

SELF STUDY REPORT (SSR)



Submitted by

**Gramaudyogik Shikshan Mandal's
Maharashtra Institute of Technology, Aurangabad
Maharashtra, PIN: 431010**

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Submitted to



**NATIONAL ASSESSMENT AND ACCREDITATION
COUNCIL (NAAC)**

P.O. Box No.1075, Nagarbhavi, Bangalore, Karnataka, India – 560072



NAAC STEERING COMMITTEE

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5.	Dr. G. S. Sable	Professor, Department of Electronics and Telecommunications Engineering	Member
6.	Dr. P. M. Ambad	Associate Professor, Department of Mechanical Engineering	Member

ABBREVIATIONS

AICTE	All India Council for Technical Education
ASCE	American Society of Civil Engineers
ASME	American Society of Mechanical Engineers
AED	Agricultural Engineering Department
BAMU	Dr. Babasaheb Ambedkar Marathwada University
BCUD	Board of Colleges and University Development
B.Tech	Bachelor of Engineering
BoS/ BOS	Board of Studies
CAP	Centralized Admission Process
CED	Civil Engineering Department
CSED	Computer Science and Engineering Department
CAT	Common Admission Test
CII	Confederation of Indian Industry
CSI	Computer Society of India
DAB	Departmental Advisory Board
DRDO	Defense Research & Development Organization
DST	Department of Science & Technology
EDC	Entrepreneurship Development Cell
EED	Electrical Engineering Department
ETCD	Electronics and Telecommunication Department
FDP	Faculty Development Program
GSM	Gramaudyogik Shikshan Mandal
GATE	Graduate Aptitude Test in Engineering
GB	Governing Body
GRE	Graduate Record Examination
HoD/HOD	Head of the Department

ICT	Information and Communication Technology
IEI	The Institution of Engineers India
IEEE	Institute of Electrical and Electronics Engineers
IETE	Institute of Electronics and Telecommunication Engineers
IIPC	Industry Institute Partnership Cell
IPR	Intellectual Property Rights
IQAC	Internal Quality Assurance Cell
ISR	Institutional Social Responsibility
ISTE	Indian Society for Technical Education
LMC	Local Managing Committee
LOI	Letter of Intent
M.Tech	Master of Technology
MED	Mechanical Engineering Department
MOU	Memorandum of Understanding
MBA	Master of Business Administration
NCC	National Cadet Corps
NGO	Non-Governmental Organization
NPTEL	National Programme for Technology Enhanced Learning
NSS	National Service Scheme
NT	Nomadic Tribes
OBC	Other Backward Class
OPAC	Online Public Access Catalog
PEO	Programme Education objectives
PPED	Plastic and Polymer Engineering Department
PG	Post Graduate
Ph.D.	Doctor of Philosophy
PLC	Programmable Logic Controller
PO	Performance Outcome

PUC	Pollution Under Control
QIP	Quality Improvement Program
RPS	Research Promotion Scheme
SBC	Special Backward Class
SC	Scheduled Caste
ST	Scheduled Tribes
STTP	Short Term Training Programme
TOEFL	Test of English as a Foreign Language
TPO	Training and Placement Office
UG	Under Graduate
UGC	University Grants Commission
ISSN	International Standard Serial Number
SNIP	Source Normalized Impact per Paper
TGS	Teacher Guardian Scheme

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2015, MECH 2015 |
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PREFACE

It gives me immense pleasure to submit the Self-Study Report (SSR) of Gramaudyogik Shikshan Mandal's Maharashtra Institute of Technology, Aurangabad to the National Assessment and Accreditation Council (NAAC), Bangalore for assessment and accreditation. The SSR report has been prepared with utmost care and as per the guidelines provided by NAAC. The report comprises of three sections: Section I - Profile of the Affiliated Institute, Section II - Criterion-Wise analytical report, Section III- Evaluation reports of the Departments.

GSM's Maharashtra Institute of Technology, Aurangabad was established in 2001 and is affiliated to Dr. Babasaheb Ambedkar Marathwada University (BAMU), Aurangabad, and Maharashtra. The institute offers 7 undergraduate (B. Tech.) courses, 5 postgraduate courses that include 4 M. Tech. courses and 1 MBA course and 2 Ph.D. courses.

We are devoted to impart quality engineering education and create opportunities for rural students to become intelligent engineers and technocrats. This accreditation process will provide us an opportunity to know our strengths and weaknesses and to implement the suggestions given by the peer team.

It is tough to complete this self-study report (SSR) without the cooperation and help of entire team of Maharashtra Institute of Technology. I would like to express my profound thanks to the members of the Steering Committee, the Heads of the Departments, the faculty and staff for their contribution in the preparation of SSR. I take this opportunity to thank our Management for their help and whole hearted support for this endeavor. We look forward for the visit of the Peer Team and you will appreciate our efforts.



**Dr. Santosh. P. Bhosle,
Principal
Maharashtra Institute of Technology,
Aurangabad, (M.S.)**

EXECUTIVE SUMMARY OF INSTITUTE

GSM's Maharashtra Institute of Technology is among the premier self-financing Engineering Colleges in Maharashtra. The College was established in 2001 by the Gramaudyogik Shikshan Mandal under the dynamic leadership of Hon'able Dr. Y A Kawade, President G.S. Mandal, Aurangabad. The Mission of the institute states the commitment to provide wholesome education in Technology and Management to enable aspiring students to utilize their fullest potential and become professionally competent and ethically strong by providing.

- Well qualified, experienced and professionally trained faculty.
- State-of-the-art infrastructural facilities and learning environment.
- Conducive environment for research and development.
- Delight to all stakeholders.

The College has been approved by AICTE, New Delhi and affiliated to Dr. Babasaheb Ambedkar Marathwada, University, Aurangabad.

