)
4.	10.03.2013	National Conference (FAME 2014) Fascinating Advancements in Mechanical Engineering	Board of Research in Nuclear Sciences (BRNS)
5.	23.03.2015	National Conference (FAME 2015) Fascinating Advancements in Mechanical Engineering	Board of Research in Nuclear Sciences (BRNS)
6.	23.03.2015 to 24.03.2015	Two Days Workshop on Autonomous Robot	SAE Collegiate Club of RMKET
7.	28.09.2015	One Day National Seminar On Renewable Conversion Technologies	Ministry of New and Renewable Energy
8.	07.03.2016	National Conference (FAME 2016) Fascinating Advancements in Mechanical Engineering	Mechanical Engineering Association of RMKET
9.	07.03.2016 to 8.03.2016	I.C. Engines workshop	SAE Collegiate Club of RMKET
10.	27.02.2017	National Conference (FAME 2017) Fascinating Advancements in Mechanical Engineering	Mechanical Engineering Association of RMKET

11.	27.02.2017 to 28.02.2017	I.C. Engines workshop	SAE Collegiate Club of RMKCET
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**b) International:**

NIL

**26. Student profile programme/course wise:**

Academic year	Application received/ Selected	Enrolled (MQ+DTE+LE)	
		M	F
2013 – 2014	135	135	
2014 – 2015	142	142	
2015 – 2016	138	138	
2016 – 2017	118	117	1

\*M=Male \*F =Female

**27. Diversity of Students:**

Academic year	% of students from the same state	% of students from other States	% of students from abroad
2013 – 2014	93.98	6.01	-
2014 – 2015	95.07	4.92	-
2015 – 2016	94.81	5.18	-
2016 – 2017	94.91	5.08	-

**28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?**

Sl. No.	Year of Passing	No. of students who have cleared competitive exam	Numbers of students cleared
1	2013 – 2014	GATE	01
		GRE	02
		TANCET	01
2	2014 – 2015	GATE	03
		CAT	01
		TANCET	02
3	2015 – 2016	GATE	18
		TOEFL	01

**29. Student progression:**

S.No	Student progression	Against % enrolled			
		2013 – 14	2014 – 15	2015 – 16	2016 – 17
1.	UG to PG	3.1	3.6	1.4	NA

2.	Employed Campus selection	38.23	87.64	93.24	60.71%(till November 2016)
3.	Entrepreneurship/ Self-employment	9	2.9	1.4	NA

**30. Details of Infrastructural facilities****a) Library**

S.No	Year	No. of Books added	No. of Journals	
			National	International (Ejournal)
1	2013 – 2014	777	12	28
2	2014 – 2015	526	12	28
3	2015 – 2016	433	12	72
4	2016 – 2017	222	12	72

**b) Internet facilities for Staff & Students**

Name of the Internet provider	: Reliance, Tata Indicom
Available bandwidth	: 170 Mbps Reliance 25 Mbps Tata Indicom = 195 Mbps
Access speed	: Download 35Mbps Upload: 9Mbps
Availability of internet in an exclusive lab	: Available
Availability in most computing labs	: Available
Availability in departments and other units	: Available
Availability in faculty rooms	: Available
Institute's own e-mail facility to faculty / students	: Yes
Security/ privacy to e-mail/internet users	: Security and privacy provided by firewall
Wi Fi Connection	: Available (195 Mbps)
Total Number of Systems with Internet Facility	: 606

**c) Classrooms with ICT Facility**

LCD projectors for multimedia presentation	: 03 Nos.
Over head projector	: 04 Nos.

**d) Laboratories**

S.No	Name of the Subject	Name of the Laboratory	Area (Sq.m)
1.	Engineering Practice Lab	Engineering Practice Lab	447.9
2.	Fluid Mechanics and Machinery lab	Fluid Mechanics and Machinery lab	173.7
3.	Manufacturing Technology Lab-I	Manufacturing Technology Lab	265.8

4.	Manufacturing Technology Lab-II		230
5.	Thermal Engineering Lab-I	Thermal Engineering Lab	115
6.	Thermal Engineering Lab-II		265.8
7.	Strength of Materials Lab	Strength of Materials Lab	115
8.	Metrology & Measurements Lab	Metrology & Measurements Lab	73.39
9.	Dynamics Lab	Dynamics Lab	73.39
10.	Mechatronics Lab	Mechatronics Lab	98.48
11.	CAD Lab & CAD / CAM Laboratory	CAD/CAM Lab	173.7
12.	Simulation and Analysis Lab		

**31. Number of students receiving financial assistance from college, university, Government or other agencies**

S.No	Year	No. of Students receiving financial assistance from			
		College	University	Government	Other Agencies
1.	2013 – 14	7	-	31	-
2.	2014 – 15	8	-	55	-
3.	2015 – 16	9	-	82	-
4.	2016 – 17	9	-	130	-

**32. Details on student enrichment programmes (Special lectures / workshops / seminar) with external experts.**

Sl. No.	Date	Title of the Lecture	Name of the Resource Person
<b>2013 – 2014</b>			
1.	06.7.2013	Total Quality Management	Dr.G. Shibu, CEG, Anna University
2.	20.07.2013	Nuclear Engineering	Dr.Anil Kumar Sharma, Scientific Officer/Engineer, IGCAR
3.	20.7.2013	Thermal Engineering	Dr.M. Swaminathan, CEG, Anna University
4.	20.7.2013	Engineering Thermodynamics	Dr.G. Kumerasen, CEG, Anna University
5.	25.01.2014	Gas Dynamics and Jet Propulsion	Dr.M. Swaminathan, CEG, Anna University
6.	09.01.2014	Advancement in CAD	Mr.V.Herald Wilson Raja
7.	01.02.2014	Principles of Management	Dr.N.Ramasamy, Management Consultant
8.	01.02.2014	Heat and Mass Transfer	Dr.G. Kumerasen, CEG, Anna University

9.	21.02.2014	Engineering Materials and Metallurgy	Prof.B.S.Murthy,Dept., of Metallurgical &Material Engg., IITM
<b>2014 – 2015</b>			
1.	21.06.2014	Nuclear Engineering	Dr.Anil Kumarsharma, Scientific Officer, IGCAR
2.	28.06.2014	Thermal Engineering	Dr.M.R.Swaminathan,Asst Prof/Mech CEG,- Anna University, Chennai– 25
3.	28.06.2014	Engineering Thermodynamics	Dr.G.Kumaresan, Asst Prof/Mech CEG,Anna university chennai
4.	14.08.2014	Total Quality Management	Mr.S.Sidharth,Manager, Six sigma, TAFE.
5.	25.09.2014	Product Design	Dr.M.M.Shah, Director Incubation center, Anna University
6.	09.10.2014	Manufacturing Technology	Mr.V.Sudharsan,Advisor& Former Senior Vice President Wheels India .
7.	24.12.2014	Principles of Management	Dr.N.Ramasamy,Management Consultant
8.	07.02.2015	Finite Elements Analysis	Mr.K.A.Prabhakaran, Director, (ICCS Pvt., Ltd.,
9.	31.12.2014	Engineering Materials and Metallurgy	Mr.S.Venkatasubramanian, Graduate Engineering Trainee.
10.	10.01.2015	Manufacturing Technology	Mr.S.Jeyakumar
<b>2015 – 2016</b>			
1.	27.06.2015	Nuclear Engineering	Dr. Anil Kumar Sharma (IGCAR)
2.	04.07.2015	Total quality management	Mr. S. P. Venkatesh(TAFE, Chennai)
3.	07.08.2015	Challenges in Industries	Mr. K Roshan (Isuzu Motors Pvt Ltd)
4.	03.07.2015	Computer Aided Design	Mr. R. Raghunathan (IITM Chennai)
5.	29.08.2015	Heat and Mass Transfer	Dr.G.Kumersan (Anna university)
6.	22.08.2015	Manufacturing Technology	Mr.M.Pradeep Kumar(Hyundai Motors)
7.	26.09.2015	Engineering Thermodynamics	Dr.M.R.Saminathan (Anna university )
8.	28.09.2015.	One Day National Seminar on	Dr. S. Gomathinayagam, Director General, National Institute of Wind

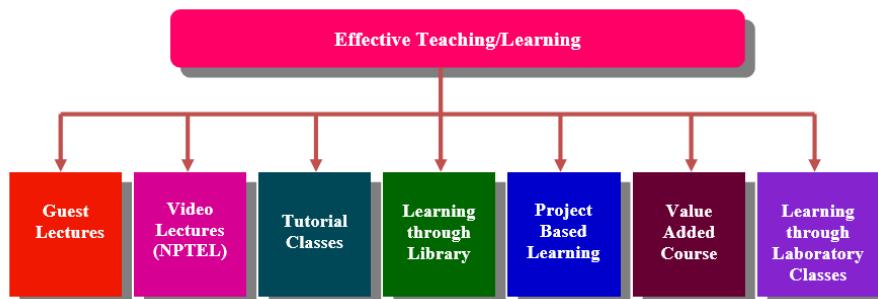
		“Renewable Conversion Technologies”	Energy, Ministry of New and Renewable Energy, Government of India, Chennai
9.	19.02.2016	Kinematics of Machinery	Dr. Sunderaswaran. V., Prof., Anna University,
10.	10.03.2016	Manufacturing Technology	Mr. Sudharshanam V., Advisor, Former Senior Vice President, Wheels India.
11.	05.03.2016	Automobile Engineering	Mr.P.Prakash, Manager-Design, Daimler India Ltd., Chennai.
12.	15.03.2016	Design of Transmission Systems	Dr. Jayakumar V., Prof., Saveetha University, Chennai.
<b>2016 – 2017</b>			
1.	19.08.2016	Industrial Scale Casting of Non – Ferrous Metals	Mr. V.Sudharasan, Industrial Consultant
2.	27.08.2016	Unbalanced Vibration	Mr.A.Gurusamy, Rane Engine Valve Ltd
3.	30.08.2016	Application of Metal joining in Automotive industry	Mr. V.Sudharasan, Industrial Consultant
4.	09.09.2016	Hot Forging – Machinery / Facilities required in Industry	Mr. V.Sudharasan, Industrial Consultant
5.	12.09.2016	Load Distribution in Power Plant	Mr.R.Arularasan, Vidhun Foundation
6.	15.12.2016	Automobile Evolution	Mr.A.Gurusamy, Rane Engine Valve Ltd
7.	29.12.2016	Advancements in IC Engines	Mr.A.Gurusamy, Rane Engine Valve Ltd
8.	06.01.2017	Electronic Systems in Automotive	Mr.A.Gurusamy, Rane Engine Valve Ltd
9.	18.02.2017	Joints in Automotive Industry	Mr.A.Gurusamy, Rane Engine Valve Ltd
10.	27.02.2017	I.C. Engine Workshop	Mr.P.Krishnakanth, Director

### 33. Teaching methods adopted to improve student learning

- ❖ Chalk and Board Method
- ❖ Class test /Improvement test
- ❖ Industrial Visits
- ❖ Demonstration method of teaching
- ❖ NPTEL or Video based presentations
- ❖ Online multiple choice questions for placement training.
- ❖ Models available for witnessing various laws and principles
- ❖ Faculty from industries sharing their experience

### Paradigm shift in Teaching

- ❖ The traditional teaching method of chalk and talk is predominantly used in lecture classes.
- ❖ The lecture sessions are adequately supplemented by modern electronic teaching gadgets.
- ❖ For effective class room teaching methodology, Power Point Presentation and Video Lectures are used.
- ❖ The college library is fully equipped with sufficient books, journals and professional magazines; keeping pace with the latest trends. It has many e-resources with e-journals and databases for the use of the faculty and students.
- ❖ Sophisticated and well equipped laboratories in the campus invigorate the students to do research activities.
- ❖ Interactive and participatory activities are adopted by the teachers to make the learning process as student-centric approach.
- ❖ Through seminars, debates and group discussions, students are encouraged to practice both individual and collaborative learning process.
- ❖ Students are taken to Industries, Research Institutes and Field Visits to expose them to the latest developments in their discipline.



Also our institution engages the students and teachers in active learning throughout the academic year emphasizing more on training activities. The institution promotes active learning by organizing various programs like Seminars, Conference, Mini Project, Workshops on instructional objectives. Assignment preparation and practical activities make the students to be active participants in the process of learning

### 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

#### YRC Club Activities

- ❖ Every Academic Year YRC Conducts Blood Donation Camp and Tree Plantation Camp.
- ❖ Youth Red Cross Unit of the college received “**Best Performance in Youth Red Cross Unit**” Award from the Indian Red Cross Society on 06.01.2015.

S.No	Date	Program	No of Student Participated
1.	05.10.2013	Blood Donation Camp	50
2.	22.02.2014	Tree Plantation Programme & First Aid Awareness	24

		Programme	
3.	24.01.2015	Tree Plantation Programme & First Aid Awareness Programme	30
4.	07.03.2015	Blood Donation Camp	45
5.	11.03.2016	Blood Donation Camp & First Aid Awareness Programme	45
6.	06.04.2016	Tree Plantation Programme	39

### 35. SWOC analysis of the department and Future plans

#### Strength

- ❖ Mechanical Engineering has good brand image and for the past few years emerges as the preferred choice for admission seekers.
- ❖ The Department has highly qualified and dedicated faculty members.
- ❖ The faculty has a great sense of belongingness for the institution, especially for the students.
- ❖ The Department possess about twelve different labs with advanced equipment.
- ❖ Memorandum of Understandings has been signed with different Industries for the benefit of both students and faculty members.
- ❖ Eligible students are given placement in different core industries.
- ❖ Students are given opportunities to undergo in-plant training/internship in various industries.
- ❖ Value added courses to fill the gap between industries and institution.
- ❖ Students participate in various paper presentations at various colleges to enrich their knowledge in latest technology.
- ❖ Faculty and students jointly file patent
- ❖ The Department has established a Centre for Composite fabrication & testing
- ❖ Faculty, students and industry personnel jointly publish papers in journal
- ❖ Students involve in research activity along with faculty
- ❖ Senior personnel from industry are invited to share their experience with students and faculty
- ❖ Students actively involve themselves with faculty in new product development
- ❖ The Department has established Centre of Excellence in the area of Composites and Product Life cycle Management.
- ❖ The Department faculty and students have received awards from various professional societies and agencies for their credible performance towards academics and research.
- ❖ Two publications of Dr.M.Balasubramanian have been rated within top 25 articles in science direct.
- ❖ The Department has a indigenously developed biodiesel Extraction setup.
- ❖ Our faculty also participate in training given by industries on regular basis to know about latest technology, so that the same can be disseminated to students

## Weaknesses

- ❖ Professional skills of the students need to be improved.
- ❖ We are doing consultancy on small scale. To be improved on larger scale
- ❖ Yet to receive funded projects. But we are making constant efforts to attract funded projects. But we constantly on regular basis receive fund from various government agencies for conduct of research oriented workshops, seminars and conferences.
- ❖ At present students less in number are attending competitive exams like GATE and GRE.

## Opportunities

- ❖ Encouraging more number of students and faculty to present papers in national /International seminars and conferences.
- ❖ Research and entrepreneurship development.
- ❖ Utilize the Industry Institute Partnership.
- ❖ Encouraging students to attend exams like GATE, GRE and TOEFL
- ❖ More skill oriented workshop will be conducted to impart skill set to students.