CURRICULAR ASPECTS

Maharashtra Institute of Technology has set its own Vision, Mission and Quality Policy and is trying to adopt Outcome based Education into practice. The curriculum of our programmes is revised every five years by Dr. Babasaheb Ambedkar Marathwada University, Aurangabad to meet the needs of industry, current research and societal requirements. The Board of Studies of each programme in MIT is constituted by eminent scientists, academicians and Industry Professionals. Further, our industry tie-ups, alumna interactions and co-curricular activities make the students more competitive and industry ready. Good number of events/programs on soft skills and professional development are conducted within the campus to enrich the skills of students.

TEACHING - LEARNING AND EVALUATION

The institute gives wide publicity of its infrastructure, staff and other facilities through website and newspaper advertisements. Eighty percent of the seats are filled through CET by DTE, Mumbai, while twenty percent by the Management for both UG and PG.

Admissions through CET are as per the rules framed by the respective authorities.

Financially weaker students are supported with scholarships as per state and central government norms. Female population surpasses male population and the institution is gender un-biased. Policies adopted by Govt. of Maharashtra are strictly followed for differently-abled students. The institution follows a well-structured plan for conduction of courses. Subject allotment is done well in advance and a course file containing information of academic calendar, teaching plan, teaching notes etc. The library has a good collection of books, e-books, e-journals and NPTEL videos. The language laboratory, internet labs, virtual labs, computer lab facility provide a good environment for students to learn the concepts and apply them to practical projects. A number of events on academic improvement, societal and environmental issues etc. are organized time to time. The college is having a health care facility with well-equipped ambulance. The college has provided the hygienic canteen and mess facility for students. The placement cell is well established with GD, Interview rooms and seminar halls. The College is having a computing centre with sufficient no of systems with LAN and 1 GBPS internet bandwidth, with licensed software as per requirements. The college campus is green with well-maintained tress bushes, lawns, buildings etc. The equipment's, furniture, computers and generator are well maintained to satisfy the needs.

STUDENT SUPPORT AND PROGRESSION

MIT provides all the welfare measures such as scholarships, free ships and student safety insurance scheme to ensure a financially trouble free environment. It provides information about the competitive examinations and offers career counseling, soft skills training, and entrepreneurial skills to enhance the employable opportunity of the students. The Placement cell is well equipped with staff and infrastructure to ensure smooth placement process. MIT has grievance redressal, sexual harassment prevention and Anti ragging cells to address the issues. The alumni association is registered and provides a platform for aluminous to interact with the college. It also monitors the career growth of the students. The students are encouraged to take part in several responsible administrative positions which not only improves their leadership skills but also helps them to achieve the academic excellence. Participation in several events, NSS, blood donation camp, Swachh Bharat Abhiyan and Rural Reach Program inspires social responsibility amongst the students

GOVERNANCE, LEADERSHIP AND MANAGEMENT

MIT is governed by the Board of Trustees and was established by GSM in the year 2001 at Aurangabad. The institute has been contributing to Engineering and Management Education with a focus towards developing graduates with a global outlook and with necessary Entrepreneurial, Managerial & Software Development skills to succeed in a competitive world. As an academic institution, MIT has the richness and depth commonly found in the larger Engineering Colleges and students of MIT receive individual attention and concern. MIT is continuously learning, evolving with every year and updating the needs of the companies by promoting all necessary requirements. MIT believes in overall development of its all stakeholders. The institute is striving towards excellence and imparting practical knowledge through Technical expertise since its inception. Engineering students at Maharashtra Institute of Technology are privileged to have world class Education and ultra-modern lab facilities for their overall personality development with the support of Management and dedicated staff. Management of MIT has empowered its faculty at all the levels of the organization. The participation of teaching faculty in the governing body of institution has been ensured. The entire stakeholders are involved in the development of the institution.

INNOVATIONS AND BEST PRACTICES

The MIT has adopted various measures to maintain a green campus which helps in developing an eco-balanced environment. The college ensures environmental consciousness in the minds of the students by conducting environmental awareness programmes time to time. Innovation and Entrepreneurship Development Cell has been established to meet the challenges and needs of the society. College has adopted certain Best Practices Viz. Teacher Guardian Scheme, Online Learning and Research initiatives among the students and faculty which make MIT as one of the best institution to enhance the performance of the students.

SWOC ANALYSIS OF THE INSTITUTE

- **STRENGTHS**

1. State of the art laboratories
2. State of the art library
3. Demographics advantages with a large industry hub
4. 16 years of existence in the technical education and 38 years of standing of the parent trust
5. Strong alumni base
6. Highly qualified and dedicated faculty members
7. Visionary leadership
8. Good staff retention
9. Strong industry institute interaction
10. Twenty weeks mandatory In-Plant training (IPT)
11. Adequate Infrastructure
12. Good University results
13. Good Team work
14. Better brand image in the society
15. Good Teaching Learning Process
16. Teacher guardian scheme
17. High speed internet leased line (1 Gbps)
18. Consistent performance of students on curriculum and extracurricular activities.
19. Industrial hub

- **WEAKNESS**

1. Because of primary education of the students in vernacular language, the students are weak in English communication

- **OPPORTUNITIES**

1. Providing technical solution to rural development problems
2. Providing consultancy to the various nearby industries available in opulence.
3. Networking with other premier institutes and research organizations
4. To apply and receive research grant from various govt. funding agencies like DST, DRDO, CSIR etc.

- **CHALLENGES**

1. To reduce the gap between the skill sets with students and industry expectations
2. Involvement of industry professionals
3. Improving the quality of students being admitted
4. Quality research work

PROFILE OF THE INSTITUTE

PROFILE OF THE INSTITUTE

1. Name of the Institute:

Name:	Maharashtra Institute of Technology
Address:	Off Beed Bypass, Satara Village Road, Aurangabad -431010, Maharashtra State, India.
City:	Aurangabad
Website:	http://btech.mit.asia

2. For Communication:

Designation	Name	Telephone With STD code	Mobile	Fax	Email
Principal	Dr. Santosh P. Bhosle	0240-2375222	9822768246	0240- 2375275	santosh.bhosle @mit.asia
Vice Principal	Dr. R. B. Naik	0240-2375368	9850603297	-	radhakrishna.na ik@mit.asia
Steering Committee Co- ordinator	Prof. Sachin V. Lomte	0240-2375220	9637064954	-	sachin.lomte@ mit.asia