## Challenges

- ❖ To place all eligible students.
- ❖ Modifying rural students into full-fledged employable engineers.
- ❖ Entrepreneurship development.
- ❖ Encouraging students to attend exams like GATE, GRE and TOEFL

## Future Plan

- ❖ Collaboration with industries.
- ❖ Improve Placement offers of our students in core companies.
- ❖ More emphasis on R&D Development.
- ❖ Motivating the students towards research and project based learning.
- ❖ Encouraging staff and students towards achieving consultancy and funded projects.

## EVALUATIVE REPORT OF THE DEPARTMENT

**1. Name of the department** : Science and Humanities (S&H)

**2. Year of Establishment** : 2008

**3. Names of Programmes / Courses offered:**

Service subjects to all UG Programmes

**4. Names of Interdisciplinary courses and the departments/units involved:**

Not Applicable

**5. Annual / semester / choice based credit system (Programme wise):**

Semester Based Credit System prescribed by Anna University

**6. Participation of the department in the courses offered by other departments :**  
English

Sl. No.	Subject Code	Subject Name	Department in which the course is offered
1.	GE6674	Communication and Skills Lab	CSE, ECE, EEE & MECH

**Mathematics**

Sl. No.	Subject Code	Subject / Lab	Department in which the course is offered
1.	MA6351	Transforms and Partial Differential Equations	CSE, ECE, EEE & MECH
2.	MA6459	Numerical Methods	EEE
3.	MA6451	Probability and Random Processes	ECE
4.	MA6453	Probability and Queueing Theory	CSE
5.	MA6452	Statistics and numerical methods	MECH
6.	MA6566	Discrete Mathematics	CSE

**Chemistry**

Sl. No.	Subject Code	Subject / Lab	Department in which the course is offered
1.	GE6351	Environmental Science and Engineering	CSE, ECE, EEE & MECH

**7. Courses in collaboration with other universities, industries, foreign institutions, etc.**

Sl. No	Courses	Collaborative Industry / University
1.	NPTEL Course	IIT-University

**8. Details of courses / programmes discontinued (if any) with reasons:**

There is no discontinuity of courses

**9. Number of Teaching Posts:**

S.No	Designation	2013 – 14		2014 – 15		2015 – 16		2016 – 17	
		S	F	S	F	S	F	S	F
1.	Professors	4	4	4	4	5	5	4	4
2.	Associate Professors	6	6	7	7	6	6	6	6
3.	Asst. Professors	20	20	21	21	25	25	22	22
<b>TOTAL</b>		<b>30</b>	<b>30</b>	<b>32</b>	<b>32</b>	<b>36</b>	<b>36</b>	<b>32</b>	<b>32</b>

**10. Faculty profile with name, qualification, designation, specialization**

S.N o	Name of the Faculty Member	Qualificat ion	Designati on	Specializa tion/ Industry	No of Years of Experie nce	No. of Ph.D Stude nts guide d for the last 4 years
1.	Dr. T. Rengaraja	B.E, M.E, Ph.D	Professor & Principal	Smart Structures (Civil)	26 years	Nil
2.	Dr. Bhagavathi perumal S	B.E, M.E, Ph.D	Professor & Vice Principal	Structural Engineerin g (Civil)	24 years	6
3.	Dr. R. Patturaj	Ph.D	Professor and Head	Fluid Mechanis (Mathematics)	44 years	Nil
4.	Dr. K.A. Selvakumar an	Ph.D	Professor	Complex Analysis	23 years	Nil

				(Mathematics)		
5.	Dr. Geetha Balachandar	Ph.D	Associate Professor	Complex Analysis (Mathematics)	18 years 2 months	Nil
6.	Mr. J.Leo Amalraj	M.Phil., Ph.D(pursuing)	Associate professor	Mathematics	16 years 4 months	Nil
7.	Dr. S.M. Chithra	Ph.D	Associate professor	Operation research (Mathematics)	16 Years 3 months	Nil
8.	Ms. P. Hema	M.Phil., Ph.D(pursuing)	Associate professor	Mathematics	19 years 6 months	Nil
9.	Ms. N.Selvamalar	M.Phil., Ph.D	Assistant Professor	Mathematics	12 years	Nil
10.	Ms. K.Sudha	M.Phil.,	Assistant Professor	Mathematics	11 years	Nil
11.	Mr. T.Hari Krishnan	M.Phil., Ph.D(pursuing)	Assistant Professor	Mathematics	11.5 years	Nil
12.	Ms. V.Banu Priya	M.Phil.,	Assistant Professor	Mathematics	8 years 10 months	Nil
13.	Ms. M.Gomathi	M.Phil.,	Assistant Professor	Mathematics	12 years	Nil
14.	Dr. A.Sudha	M.Phil., Ph.D	Assistant Professor	Algebra (Mathematics)	6.6 years	Nil
15.	Dr.G.Devi	Ph.D	Associate Professor	Spectro Physics (Physics)	14.8 years	Nil
16.	Mr. T.Sundareswaran.	M.Phil.,	Assistant Professor-II	Physics	14 years 10 months	Nil
17.	Dr. B. Kalithasan	Ph.D	Assistant Professor	Theoretical Physics (Physics)	6 years 6 months	Nil
18.	Ms. N.Jayanthi	M.Phil.,	Assistant Professor	Physics	8 yrs 7 months	Nil
19.	Mr. R. Sankara Subramanian	MA, (Ph.D)	Associate Professor	English	44.6 years	Nil

20.	Ms. A Ramadevi	MA, (Ph.D)	Assistant Professor	English	14 years	Nil
21.	Ms. V Jayalakshmi	MA	Assistant Professor	English	9 years 9 months	Nil
22.	Ms. B.S. Renuka	MA, M.Phil.,B .Ed	Assistant Professor	English	6 years	Nil
23.	Ms.B.Chithra	M.Sc,M. Phil	Associate Professor	Chemistry	18 years 1 month	Nil
24.	Ms. N. Saikumari	M.Phil., Ph.D(pur suing)	Assistant Professor	Chemistry	9 years 5 months	Nil
25.	Mr. K. Sudhakar	M.Phil., Ph.D(pur suing)	Assistant Professor	Chemistry	8 years 7 months	Nil
26.	Ms. S. Absara Fdo	M.Phil.,	Assistant Professor	Chemistry	6 years 5 months	Nil
27.	Ms. S. Jothilakshmi	M.Phil., Ph.D(pur suing)	Assistant Professor	Chemistry	8 years 3 months	Nil
28.	Ms. G.Vasukidevi	M.C.A., M.Phil., M.E, Ph.D(pur suing)	Assistant Professor	General Engineering	12 years	Nil
29.	Mr. P. Prem Priya	M.Tech (Ph.D),	Assistant Professor	General Engineering	5 years 6 months	Nil
30.	Ms. P.Durga Devi	B.E., ME., (Ph.D),	Assistant Professor	General Engineering	9 years	Nil
31.	Mr. A.Madhu	M.E.,	Assistant Professor	General Engineering	8 Years 6 Months	Nil
32.	Mr.B.Prabh u	M.Tech	Assistant Professor	General Engineering	7 Years 11 Months	Nil

**11. List of senior visiting faculty:**

NA

**12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:**

All lectures and practical classes are handled by permanent faculty of our college.

**13. Student -Teacher Ratio (programme wise):**

Course	Programme	Student -Teacher Ratio
UG	B.E	15:1

**14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:**

Sl.No.	Designation	Sanctioned	Filled
1	Academic Support Staff	02	02
2	Administrative Staff	01	01

**15. Qualifications of teaching faculty with D.Sc. / D.Litt./ Ph.D./ M. Phil. / PG.**

S.No	Year	Qualification					
		D.Sc. / D.Litt.	Ph.D.	M. Phil.	PG	Total	Pursuing Ph.D
1	2013 – 14	-	8	24	24	32	3
2	2014 – 15	-	8	28	28	36	7
3	2015 – 16	-	8	24	24	32	7
4	2016 – 17	-	9	21	21	30	9

**16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:**

S.No	Funding Agency	Number of Faculty	Grants Received
1.	DST-SERB	1	14,46,000/-
2.	National Board for Higher Mathematics, Department of Atomic Energy.	1	Rs.1, 50,000

**17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received:**

S. N o	Principal Investigators / Co Investigators	Project Title	Funding Agency	Duration	Amount in Rs		Current Status
					Sanctioned	Utilized	
1	Dr. B. Kalithasan	Generation and Dynamics of Soliton Pulse in	DST-SERB	2016-2018	14,46,000/-	In Progress	On Going

		Resonant fiber media					
2.	Dr.Geetha Balachandar	Studies on a new sub class of uniformly spiral like functions	DAE	2017-2019	1, 50,000	In Progress	On Going

**18. Research Centre / facility recognized by the University:**

NIL

**19. Publications:**

**Number of papers published in peer reviewed journals (national / international) by faculty and students:**

**Number of papers published in peer reviewed journals (national / international) by faculty:**

S.No	Name of the Faculty Member	Total No of papers Published	
		Conference	Journal
1.	Dr.T.Rengaraja	7	4
2.	Dr. S.Bhagavathi Perumal	-	32
3.	Dr. R. Patturaj	1	4
4.	Dr. K.A. Selvakumaran	2	13
5.	Dr. Geetha Balachandar	2	8
6.	S.M. Chithra	1	1
7.	Mr. J.Leo Amalraj	3	3
8.	Dr.A.Sudha	-	1
9.	Dr.G.Devi	3	4
10.	Dr.B. Kalithasan	18	10
11.	Mr. T. Sundareswaran	1	1
12.	Ms. A. Ramadevi	1	-

**Books Published:**

S.No	Title of Book(s)	Authors	Publisher & Year of Publication
1.	Engineering Physics – I	Dr. G. Devi Mr. T. Sundareshwaran Ms. N. Jayanthi	R.K Publishers 2009-10

2.	Engineering Physics – I	Dr. G. Devi	Mc Graw Hill Education private Ltd & 2016-17 ISBN 13-978-93-5260-276-6 ISBN 10-93-52060-2765
3.	Engineering chemistry – I	Mr. K. Sudhakar	Mc Graw Hill Education private Ltd ISBN 13-978-93-5260-277-3 ISBN 10-93-5260-277-3

**20. Areas of consultancy and income generated:**

NIL

**21. Faculty as members in National committees & International Committees:**

S.No .	Name of the Faculty Member	Membership in Professional Bodies (ISTE, IET, IITE, IAENG or any other)
1.	Dr.T.Rengaraja	ISTE
2.	Dr. S.Bhagavathi Perumal	ISTE ,FIE,IAENG,MICI,ACSE
3.	Dr. R. Patturaj	ISTE
4.	Dr. K.A. Selvakumaran	American Mathematical Society, STE
5.	Dr. Geetha Balachandar	ISTE
6.	Dr. S.M. Chithra	ISTE
7.	Ms. P. Hema	ISTE
8.	Ms. J. Leo Amalraj	ISTE
9.	Mr. T. Hari Krishnan	ISTE
10.	Ms. V. Banu Priya	ISTE
11.	Dr.G.Devi	ISTE
12.	Dr. B. Kalithasan	ISTE
13.	Mr. T.Sundareswaran.	ISTE
14.	Ms. N.Jayanthi	ISTE
15.	Mr. R. Sankara Subramanian	ISTE(LM), All India English Teachers Association, Member Of Technical Association
16.	Ms. A Ramadevi	ISTE
17.	Ms. V Jayalakshmi	ISTE
18.	Ms. B.S. Renuka	ISTE
19.	Ms. N. Saikumari	ISTE

20.	Mr. K. Sudhakar	ISTE, ISRD
21.	Ms. S. Absara Fdo	ISTE
22.	Ms. S. Jothilakshmi	ISTE
23.	Ms. G.Vasukidevi	ISTE

**c) Editorial Boards:**

S. No	Faculty Name	Name of the Journal / Publishers	Membership in Editorial Board
1.	Dr.K.A.Selvakumaran	International Bulletin of Mathematical Research	Member
		Abstract and applied analysis.	Reviewer
		Kyungpook mathematical journal	
		An.Univ.Oradea.fasc.mat	
		Mathematical Science Letters	
		Southeast Asian Bulletin of Mathematics.	
		Journal Honam Mathematical.	
		International Bulletin of Mathematical Research.	
2.	Dr.B.Kalithasan	Open Mathematics	Reviewer
		Journal of Optics	
		Journal of physica scripta	
		Electromagnetic Research and International Journal of Progressive in Optics.	

**22. Student projects**

**a) Percentage of students who have done in-house projects including inter departmental/programme**

NA

**b) Percentage of students placed for projects in organizations outside the institution i.e Research Laboratories/ Industry/Other agencies.**

NA

### 23. Awards / Recognitions received by faculty and students

#### Awards/Recognitions received by Faculty:

Sl. No.	Name of the Faculty	Organization	Awards/Recognitions received by faculty	Year
1.	Dr. Geetha Balachandar	The Centre for Women empowerment- Venus International Women Awards- VIWA 2017	Women of the year	2016

#### Awards/Recognitions received by Students:

Prizes won by Students Co-curricular and Extra Curricular Activities

#### Prizes won in Sports Events:

Academic Year	Prize Won in Co-curricular & Extra - Curricular Activities
2013 – 14	4
2014 – 15	4
2015 – 16	2

### 24. List of eminent academicians and scientists / visitors to the department

S.N o	Date	Eminent Academician s, Scientists and Visitors with Designation	Specialization/Su bject/Event	Name of the University/ Institute/Indu stry
1	04.03.2016	Dr. P. Iyamperumal	National Science Day	Executive Director, Tamil Nadu Science and Technology Centre, Gandhi Mandapam Road, Chennai.

2	11.03.2015	Ms. Aruna Perumal & Ms. Zenith Veena Jayakumar	ISTE Sponsored One Day Seminar on Personality Development Programme	L & T Infotech Chennai
3	02.03.2015	Shri. V. Ponraj	National Science Day 2015	Scientist - G & Advisor to Dr.A.P.J.Abdul Kalam Aeronautical Development Agency DRDO, Ministry of Defence, Bangalore
4	23.02.2015	Shri. G. Ashok	Innovative Techniques to Control Nuclear Hazards In various fields	Chief Engineer (Engineering and utility services) Kudankulam Nuclear Power Project
5	28.02.2014	Dr P Vivekanandhan	National Science Day 2014	Head, Computer centre, A C college of Technology Former Director, Knowledge Data centre, Anna University, Chennai.
6	24.12.2014	Dr. S. Udayabaskaran	127 th Birth Anniversary Celebrations of Shri. Srinivasa Ramanujan	Professor of Mathematics, Vel Tech Technical University, Chennai.
7	25.02.2013	Prof. A. N. Parameswaran	Ramanujan Mathematics Awareness Programme (RMAP)	ISTE National Executive Council Member and Dean,

				IIIC, SRM University
		Dr. V. Thangaraj		Former Director & Head, Ramanujan Institute for Advanced Study in Mathematics, Chennai
		Dr. N. Ramanujam		Professor & Chair, Department of Mathematics, Bharathidasan University, Trichy