3. Status of Institute:

Affiliated College	✓
Constituent College	
Any Other (Specify)	

4. Type of Institute:

1 By Gender:

i.	For Men	<input type="checkbox"/>
ii.	For Women	<input type="checkbox"/>
iii.	Co-education	<input checked="" type="checkbox"/>

2 By Shift:

- i. Regular
- ii. Day
- iii. Evening

5. It is a recognized minority institution?

Yes	<input type="checkbox"/>
No	<input checked="" type="checkbox"/>

6. Source of Funding:

Government	<input type="checkbox"/>
Grant-in-aid	<input type="checkbox"/>
Self-financing	<input checked="" type="checkbox"/>
Any other	<input type="checkbox"/>

7.

a. Date of establishment of the college: 13th July 2001

b. University to which the college is affiliated/or which governs the college (If it is a constituent College): Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, Maharashtra.

c. Details of UGC recognition:

Under Section	Date, Month & Year (dd-mm-yyyy)	Remarks (If any)
i. 2(f)	N A	-
ii. 12(B)	N A	--

(Enclose the Certificate of recognition u/s 2(f) and 12(B) of the UGC Act)

**d. Details of recognition/approval by statutory/ regulatory bodies other than UGC
(AICTE, NCTE, MCI, DCI, PCI, RCI etc.)**

Under Section/ Clause	Recognition/Approval details Institution/ Department Programme	Day, Month and Year (dd-mm-yyyy)	Validity	Remarks
i.	F. No. Western/1- 2809300666/2016/EOA	30/04/2016	One Year	-

8. Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?

Yes √ No

If yes, has the College applied for availing the autonomous status?

Yes No √

9. Is the college recognized?

1. by UGC as a College with Potential for Excellence (CPE)?

Yes No √

If yes, date of recognition: (dd/mm/yyyy)

2. for its performance by any other governmental agency?

Yes No √

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

Location *	Urban
Campus area in sq. mts.	41331.28 sq. mts. (10.209 Acres)
Built up area in sq. mts.	18120 sq. mts.

(* Urban, Semi-urban, Rural, Tribal, Hilly Area, Any others specify)

11. Facilities available on the campus (Tick the available facility and provide numbers or other details at appropriate places) or in case the institute has an agreement with other agencies in using any of the listed facilities provide information on the facilities covered under the agreement.

- Auditorium/seminar complex with infrastructural facilities
- Sports facilities
- Playground
- Gymnasium
- Hostel
- Boys hostel
- Number of hostels –02 (Shared)
 - Number of inmates– 303
 - Facilities: Gymnasium, reading room, TV Room, RO Water, Hot water facility, 24 Hrs Electricity, wifi facility
- Girls hostel
- Number of hostels –02 (Shared)
 - Number of inmates-145
 - Facilities: Reading room, TV Room, RO Water, Hot water facility,
 - 24 Hrs Electricity and Wi-Fi facility
- Residential facilities for teaching and non-teaching staff
(give numbers available—cadre wise): **Yes**
- Professor – 1
 - Asstt. Professor – 2
 - Lecturer– 1
 - Non-Teaching– 1
- Cafeteria:
- Health Centre:

- First aid, Inpatient, Outpatient, Emergency care facility, Ambulance...
- Qualified Doctors: Available
- Qualified Nurse: Part Time
- Facilities like banking
- Transport facilities to cater to the needs of students and staff
- Animal house : N. A.
- Biological waste disposal : N. A.
- Waste water management
- Water harvesting
- Generator or other facility for management/regulation of electricity and voltage

12. Details of programmes offered by the college (Give data for current academic year) 2016-17

Sr. No.	Programme Level	Name of the Programme/ Course	Duration	Entry Qualification	Medium of instruction	Sanctioned/ approved Student strength	No. of students admitted
01.	Under-Graduate	Agricultural Engineering	4 Years	HSC Science as per rules & Regulation of Commissioner CET, Cell, Govt. M.S.	English	30	18
02.		Civil Engineering	4 Years	HSC Science as per rules & Regulation of Commissioner CET, Cell, Govt. M.S.	English	60	47
03.		Computer Science and Engineering	4 Years	HSC Science as per rules & Regulation of Commissioner CET, Cell, Govt. M.S.	English	60	56
04.		Mechanical Engineering	4 Years	HSC Science as per rules & Regulation of Commissioner CET, Cell, Govt. M.S.	English	120	95
05.		Electronics Telecommunication Engineering	4 Years	HSC Science as per rules & Regulation of Commissioner CET, Cell, Govt. M.S.	English	120	52

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06.	Post-Graduate	Electrical Engineering	4 Years	HSC Science as per rules & Regulation of Commissioner CET, Cell, Govt. M.S.	English	60	45
07.		Plastic & Polymer Engineering	4 Years	HSC Science as per rules & Regulation of Commissioner CET, Cell, Govt. M.S.	English	60	20
08.		Mechanical Engineering Second Shift	4 Years	HSC Science as per rules & Regulation of Commissioner CET, Cell, Govt. M.S.	English	60	47
09.		Civil Engineering Second Shift	4 Years	HSC Science as per rules & Regulation of Commissioner CET, Cell, Govt. M.S.	English	60	45
10.	Ph. D.	Food Processing Technology	2 Years	B. E. / B. Tech. as per rules & Regulation of Commissioner CET, Cell, Govt. M.S.	English	24	17
11.		Computer Science and Technology	2 Years	B. E. / B.Tech as per rules & Regulation of Commissioner CET, Cell, Govt. M.S.	English	24	6
12.		Electronics & Telecommunication Engineering	2 Years	B. E. / B. Tech as per rules & Regulation of Commissioner CET, Cell, Govt. M.S.	English	24	6
13.		Mechanical Engineering	2 Years	B. E. / B. Tech. as per rules & Regulation of Commissioner CET, Cell, Govt. M.S.	English	18	17
14.		MBA	2 years	B. E. / B. Tech as per rules & Regulation of Commissioner CET, Cell, Govt. M.S.	English	60	30
15		Mechanical Engineering	3 Years	As per guidelines of affiliating university	English	*	13
16.		Electronics & Telecommunication Engineering	3 Years	As per guidelines of affiliating university	English	*	13

*number of intake students is in proportion to the number of available guides.

13. Does the college offer self-financed Programmes?

Yes √

No

If yes, how many? **UG-07, PG-05 & Ph.D.-02**

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

Yes √ No Number **04**

15. List the departments: (respond if applicable only and do not list facilities like Library, Physical Education as departments, unless they are also offering academic degree awarding programmes. Similarly, do not list the departments offering common compulsory subjects for all the programmes like English, regional languages etc.)

Faculty	Departments (e. g. Physics, Botany, History etc.)	UG	PG	Research
Science				
Commerce				
Engineering	Agricultural Engineering	√		
	Civil Engineering	√		
	Computer Science and Engineering	√		
	Electrical Engineering	√		
	Electronics & Telecommunication Engineering	√	√	√
	Mechanical Engineering	√	√	√
	Plastic and Polymer Engineering	√		
	Food Processing Technology		√	
	Computer Science & Technology		√	
	Master in Business Administration		√	

16. Number of Programmes offered under (Programme means a degree course like B. A., B. Sc., M. A., M. Com....)

a)	Annual system	
b)	Semester system	12
c)	Trimester system	

17. Number of Programmes with

- a. Choice Based Credit System: 12
- b. Inter/Multidisciplinary Approach
- c. Credit based System for Course Work: 02

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

Yes

No √

If yes,

- a. Year of Introduction of the programme(s).....(dd/mm/yyyy)and

number of batches that completed the programme

- b. NCTE recognition details (if applicable): NA

- c. Is the institution opting for assessment and accreditation of Physical Education Programme separately?

Yes

No √

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

Yes

No

If yes,

a. Year of Introduction of the programme(s)..... (dd/mm/yyyy) and
number of batches that completed the programme

b. NCTE recognition details (if applicable)
Notification No.:

..... Date:

..... (dd/mm/yyyy)

Validity:.....

c. Is the institution opting for assessment and accreditation of Teacher
Education Programme separately?

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

Positions	Level	Teaching faculty						Non-teaching staff	Technical staff	
		Professor		Associate Professor		Assistant Professor			*M	*F
Sanctioned as per AICTE Norms#	UG	11	6	24	12	72	35	No Norms Specified by AICTE	13	1
	PG (M. Tech.)	3	2	3	2	3	2			
	PG (MBA)	0	0	2	1	2	2			
	TOTAL	14	8	29	15	78	39			
Available as on 25.3.2017	UG + PG (M. Tech.)	5	1	10	6	101	39	103	1	10
	PG (MBA)	1	0	0	0	2	5			
	TOTAL	6	1	10	6	103	44			

*M-Male *F-Female

21. Qualification of Teaching Staff

Highest Qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent Teachers							
D.Sc./D.Litt.	0	0	0	0	0	0	0
Ph.D.	2	0	3	1	1	1	8
M. Phil.	0	0	0	0	1	1	2
PG	0	1	4	5	17	13	40
PG Pursuing	0	0	0	0	3	1	4
Temporary Teachers (Ad-hoc basis)							
Ph.D.	3	0	3	0	8	3	17
M. Phil.	0	0	0	0	2	0	2
PG	1	0	0	0	68	24	93
PG Pursuing	0	0	0	0	2	2	4
Part Time Teachers							
Ph.D.	--	--	--	--	--	--	--

22. Number of Visiting Faculty /Guest Faculty engaged with the College: 10

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

Categories	2015-16		2014-15		2013-14		2012-13	
	Male	Female	Male	Female	Male	Female	Male	Female
SC	242	91	201	84	214	86	186	69
ST	20	7	17	5	18	3	11	0
VJDT	52	16	45	10	39	14	154	52
NT 1 B	40	21	39	12	31	13		
NT 2 C	60	13	88	25	49	19		
NT 3 D	65	15	38	12	52	16		
SBC	30	12	35	15	23	14	25	7
OBC	408	122	366	104	366	75	331	60
General	944	321	860	308	943	265	1177	297
Others (J& K)	1	0	0	0	0	0	0	0
Total	1862	618	1689	575	1735	505	1884	485
TOTAL	2480		2264		2240		2369	

24. Details on students enrollment in the college during the current Academic year: (2016-17)

Categories	2016-17	
	Male	Female
SC	286	101
ST	27	7
VJDT	65	17
NT1 B	44	30
NT2 C	61	19
NT3 D	77	14
SBC	33	16
OBC	414	146
General	951	351
Total	1958	701
TOTAL	2659	

25. Dropout rate in UG and PG (average of the last two batches)

UG: 2% PG: 2%

26. Unit Cost of Education

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

Year	Total cost / No. of Students	Unit Cost in Rs.
2012-13	112498327	47488
	2369	
2013-14	131586135	58744
	2240	
2014-15	136845210	60444
	2264	
2015-16	192586550	77656
	2480	

27. Does the college offer any programme/s in distance education mode (DEP)?Yes No

If yes,

- a) Is it a registered center for offering distance education programmes of another university?

Yes

No

- b) Name of the University which has granted such registration.

- c) Number of programmes offered

- d) Programmes carry the recognition of the Distance Education Council.

Yes

No **28. Provide Teacher-student ratio for each of the programme / Course offered**

Sr. No	Name of Course	Teacher-Student Ratio	
		UG	PG
1.	Agricultural Engineering	1:12	1:12
2.	Civil Engineering	1:14	--
3.	Computer Science and Engineering	1:11.42	1:12
4.	Electrical Engineering	1:12.8	--
5.	Electronics & Telecommunication Engineering	1:14.54	1:12
6.	Mechanical Engineering	1:12.85	1:12
7.	Plastic and Polymer Engineering	1:13.33	--
8.	MBA	--	1:8.5

29. Is the college applying for Accreditation:

Cycle1 Cycle2 Cycle3 Cycle4

Re-Assessment:

(Cycle 1 refers to first accreditation and Cycle 2, Cycle 3 and Cycle 4 refers to re-accreditation)

30. Date of accreditation* (applicable for Cycle 2, Cycle 3, Cycle 4 and re-assessment only)

Cycle 1: N. A.(dd/mm/yyyy) Accreditation Outcome/Result.....