## 25. Seminars / Conferences / Workshops organized & the source of funding

### a) National

Sl. No.	DATE	Seminars / Conferences / Workshops organized	Funded by
<b>2016 – 17</b>			
1	04.03.2017	National Science Day	ISTE
2	08.03.2017	Women's day Program	ISTE
<b>2015 – 16</b>			
1	04.03.2016	National Science Day	ISTE
2	07.03.2016	Women's day Program	ISTE
<b>2014 – 15</b>			
1	02.03.2015	National Science Day	ISTE
2	24.12.2014	127 <sup>th</sup> birth anniversary celebration of Shri Srinivasa Ramanujam	RMKCET
3	23.02.2015	Innovative techniques to control Nuclear hazards in various fields	BRNS, DAE
4	07.03.2015	International Women's day	ISTE
5	11.03.2015	Seminar on personality Development	ISTE
<b>2013 – 14</b>			

1	28.02.2014	National Science Day	ISTE
2	21.09.2013	Latex Software Training Programme For Faculty	RMKCET

**26. Student profile programme / course wise:**

Name of the Course/Programme	Application received/ Selected	Enrolled (MQ+DTE+LE)	
		M	F
2013 – 14	496	291	205
2014 – 15	474	282	192
2015 – 16	470	277	193
2016 – 17	471	298	173

**27. Diversity of Students**

Year	% of students from the same state	% of students from other States	% of students from abroad
2013 – 14	96.58	3.42	-
2014 – 15	85.23	14.77	-
2015 – 16	83.19	16.81	-
2016 – 17	87.48	12.52	-

**28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?**

Details will be given by their respective departments

**29. Student progression:**

Details will be given by their respective departments

**30. Details of Infrastructural facilities:**

**a) Library**

**Number of Volumes Available: 1953**

**Number of Titles Available: 611**

**b) Internet facilities for Staff & Students**

Name of the Internet provider	:	Reliance, Tata Indicom
Available bandwidth	:	170 Mbps Reliance 25

S.No	Year	No. of Journals	
		National	International (Ejournal)
1	2013 – 2014	6	75
2	2014 – 2015	6	13
3	2015 – 2016	6	75
4	2016 – 2017	6	75

Access speed	Mbps Tata Indicom = 195 Mbps
Availability of internet in an exclusive lab	: Download 35Mbps
Availability in most computing labs	: Available
Availability in departments and other units	: Available
Availability in faculty rooms	: Available
Institute's own e-mail facility to faculty / students	: Yes
Security/ privacy to e-mail/internet users	: Security and privacy provided by firewall
Wi Fi Connection	: Available (195 Mbps)
Total Number of Systems with Internet Facility	: 606

**c) Classrooms with ICT Facility:**

LCD projectors for multimedia presentation	: 01 Nos.
Over head projector	: 01 Nos.

**d) Laboratories:**

S.No	Name of the Lab	Area (sq.m)
1.	Physics Laboratory	167.84
2.	Chemistry Laboratory	167.84

**31. Number of students receiving financial assistance from college, university, Government or other agencies**

S.No	Year	No. of Students receiving financial assistance from			
		College	University	Government	Other Agencies
1.	2013 – 2014	9	-	37	-
2.	2014 – 2015	8	-	28	-
3.	2015 – 2016	8	-	31	-
4.	2016 – 2017	8	-	22	

**32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts:**

S.No	Date	Title of the Special Lecture/Workshop/Seminar/Training Programme	Name of the Resource Person /Trained by
<b>2013 – 2014</b>			
1.	30.08.2013	Orientation Programme	Shri. Jayaprakash A Gandhi
2.	31.08.2013	Orientation Programme	Shri. Jayaprakash A Gandhi
3.	06.09.2013 & 07.09.2013	Two days Accenture Specific Aptitude training programme	FACE
4.	10.09.2013	Orientation & Motivation Programme	Dr. B.V. Pattabiraman
5.	11.09.2013	Orientation & Motivation Programme	Dr. B.V. Pattabiraman
6.	12.09.2013	Orientation & Motivation Programme	Dr. B.V. Pattabiraman
7.	24 & 25.09.2013	Orientation & Motivation Programme	Dr. B.V. Pattabiraman
8.	21 & 23.02.2014	“RIPE NOODHANA – Two Days Personality Development and Interpersonal Skills Workshop”	M/s. RIPE
9.	25 & 26.02.2014	“RIPE NOODHANA – Two Days Personality Development and Interpersonal Skills Workshop”	M/s. RIPE
10.	27 & 28.02.2014	“RIPE NOODHANA – Two Days Personality Development and Interpersonal Skills Workshop”	M/s. RIPE
11.	17 & 19.02.2014	BEC EXAM	BEC
12.	27.03.2014	conduct Motivation Programme	Mr. T. Raghunath
13.	28.03.2014	conduct Motivation Programme	Mr. T. Raghunath
14.	01.04.2014	conduct Motivation Programme	Mr. T. Raghunath
<b>2014 – 2015</b>			
1.	27.1.16 & 28.01.2016	Orientation Programme	Shri. Jayaprakash A Gandhi
2.	04.09.2014	Orientation Programme	Shri. Jayaprakash A Gandhi

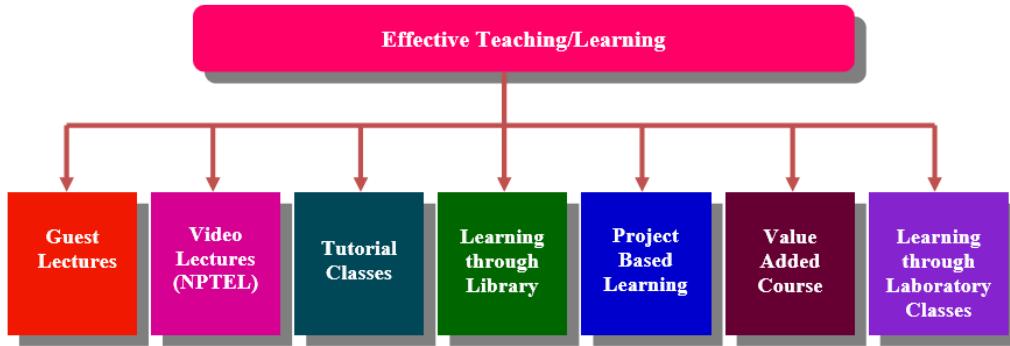
3.	19.08.2014	Orientation Programme	Dr. B.V. Pattabhiram
4.	20.08.2014	Orientation Programme	Dr. B.V. Pattabhiram
5.	13.10.2014	Personality Development and Interpersonal Skills Workshop	M/s. RIPE
6.	14.10.2014	Personality Development and Interpersonal Skills Workshop	M/s. RIPE
7.	15.10.2014	Personality Development and Interpersonal Skills Workshop	M/s. RIPE
8.	16.10.2014	Personality Development and Interpersonal Skills Workshop	M/s. RIPE
<b>2015 – 2016</b>			
1.	23.1.16 & 25.01.2016	2 days life skills workshop	ETHNUS
2.	29 & 30.01.2016	2 days life skills workshop	ETHNUS
3.	01.2.2016 & 02.02.2016	2 days life skills workshop	ETHNUS
4.	03.2.2016 & 4.2.2016	2 days stepping stone program	FACE
5.	05.2.2016 & 6.2.2016	2 days stepping stone program	FACE
6.	9.2.2016 & 10.2.2016	2 days stepping stone program	FACE
7.	24.3.2016	One day Creative Thinking workshop	Ethnus
8.	28.3.2016	One day Creative Thinking workshop	Ethnus
9.	29.3.2016	One day Creative Thinking workshop	Ethnus
10.	27.8.2015	Orientation Programme	Dr. B.V. Pattabhiram
11.	29.8.2015	Orientation Programme	Dr. B.V. Pattabhiram
12.	2.9.15	Orientation Programme	Shri. Jayaprakash A Gandhi
13.	3.9.2015	Orientation Programme	Shri. Jayaprakash A Gandhi
<b>2015 – 2016</b>			
1.	27.1.17 & 28.01.2017	Stepping Stone - an Engineering Orientation Program	FACE
2.	30 & 31.01.2017	Stepping Stone - an Engineering Orientation Program	FACE
3.	01 & 02.02.2017	Stepping Stone - an Engineering Orientation Program	FACE
4.	04.01.2017	one day Creative Thinking workshop	ETHNUS