Cycle 2: N.A. (dd/mm/yyyy) Accreditation Outcome/Result.....

Cycle 3: N.A (dd/mm/yyyy) Accreditation Outcome/Result.....

Kindly enclose copy of accreditation certificate(s) and peer team report(s)

as an annexure.

31. Number of working days during the last academic year. (Including vacation)

315

32. Number of teaching days during the last academic year

(Teaching days means days on which lectures were engaged excluding the examination days)

180

33. Date of establishment of Internal Quality Assurance Cell (IQAC) IQAC: 9/1/2017**34. Details regarding submission of Annual Quality Assurance Reports**

(AQAR) to NAAC.

AQAR (i)N.A.....

(dd/mm/yyyy)

AQAR (ii)N.A.....

(dd/mm/yyyy)

AQAR (iii)N.A.....

(dd/mm/yyyy)

AQAR (iv)N.A.....

35. Any other relevant data (not covered above) the college would like to include. (Do not include explanatory/descriptive information)

Other institutes run by the society

Sr. No.	Name of Institute	Year of Establishment
1.	MIT, Technical High School, Aurangabad.	1979
2.	JIRT, Washi Osmanabad.	1979
3.	Marathwada Institute of Technology (Polytechnic), Aurangabad	1983
4.	Marathwada Institute of Technology, Aurangabad	1984
5.	Marathwada Institute of Technology (Architecture), Aurangabad.	1984
6.	MIT, MCVC Cidco, Aurangabad.	1989
7.	MIT, High School, CIDCO, Aurangabad	1992
8.	Marathwada Industrial Training Center, Solapur.	1993
9.	MIT, Tantra Vidhyamandir, Ambejogai.	1996
10.	MIT, YCMOU, Study Center, Aurangabad.	1996
11.	MIT, Technical School, Washi.	1996
12.	Marathwada Institute of Technology (Polytechnic), New Delhi.	1997
13.	Marathwada Institute of Technology, Bulandshahar, UP.	1999
14.	Marathwada Institute of Technology (Applied Science), Bulandshahar, UP.	2000
15.	MIT Hospital and Research Center, Aurangabad.	2001
16.	Marathwada Institute of Technology (IT), Aurangabad.	2002
17.	Marathwada Institute of Technology (Polytechnic), Rotegaon.	2006
18.	MIT, Sericulture Center, Fatiyabad, Aurangabad.	2006
19.	MIT, Nursing College, Aurangabad.	2008
20.	MIT College of Food Technology, Aurangabad.	2014

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:

MIT aspires to be a leader in Techno-Managerial education at national level by developing students as technologically superior and ethically strong multidimensional personalities with a global mindset.

MISSION:

We are committed to provide wholesome education in Technology and Management to enable aspiring students to utilize their fullest potential and become professionally competent and ethically strong by providing

- Well qualified, experienced and professionally trained faculty.
- State-of-the-art infrastructural facilities and learning environment.
- Conducive environment for research and development.
- Delight to all stakeholders.

The goals and objectives of the college are as follows:

- To deliver the curriculum prescribed by the University in the best manner and to ensure that the students graduate with Dr. Babasaheb Ambedkar Marathwada University degree with a high CGPA.
- To maintain the teaching-learning process innovative, interactive and in-depth and to ensure an effective relationship between the curricular content and practical applications.
- To provide excellent academic ambience to the students and to identify and take care of the performance of every student.
- To promote and maintain a serene campus with a scientific fervor.
- To promote co-curricular and extra- curricular activities for overall development of the students.
- To provide appropriate value addition programmes, international certification

programmes and to bridge the gap between academia and industry and to make the students globally competent and employable.

- To promote R & D activities and kindle creative thinking of the students and to encourage their innovative ideas and projects.
- To provide a forum to imbibe ethical practices with a concern for the society.
- To develop knowledgeable and responsible citizens for participating in nation building activities.
- To strive for continuous improvements in all the institutional endeavors.

The vision and mission of the college are made known to the students, teachers, staff and other stakeholders through:

- College website
- College prospectus, Calendar, College magazine
- Programmes telecast in Television
- Posters within the campus
- Distribution of information brochures
- Sending information to other institutions of higher learning
- Career counseling programs for school children
- Students' Orientation programmes
- Boards displayed at strategic locations within the campus.

1.1.2 How does the institution develop and deploy action plans for effective implementation of the curriculum? Give details of the process

The College is affiliated to Dr. Babasaheb Ambedkar Marathwada University and the curriculum and syllabi prescribed by the university are strictly adhered to. Apart from this prescribed curriculum, the College has strategized ways and means to strengthen the teaching-learning process in the following ways:

Development of Action Plan:

- Before commencement of each semester academic calendar is prepared by the institute and implemented by all Departments. A specimen copy of academic calendar is provided.
- Subject allocation to the faculty is done as per area of specialization and their choice by HODs. Subject distribution is planned well in advance for proper academic implementation.

- Theory teaching plans, practical teaching plans, Tutorials teaching plan and lab manuals are prepared by faculty for the respective subject allotted before commencement of semester considering academic calendar and time table.
- Faculty maintain course file which contain following information: Mission and Vision of Institute and Department, PEOs, PSOs, COs, Academic calendar, Individual time table, Syllabus, Teaching plan, Teaching notes, practical write-ups, assignment/ tutorial questions, ppt. handouts, university question papers, continuous assessments, curriculum gap identified, class test record, attainment.

Deployment of Action Plan:

After preparation of course file, as per academic calendar and time table lectures, practical, tutorial are conducted by respective department.

- Monthly review of syllabus by HOD
- Report of syllabus coverage is submitted through HOD to Vice Principal Academic at the end of every month.
- Monthly class attendance is displayed and communicates to students as well as parents.
- Continuous assessment of term work is done.
- Academic progresses, grievances, feedback from stakeholders are conveyed to the concerned authority for necessary action.
- Academic monitoring is done through academic administrative committee.

Academic Calendar

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?

- After every five years syllabus revision is done by the Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
- For the revised syllabus, University/Board of Studies (BOS) organizes workshop on syllabus detailing, teaching methodology for the faculty. The institute deputes faculty to attend these workshops.
- The text and reference books are also prescribed by the University in syllabus.
- The Institute also encourages the faculty to attend faculty development program, STTP, industrial training on latest technological and academic development, and to enrich the recent trends and knowledge in their subject.
- Internet connectivity is available in the central library for the access of e-journals and e-books and e-learning resources and NPTEL Video Lectures etc.
- Departments have a student chapter of professional societies like IETE, SAE, CSI, IGBC, IPI, IIIE, IEI and ISTE.
- Every department has students association like TESA, MESA, ACES, EESA, CESA, etc.
- The University provides funds under various BCUD/QIP schemes such as seminar grant, research project grant.
- Faculty is also supported financially to attend conferences, seminars and workshops at national and international level.
- Institute has a well-established Central Library and each department has a separate department library.
- The faculty uses modern teaching aids such as LCD projectors, online resource etc. to conduct classes more effectively.
- E-learning facilities are provided to all the faculty members of the institute which help them in effective teaching. Internet facility through Wi-Fi is also available in the campus.
- Senior faculty counsel and guide newly joined faculty for effective teaching learning process.
- The institute encourages faculty for up-gradation in their educational/academic qualification.

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.

For an effective teaching learning process a learner centric pedagogy is practiced in the following ways:

- Subject allotment based on proficiency matrix, experience and performance in previous years.
- Time table framed with provision for Value Added Programmes (VAP), seminar and library hours.
- Preparation of proper lesson plan, notes on lesson, question bank, lab manuals well in advance.
- 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 Campus Management System software for internal database management.
- Guest lectures, seminars, Industrial visits and training programmes to supplement the curricular inputs
- Refresher courses, workshops, FDPs for skill up gradation of faculty.
- Provision of infrastructure facility (e.g. well established labs and workshop)
- Encouraging students to do innovative project work of national interest through
- Innovation Incubation Entrepreneurship Development Cell
- Motivating students for doing research work and present papers in seminars and conferences and publish in journals.
- Bridging Industry –Institution gap with suitable value added programmes which are part of the regular time table.
- Adopting “outcome based approach” for the effective delivery of the curriculum.
- Even the pattern of setting of the question papers for the internal tests is so

designed to facilitate the assessment of the attainments of the course outcomes for the various courses.

1.1.5 How does the institution network and interact with beneficiaries such as industry, research bodies and the university in effective operationalisation of the curriculum?

The institution networks and interacts with beneficiaries in the effective operationalisation of the curriculum and other related activities in the following ways:

- The institute has a unique feature in the university curriculum. Twenty (20 weeks) In-plant training which is mandatory for all the students at the final year (eighth semester) enables every student to have a real time experience of the industrial scenario. Through this feature of IPT the institute is having a rapport with almost 350 industries and also with the prominent government research institutes viz. DRDO, ISRO and premiere institutes of national importance like IIT's. Every year approximately 500 students are undergoing the in-plant training at various industries and few of the students undergo the research institutes and premier institutes mentioned aforesaid.
- The effective operationalisation of the curriculum faculty member participate in teaching methodology, orientation, seminars, workshops conducted by Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
- The institute has established relation with various industries through specific activities with defined outcomes for each of these activities as given in the Table 1.1

Table 1.1 Collaboration List

Sr. No.	Name of the Industry	Areas of Collaboration
1.	Endress+Hauser, Aurangabad	1.Guest Lectures 2.Laboratory sharing
2.	BSNL	1. Student training 2. Guest lectures
3.	Reliance Industries, Mumbai	1.Training & Strategic hiring
4.	Swajeet Industries Pvt. Ltd. Aurangabad	1.Academic Alliance 2.Training
5.	Indo German Tool Room, Aurangabad	1. PLC Programming 2. Integrated Course in PLC Programming, SCADA and Pneumatics
6.	Maven Technology, Aurangabad	1. Arduino 2. Internet of Things (IOT)
7.	Gill Instruments Pvt. Ltd., Bangalore	1. MSP-430 Low Cost & Low Power Micro-controller
8.	Inventrom Pvt. Ltd, Panaji	1. Raspberry Pi & Wireless Sensor Network
9.	Square Circles, Jalgaon	1. Emotional Intelligence
10.	Infosys, Pune	1.Campus Connect
11.	Garda Chemicals, Mumbai	1.Training & Strategic hiring

- The institute has established centre of excellence in collaboration with industries to offer specialized training programmes in specific areas as shown in Table 1.2

Table 1.2 Centre of Excellence

Sr. No.	Name of the Centre	Partnering Industry	Area of training
1	Mechatronics and Automation	SIEMENS	Automation

- Department of Computer Science and Engineering is authorized training center of RED-HAT and Cloudera. Department has Infosys campus connect program under which several students and faculties have been benefited. Recently few faculties awarded as Silver Faculty, Bronze faculty for their contributions in the campus connect programs
- MIT-SHIMADZU Analytical Testing Laboratory, in collaboration with SHIMADZU (ASIA PACIFIC), Singapore was established in January,2015 in Department of Plastics & Polymer Engineering, MIT, Aurangabad. The laboratory is equipped with sophisticated analytical instruments like UV-visible spectrophotometer (UV-Vis), Fourier Transform Infrared spectrophotometer (FTIR), Differential Scanning Calorimeter (DSC) and Thermogravimetric Analyzer (TGA), with a facility to enhance spectral measurements and material characterization. The very purpose of establishing this facility is to provide Training, Testing and Consultancy to the scientific community for their advanced research.
- The feedback from the students periodically helps to understand the problems that arise from time to time in the teaching-learning process and to take remedial measures. It also helps in arranging suitable guest lectures by industrial experts on topics of current interest in various specializations and In-plant training (IPT) for the students.
- Students are taken for industrial visits to expose them to the present industrial practices relevant to their branch of study.
- Certain groups of students take up projects in industries appropriate to their branch of study.
- Faculty members take up Industrial training during semester end vacation periods to learn and teach the students the current industrial practices.
- Experts are also invited from industries as judges for the quality assessment of students' projects.