5.	05.01.2017	one day Creative Thinking workshop	ETHNUS
6.	06.01.2017	one day Creative Thinking workshop	ETHNUS
7.	13 & 14.10.2016	Two days Life Skills Workshop	ETHNUS
8.	15 & 17.10.2016	Two days Life Skills Workshop	ETHNUS
9.	18 & 19.10.2016	Two days Life Skills Workshop	ETHNUS
10.	18 & 19.10.2016	Two days Life Skills Workshop	ETHNUS
11.	16.9.2016	Orientation Programme	Dr. B.V. Pattabhiram
12.	17.9.2016	Orientation Programme	Dr. B.V. Pattabhiram
13.	17.9.2016	Orientation Programme	Shri. Jayaprakash A Gandhi
14.	22.9.2016	Orientation Programme	Shri. Jayaprakash A Gandhi

### 33. Teaching methods adopted to improve student learning

#### Innovations by the Faculty in Teaching and Learning

- ❖ The traditional teaching method of chalk and talk is predominantly used in lecture classes.
- ❖ The lecture sessions are adequately supplemented by modern electronic teaching gadgets.
- ❖ For effective class room teaching methodology, Power Point Presentation and Video Lectures are used.
- ❖ The college library is fully equipped with sufficient books, journals and professional magazines; keeping pace with the latest trends. It has many e-resources with e-journals and databases for the use of the faculty and students.
- ❖ Interactive and participatory activities are adopted by the teachers to make the learning process as student-centric approach.
- ❖ Through seminars, debates and group discussions, students are encouraged to practice both individual and collaborative learning process.



Also our institution engages the students and teachers in active learning throughout the academic year emphasizing more on training activities. The institution promotes active learning by organizing various programs like Seminars, Conference, Mini Project, Workshops on instructional objectives. Assignment preparation and practical activities make the students to be active participants in the process of learning.

#### **34. Participation in Institutional Social Responsibility (ISR) and Extension activities**

##### **YRC Club Activities**

- ❖ Every Academic Year YRC Conducts Blood Donation Camp and Tree Plantation Camp.
- ❖ Youth Red Cross Unit of the college received “**Best Performance in Youth Red Cross Unit**” Award from the Indian Red Cross Society on 06.01.2015.

Sl.No.	Date	Program	No. of Student Participated
1	06.04.2016	Tree Plantation Programme	11
2	11.03.2016	Blood donation Camp & first aid awareness programme	5
3	07.03.2015	Blood donation Camp	6
4	24.01.2015	Tree Plantation Programme & first aid awareness programme	14
5	22.02.2014	Tree Plantation Programme & first aid awareness programme	15
6	05.10.2013	Blood donation Camp	6

#### **35. SWOC analysis of the department and Future plans**

##### **Strengths:**

- ❖ Unambiguous Vision and Mission of the Institution and the leadership bestowed with to achieve the same.

- ❖ Highly qualified and experienced Faculty Members.
- ❖ Well Equipped laboratory to support Curriculum.
- ❖ Well stocked library to meet the requirement of students and faculties.
- ❖ Value added courses are conducted for students by expert trainers to enrich student skills.

**Weakness:**

- ❖ Consultancy and funded projects are to be increased.
- ❖ Research Centre has to be established.

**Opportunities:**

- ❖ There are various opportunities for Research & Development in various fields.

**Challenges:**

- ❖ To develop confidence for the weaker section with respect to communication.
- ❖ To lubricate the gap between school level leanings and the new Engineering courses.
- ❖ To cultivate the thirst towards Entrepreneurship development from the first year itself.
- ❖ To provide enrichment courses to students for their holistic development.

**Future Plan:**

- ❖ To concentrate more in outcome based learning for the students.
- ❖ To plan the course delivery plan in such a way that the learning outcomes of the first year courses have more correlation with their respective programs.
- ❖ To give thrust in Research area for students and faculty by involving students in mini projects, getting sponsored projects from funding agencies etc., respectively.
- ❖ To organize programs to the students to give awareness of the demands of the industry needs.



# R.M.K. COLLEGE OF ENGINEERING AND TECHNOLOGY

(Sponsored by LAKSHMIKANTHAMMAL EDUCATIONAL TRUST)



(ISO 9001 : 2008 Certified Institution)

(Approved by the All India Council for Technical Education, New Delhi  
and Affiliated to Anna University, Chennai)

R.S.M. NAGAR, PUDUVOYAL-601 206, GUMMIDIPOONDI TK., THIRUVALLUR DIST., TAMILNADU, INDIA.

## DECLARATION BY THE HEAD OF THE INSTITUTION

I certify that the data included in this Self-Study Report (SSR) are true to the best of my knowledge.

This SSR is prepared by the institution after internal discussions, and no part thereof has been outsourced.

I am aware that the Peer Team will validate the information provided in this SSR during the peer team visit.

A handwritten signature in black ink.

Signature of the Head of the institution

with seal:

Dr. T RENGARAJA, M.E., Ph.D., M.I.T.E.  
PRINCIPAL

R.M.K. COLLEGE OF ENGINEERING AND TECHNOLOGY  
PUDUVOYAL, GUMMIDIPOONDI TALUK - 601 206



Place: Puduvoyal

Date: 31.03.2017



# R.M.K. COLLEGE OF ENGINEERING AND TECHNOLOGY

(Sponsored by LAKSHMIKANTHAMMAL EDUCATIONAL TRUST)

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R.S.M. NAGAR, PUDUVOYAL-601 206, GUMMIDIPOONDI TK., THIRUVALLUR DIST., TAMILNADU, INDIA.



## Certificate of Compliance

This is to certify that R.M.K College of Engineering and Technology, Puduvoyal, Thiruvallur (D.T) fulfills all norms.

1. Stipulated by the affiliating University— Anna University Chennai,
2. Regulatory Council - AICTE, New Delhi and
3. The affiliation and recognition is valid as on date.

In case the affiliation/recognition is conditional, then a detailed enclosure with regard to compliance of conditions by the institution will be sent.

It is noted that NAAC's accreditation, if granted, shall stand cancelled automatically, once the institution loses its University affiliation or Recognition by the Regulatory Council, as the case maybe.

In case the undertaking submitted by the institution is found to be false then the accreditation given by NAAC is liable to be withdrawn. It is also agreeable that the undertaking given to NAAC will be displayed on the college website.

Date: 02.05.2017

Place:Puduvoyal



Principal

(Dr.T.Rengaraja)

Dr. T RENGARAJA, M.E., Ph.D., M.I.T.E

PRINCIPAL

R.M.K. COLLEGE OF ENGINEERING AND TECHNOLOGY  
PUDUVOYAL, GUMMIDIPOONDI TALUK - 601 206



# All India Council for Technical Education

(A Statutory body under Ministry of HRD, Govt. of India)

Nelson Mandela Marg/Vasant Kunj, New Delhi-110067

PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 [www.aicte-india.org](http://www.aicte-india.org)

F.No. Southern/1-3330421337/2017/EOA

Date: 30-Mar-2017

To,

The Principal Secretary  
(Higher Education) Govt. of Tamil Nadu,  
N. K. M. Bld. 6th Floor Secretariat,  
Chennai-600009

## Sub: Extension of approval for the academic year 2017-18

Ref: Application of the Institution for Extension of approval for the academic year 2017-18

Sir/Madam,

In terms of the provisions under the All India Council for Technical Education (Grant of Approvals for Technical Institutions) Regulations 2016 notified by the Council vide notification number F.No.AB/AICTE/REG/2016 dated 30/11/2016 and norms standards, procedures and conditions prescribed by the Council from time to time, I am directed to convey the approval to