Research recognition /grants/ students' external projects University and other educational Institutions

- Eminent faculty of the institution are members of various Boards of studies, Syllabus
- Committee and they take active part in curriculum revision and in the discussions relating to the implementation of various other academic activities and examination systems.
- University sponsors FDPs specifically on subjects given in the curriculum during the academic year.
- Principal and the IQAC members participate in the meetings organized by other institutions for discussing the functioning of IQAC.

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.

The curriculum designed by the affiliating University is adequate and it is dynamic. The last revision was done as latest as the academic year 2013-14. However, based on the systematic feedback of the students on course outcomes and alumni on attainment of programme outcomes teachers at the department level discuss the curriculum threadbare and through the members, Board of Study, the required and suitable changes are recommended to the concerned bodies.

Details of the faculty of the College who are on the Syndicate/BoS/Academic Council/Syllabus Committee of the University:

Table 1.3 List of Faculties Members Contributed

Sr. No.	Name of the Faculty	Contributed as
1.	Dr. S. P. Bhosle	BOS Chairman, Mechanical Engineering
2.	Dr. R. B. Naik	BOS Member, Computer Science and Engineering
3.	Dr. P. M. Ambad	BOS Member, Mechanical Engineering
4.	Dr. G. S. Sable	BOS Member, Electronics and Telecommunication Engineering

5.	Prof. K. V. Bhosle	BOS Member, Computer Science and Engineering
6.	Prof. K. T. Mahamuni	BOS Member, Electrical Engineering
7.	Dr. A. G. Dahake	BOS Member, Civil Engineering
8.	Dr. Aniruddha Chatterjee	BOS Member, Plastic and Polymer Engineering
9.	Dr. Hanuman Bobade	BOS Member, Agricultural Engineering
10.	Mr. Vikas Jadhao	BOS Member, Agricultural Engineering
11.	Mr. Deepak Bornare	BOS Member, Agricultural Engineering

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.

- Courses are offered in collaboration with professional agencies/ consultancies to cater to the needs of industry with the objective of enhancement of knowledge and placement of the students.
- Courses designed in-house to meet as per the needs of the industries.
- Communication skills curriculum developed with the help of college faculty and delivered by experts from respective field.
- Institute offers value added courses to students for bridging the gap between curriculum and industry requirement.
- Short term courses and workshop organized and conducted by faculty members at respective departments based on latest technology.

Table 1.4 Courses offered

Course	Department	Assessment for Need	Design/ Structure	Development and Planning
Soft skill Development	All	Industrial requirement with respective communication skills, aptitude, personality, etiquettes and manners.	Focus on communication skills, aptitude, personality, etiquettes and manners.	Total 20 lectures have conducted by the industry expert about the soft skills.

Integrated Courses in PLC, SCADA, Embedded systems, VLSI and Pneumatics.	ETC	As per recent trends in Industrial requirements.	PLC Programming, SCADA supervisory control and data acquisition	Total 45 Days (Daily 2 Hrs.) 90 hrs teaching learning process happen.
Red Hat Certifications	CSE	As per the industry requirement, we train the students in the domain of open source technologies.	RHCSA RHCE Red Hat Cloud Red Hat Storage Red Hat Virtualization.	90 hrs. teaching learning process.
Foundation Program of Infosys Campus Connect.	CSE	To train the students as per the IT industry expectation.	OOPJ RDBMS IWT SE	60 Hrs. teaching learning process.

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

The institution follows an '**outcome based approach**' in the teaching-learning-evaluation processes. Every programme frames a set of about twelve **Programme Outcomes** based on the graduate attributes concerning that specific programme. The University syllabus for every course in a programme is divided into six units and six **Course Outcomes**, one for each unit have been arrived at. Further, for enabling an easy **direct assessment** of attainment of these six course outcomes, the internal examination question paper patterns and assignments for each course are suitably framed and marks are awarded. The percentage of students getting more than 50 % of the marks allotted for any course outcome is taken as a measure of its attainment. Apart from the direct assessment, indirect assessment methods are also adopted.

The institution has formed communication channels among all the stakeholders to ensure that objectives of the curriculum are achieved in the course of

implementation. The methods followed to ensure the achievements of stated objectives are:

- Preparation of competency matrix and allotment of subjects based on the expertise and experience of the teachers.
- The institution compares content given in the courses delivered and the inputs from the alumni employed in industries.
- Attainment of course objectives and outcomes is evaluated through a feedback obtained from the students.
- Class Committee meetings are conducted (one meeting at the end of every unit test) to improve the teaching learning process. Corrective and preventive actions are taken whenever required.
- Faculty members attend appropriate Faculty Development Programmes organized within and outside the college to become familiar with the newly added advanced syllabus topics.
- Student performance is analyzed by the IQAC and suitable strategies, drawn besides the exit feedback of the outgoing students that has formed the basis for devising appropriate strategies. Feedback from the industry representatives is also obtained for various corrective measures. It is observed that by the implementation of the aforesaid methodologies, the specified objectives of the curriculum are met as stated below:
- Most of the students achieve good marks in their university examinations.
- Students of the institution achieve success in various inter-college and intra-college competitions.
- The alumni of the institution are securing top positions in different organizations /institutions.
- Periodic assessment is made to analyze goal implementation and target realization.

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.

Goals and Objectives

- To attain the concurrent demand of recent, value added and skill based knowledge of students.
- To develop center of excellence in various streams of engineering.
- To ensure maximum placements.
- To bridge the gap between industry and academia.
- To train the students for design, development, analysis and programming.
- To cope up the students with latest resent technological knowhow.

Apart from the programs affiliated to BAMU, institute offers certification courses which basically serve the purpose of value addition. These courses enhance the employability skills of the students.