Permanent Id	1-2511917	Application Id	1-3330421337	
Name of the Institute	R.M.K. COLLEGE OF ENGINEERING AND TECHNOLOGY	Institute Address	R.S.M. NAGAR PUDUVOYAL - 601 206 GUMMIDIPOONDI TALUK THIRUVALLUR DISTRICT TAMILNADU, CHENNAI, THIRUVALLUR, Tamil Nadu, 601206	
Name of the Society/Trust	LAKSHMIKANTHAMMAL EDUCATIONAL TRUST	Society/Trust Address	PLOT NO. 2981, Z BLOCK, 1ST STREET, 13TH MAIN ROAD, CHENNAI, CHENNAI, Tamil Nadu, 600040	
Institute Type	Unaided - Private	Region	Southern	

Opted for change from Women to Co-ed and Vice versa	No	Opted for change of name	No	Opted for change of site	No
Change from Women to Co-ed approved and Vice versa	Not Applicable	Change of name Approved	Not Applicable	Change of site Approved	Not Applicable
Opted for Conversion from degree to diploma	No	Opted for Conversion from diploma to degree	No	Conversion (degree to diploma or vice-a-versa) Approved	Not Applicable

To conduct following courses with the intake indicated below for the academic year 2017-18

Application Id: 1-3330421337			Course	Full/Part Time	Affiliating Body	Intake Approved for 2016-17	Intake Approved for 2017-18	NRI Approval status	PIO / FN / Gulf quota/ OCI/ Approval status	Foreign Collaboration/Twinning Program Approval status
Program	Shift	Level								
ENGINEERING AND	1st Shift	UNDER GRADUATION	COMPUTER SCIENCE AND ENGINEERING	FULL TIME	Anna University, Chennai	120	120	NA	NA	NA



# All India Council for Technical Education

(A Statutory body under Ministry of HRD, Govt. of India)

Nelson Mandela Marg/Vasant Kunj, New Delhi-110067

PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 [www.aicte-india.org](http://www.aicte-india.org)

TECHNOLOGY		DUA TE								
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	ELECTRICAL AND ELECTRONICS ENGINEERING	FULL TIME	Anna University, Chennai	60	60	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	ELECTRONICS AND COMMUNICATIONS ENGINEERING	FULL TIME	Anna University, Chennai	180	180	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	MECHANICAL ENGINEERING	FULL TIME	Anna University, Chennai	120	120	NA	NA	NA

The above mentioned approval is subject to the condition that

R.M.K. COLLEGE OF ENGINEERING AND TECHNOLOGY

shall follow and adhere to the Regulations, guidelines and directions issued by AICTE from time to time and the undertaking / affidavit given by the institution along with the application submitted by the institution on portal.

In case of any differences in content in this Computer generated Extension of Approval Letter, the content/information as approved by the Executive Council / General Council as available on the record of AICTE shall be final and binding.

Strict compliance of Anti-Ragging Regulation:- Approval is subject to strict compliance of provisions made in AICTE Regulation notified vide F. No. 37-3/Legal/AICTE/2009 dated July 1, 2009 for Prevention and Prohibition of Ragging in Technical Institutions. In case Institution fails to take adequate steps to Prevent Ragging or fails to act in accordance with AICTE Regulation or fails to punish perpetrators or incidents of Ragging, it will be liable to take any action as defined under clause 9(4) of the said Regulation.

**Note: Validity of the course details may be verified at [www.aicte-india.org](http://www.aicte-india.org)**

**Prof. A.P Mittal  
Member Secretary, AICTE**

Copy to:

1. **The Regional Officer,**  
All India Council for Technical Education  
Shastri Bhawan 26, Haddows Road  
Chennai - 600 006, Tamil Nadu
2. **The Director Of Technical Education\*\*,**  
Tamil Nadu
3. **The Registrar\*\*,**  
Anna University, Chennai
4. **The Principal / Director,**



## All India Council for Technical Education

(A Statutory body under Ministry of HRD, Govt. of India)

Nelson Mandela Marg/Vasant Kunj, New Delhi-110067

PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 [www.aicte-india.org](http://www.aicte-india.org)

R.M.K. COLLEGE OF ENGINEERING AND TECHNOLOGY  
R.S.M. NAGAR  
PUDUVOYAL - 601 206  
GUMMIDIPOONDI TALUK  
THIRUVALLUR DISTRICT  
TAMILNADU,  
CHENNAI,THIRUVALLUR,  
Tamil Nadu,601206

**5. The Secretary / Chairman,**

LAKSHMIKANTHAMMAL EDUCATIONAL TRUST  
PLOT NO. 2981, Z BLOCK, 1ST STREET, 13TH MAIN ROAD,  
CHENNAI,CHENNAI,  
Tamil Nadu,600040

**6. Guard File(AICTE)**

Note: \*\* - Approval letter copy will not be communicated through post/email. However, provision is made in the portal for downloading Approval letter through Authorized login credentials allotted to concerned DTE/Registrar.



# ANNA UNIVERSITY

CHENNAI - 600 025, INDIA

REGISTRAR

Phone : (O) 22352161, 22357004

Fax : 91-44-2235 1956

Gmail : ANNATECH

E-mail : registrar@annauniv.edu

Lr No. 02 /AFFLN/CAI/AU/2016-17/1116

To

The Principal,  
R M K College of Engineering and Technology,R.S.M.  
Nagar, Puduvoyal, Gummidi poondi Taluk, Tiruvallur  
District-601206

Sir,

Sub: AU - AFFILIATION - Provisional Affiliation for the existing course(s) / New course(s) / variation in intake - U.G. / P.G. for the academic year 2016-17 Granted - Reg.

- Ref: 1. Your application for affiliation for the academic year 2016-17  
2. AICTE Approval for the academic year 2016-17.

I am to inform that under the provisions of Section 7.6.1 of the Statutes for affiliation of Anna University, Chennai, **Provisional Affiliation** for the continuation of the existing course(s) / new course(s) / variation in intake in the existing course(s) is granted for the following U.G / P.G. courses with the sanctioned intake mentioned against each course for the academic year 2016-17 at R M K College of Engineering and Technology,R.S.M. Nagar, Puduvoyal, Gummidi poondi Taluk, Tiruvallur District-601206.

Sl. No.	Degree	Course(s)	Sanctioned Intake	
			2015-16	2016-17
1	B.E.	Computer Science and Engineering	120	120
2	B.E.	Electrical and Electronics Engineering	60	60
3	B.E.	Electronics and Communication Engineering	180	180
4	B.E.	Mechanical Engineering	120	120

The above said Provisional Affiliation is being granted subject to the fulfillment of the conditions mentioned below:

- Production of Originals of AICTE / COA / DGS approval and all other related documents for verification, whenever demanded by the University.
- Verification by a Committee towards the fulfillment of the conditions mentioned above and the continued fulfillment of the requirements for the above-mentioned course(s) as per the norms and standards of AICTE / University and the laboratory requirements as per the curricula and syllabi of Anna University, Chennai for the above courses. In the event of any violation/infringement of the above said conditions and / or the provisions of Anna University, Chennai Act / Statutes / Regulations, AICTE Act, norms & standards / regulations / guidelines or any other law being in force, suitable action including suspension / withdrawal of affiliation of course(s) may be initiated against the college.
- Students should not be admitted for the above course(s) for the next academic year without obtaining the order of continuation of provisional affiliation for the next academic year from the University.

The Provisional Affiliation is granted without prejudice to the right of the University requiring

1 of 2

Dr. T RENGARAJA, M.E., Ph.D., M.I.T.E

PRINCIPAL

R.M.K. COLLEGE OF ENGINEERING AND TECHNOLOGY  
PUDUVLOYAL, GUMMIDIPOONDI TALUK - 601 206



production of certificate required under Section 37-B of TAMILNADU Reforms (LC) Act 1961 subject to the decision of the Hon'ble High Court of Madras in W.A. No. 3454 / 2002 batch and W.A. No. 3482 / 2002 batch.



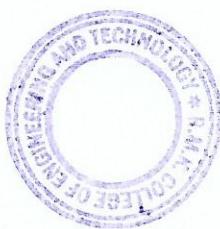
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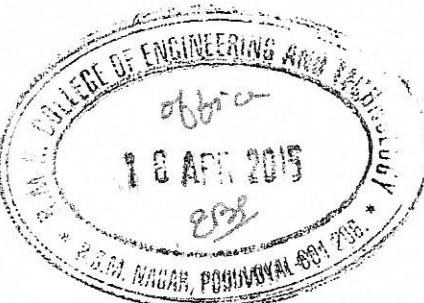
- Chennai  
M.Y
1. The Director of Technical Education, DOTE campus, Chennai - 600 025.
  2. The Regional Officer, Southern Regional Office, AICTE, 26, Haddows Road, Shastri Bhawan, Chennai 600 006.
  3. Master file.

Yours sincerely,

REGISTRAR  
REGISTRAR  
ANNA UNIVERSITY  
CHENNAI-600 025.

Dr. T RENGARAJA, M.E., Ph.D., MISTE  
PRINCIPAL  
R.M.K. COLLEGE OF ENGINEERING AND TECHNOLOGY  
PUDUVLOYAL, GUMMIDIPOONDI TALUK - 601 206





## ABSTRACT

Technical Education - Self-financing Engineering Colleges – R.M.K. College of Engineering and Technology, RSM Nagar, Puduvoyal, Thiruvallur District run by Lakshmi Kanthammal Educational Trust, Anna Nagar, Chennai – Continuance of Minority Status (Linguistic / Telugu) for a period of five years from 2013-14 to 2017-18 - Orders - Issued.

### Higher Education (J1) Department

G.O.(Ms)No:62

Dated: 1.4.2015.

ஜெய வருடம், பங்குணி 18  
திருவள்ளுவர் ஆண்டு 2046

Read:

- 1) G.O.(Ms) No. 270, Higher Education (J1) Department, dated:17.6.1998.
- 2) Judgment of Supreme Court of India, dated.17.10.1994 and 31.10.2002 in W.P.(Civil) No.317/1993 in T.M.A. Pai Foundation and Others –Vs-State of Karnataka and Others.
- 3) G.O.(Ms) No.386, Higher Education (J1) Department, dated 11.12.2006.
- 4) G.O. (Ms) No.297, Higher Education (J1) Department, dated 12.7.2008.
- 5) From the Commissioner of Technical Education, letter No.14990/H1/2013, dated 7.5.2013.

### ORDER:-

In the Order second read above, the Hon'ble Supreme Court of India in its order, dated 17.10.1994 in I.A.No.20 in W.P.(C).No.317/93, filed by TMA Pai Foundation and others, have stayed the operation of all the decrees / orders which might have been given by any Civil Court in respect of the minority status to the Institutions concerned and directed that the institutions claiming minority status shall approach the Government for a declaration, that they are minority institutions and till such time, the Government issue an order declaring that it is a minority institution, they cannot operate as Minority Institutions. The 11 Judges constitution Bench of the Supreme Court of India in its Judgment dated 31.10.2002 in the same case has laid down certain laws relating to aided / unaided Minority / non-minority educational institutions. However, with regard to the framing of 'indicia' for treating an educational institution as a Minority institution, the Supreme Court has held that it will be dealt with by a Regular Bench.

2. The Commissioner of Technical Education in his letter fifth read above has sent proposal to the Government for granting of continuance of Minority Status (Linguistic/Telugu) to R.M.K. College of Engineering and Technology, RSM Nagar, Puduvoyal, Thiruvallur District run by Lakshmi Kanthammal Educational Trust, Anna Nagar, Chennai along with connected documents of the Institution and recommended for granting of continuance of minority status (Linguistic/Telugu) for a period of five years from 2013-14 to 2017-18 to the said college. The Government have examined the proposal of the Commissioner of Technical Education as per the orders issued in the Government Orders first and third read above and in the light of the orders of the Hon'ble Supreme Court of India and it is found that:-

- a) The R.M.K. College of Engineering and Technology, RSM Nagar, Puduvoyal, Thiruvallur District has been started with the grant of approval from the All India Council for Technical Education and also got affiliation from the concerned university.

Dr. T RENGARAJA, M.E., Ph.D., N.M.I.C.  
PRINCIPAL

R.M.K. COLLEGE OF ENGINEERING AND TECHNOLOGY  
PUDUVOYAL, GUMMIDIPOONDI TALUK - 601 206



- b) The College has been established and continuously being administered by the members of the concerned Linguistic minority.
- c) The Sub-Collector, Thiruvallur District has certified that all the members of the Trust / Governing body belong to concerned minority.
- d) The deed of the Trust provides that it subserve the interest of the concerned Linguistic/Telugu Minority Community.
- e) In the Order fourth read above, the Government have conferred minority status to the R.M.K. College of Engineering and Technology, RSM Nagar, Puduvoyal, Thiruvallur District run by Lakshmi Kanthammal Educational Trust, Anna Nagar, Chennai for a period of five years from 2008-2009 to 2012-2013.
- f) In the total admission made during the year 2012-13, the percentage of students belonging to the concerned Telugu minority is 29%.

3. The Government after careful examination, have decided to accept the proposal of the Commissioner of Technical Education and grant continuance of minority status (Linguistic / Telugu) to the R.M.K. College of Engineering and Technology, RSM Nagar, Puduvoyal, Thiruvallur District run by Lakshmi Kanthammal Educational Trust, Anna Nagar, Chennai for a period of five years from 2013-14 to 2017-18, subject to the ultimate guidelines that are to be laid down by the Regular Bench of Supreme Court of India based on "indicia" for treating an educational institution as a minority institution and subject to the condition stipulated in the Government Order third read above viz.,

" if any of the minority institutions by commission or omission of any action does anything against the minority status, the Head of Department shall bring it to the notice of the Government for the withdrawal of minority status and the Government may take further necessary action for the withdrawal of minority status after giving an opportunity to the institution concerned".

**(BY ORDER OF THE GOVERNOR)**

**APOORVA  
SECRETARY TO GOVERNMENT.**

To

The Principal Secretary / Commissioner of Technical Education, Chennai-25.  
The Registrar, Anna University, Chennai -25.

The Secretary, Tamil Nadu Engineering Admissions, Anna University Chennai-25

The Chairman, Lakshmi Kanthammal Educational Trust, Anna Nagar, Chennai-40.

✓ The Principal, R.M.K. College of Engineering and technology,  
Thiruvallur District. (through the Principal Secretary / Commissioner of Technical Education )  
Copy to

The Special Personal Assistant to Hon'ble Minister (Higher Education), Chennai.9

The Private Secretary to Secretary to Government, Higher Education Department, Chennai.9  
SF/SC.

*L*  
**Dr. T RENGARAJA, M.E., Ph.D., MISTE**  
PRINCIPAL

R.M.K. COLLEGE OF ENGINEERING AND TECHNOLOGY  
PUDUVLOYAL, GUMMIDIPOONDI TALUK - 601 206

//Forwarded/By Order//

Encl no 15 DCS 14990 (4/1/13)

2. n & 3. B 1/14/2015  
Section Officer

*P*  
Copy communicated.

*BB*  
T.A.15

*T*  
THE PRINCIPAL  
R.M.K. College of Engg & Tech.  
R.S.M. Nagar, Puduvoyal  
Gummidipoondi Taluk  
Thiruvallur - 601 206 700

*V/V*  
AS (PLAN)  
J.M.F/14/13