Value Added Programs are arranged to bridge the knowledge gap between academia and industry and to strengthen the regular academic programmes prescribed by the University

- International Certification Programmes
- Embedded System Certification Program
- Employability Training Programs

The gap between curriculum and the best industrial practices are bridged through

- Industrial visits and in plant training
- Arranging hands on training sessions
- Formation of Innovation cell

Ethical standards inculcated through

- Lectures by eminent personalities on moral values.

Students are moulded to serve the society through

- NSS and ROTARACT(RYLA) programmes
- Bhartiya Yuvashakthi Trust activities.

Research and Consultancy activities are promoted by

- Research Committee
- Innovation cell

1.2.2 Does the institution offer programmes that facilitate twinning /dual degree?

If ‘Yes’, give details.

No. The institution at the moment does not offer any twinning or dual degree program.

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. Issues may cover the following and beyond:

- Elective options offered by the University and those opted by the college.
- Project/seminar selection done as per area of interest of the students.
- Content beyond syllabus topics.

The academic flexibility that exists at the Institute and offered by the University in the following form:

- The academic flexibility is also extended from sixth semester onwards to choose one elective from a pool of electives offered by the department. Elective courses are program specific courses but are part of specialization in that program. This enables them to acquire in-depth knowledge of the specialized area of the concerned engineering discipline of their choice and students are free to choose the courses of their interest and become competent in the area of their interest which in turn helps them for development.
- Lateral entry for direct second year and branch change facility from first year to second year is availed by the students as per the DTE and University guidelines.

Table 1.5 Summary of Direct Second Year Admitted Students

Sr. No.	Academic Year	Total Number of Students
1.	2015-16	355
2.	2014-15	268
3.	2013-14	218
4.	2012-13	279
5.	2011-12	148

Table 1.6 Summary of Students Who Availed Change of Branch Facility

Sr. No.	Course	2016-17	2015-16	2014-15	2013-14
1.	Agricultural Engineering	0	0	0	0
2.	Civil Engineering	1	1	2	1
3.	Mechanical Engineering	4	1	0	0
4.	Computer Science and Engineering	0	3	4	4
5.	Electronic and Tele-Communication Engineering	2	11	12	01
6.	Plastic and Polymer Engineering	1	0	0	0

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

Yes - All programmes are self- financed.

- **Admission-** For all the programme is regulated by the Commissioner, CET Cell and Directorate of Technical Education, Government of Maharashtra.
- **Curriculum-** As prescribed by Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
- **Fees Structure-** As governed by —Shikshan Shulk Samiti (SSS), Govt. of Maharashtra.
- **Teacher Qualification and Salary-** is decided and monitored as per the rules and regulations of All India Council of Technical Education (AICTE), New Delhi.

1.2.5 Does the college provide additional skill oriented programmes, relevant to regional and global employment markets? If, yes; provide details of such programme and the beneficiaries.

Yes, with the help of departmental students association and professional bodies skill development programmes are being conducted. The institute provides additional skill oriented programmes, which are relevant to regional and global employment markets. Details of such programmes and its beneficiaries are as follows.

Table 1.7 Skill Oriented Programmes Organized by the Institute

Sr. No.	Topic	Beneficiary Department	Date
1.	Gurukul for Gurus	All	17-10-2014 to 18-10-2014, 04-02-2015 to 05-02-2015
2.	Emotional Intelligence	ETC and CSE	12-02-2015 to 15-02-2015
3.	Soft Skill Development	EE an ETC	22-02-2017
4.	SWOT Analysis	MBA	15-10-2015
5.	Industry expectation from young Engineers	CSE	17-02-2017 to 19-02-2017
6.	Cyber Security	CSE	22-02-2017 to 23-02-2017

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?

NA

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 Institutions goals and objectives are integrated?

Integration of Institute goals and objectives with University curriculum

- Conduction of value add on courses
- Professional trainings like soft skills and technology certification courses are regularly conducted.
- Conduction of workshops and seminars
- Conduction of topics beyond syllabus in theory
- Conduction of topics beyond syllabus in Practical
- Conduction of expert lectures by thought leaders
- Conduction of soft skill training programs

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?

- Project seminars, project exhibition viz. AVISHKAR, bridging the gap

beyond syllabus, self-learning.

- Industrial Visits
- Industry Sponsored Projects.
- Students association in every department supplements the University curriculum by inculcating the leadership and managerial skill in students.
- The alumni working in Government/Private Sectors on higher positions are regularly invited for Guest Lectures.
- One Day/ Two Days workshops for students are arranged on the topics having relevance of industry.
- Faculty members are motivated to cover certain content beyond syllabus to get deep insight of subject.
- Soft Skill and Personality development courses are arranged by the institute for students.

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?

Institute has started Women's Empowerment Cell, Career Counseling Cell, Blood Donation Camp and social activities like visit to nearby villages and NGO's and collecting and distributing the clothes for the needy people.

Table 1.8 Details of Activity

Sr. No.	Type of activity	Duration	Details of activity	Participants (students & faculty)
1.	NSS Special Camp at Balgram, Sahara Anathalaya, Tal Gevrai, Dist Beed 16 to 22 February 2017	7 Days	NSS Special camp is organized every year in villages near by Aurangabad. Students have participated in various kind activities like tree plantation, gramswachata, awareness about leanliness among villagers.	50
2.	Tree Plantation 1 July 2016	1 Day	Total 200 saplings planted in the campus and nearby the campus...	220

			most of the students involved in the plantation activity.	
3.	Blood Donation 8 August 2016 And 19 th Feb 2016	1 Day	Blood Donation camp was organized in association with Dattaji Bhale Blood Bank every year on these dates. More than 150+ students donated the blood.	200
4.	Tarunyabhan 21 to 23 August 2015	3 Days	Tarunyabhan an event about adulthood and problems and solutions of young age. Maharashtra Bhushan Dr. Rani Bang conducted this workshop.	500
5.	Swach Bharat Abhiyan 2 October 2016	1 Day	Students of the institute participate in this Swach Bharat Abhiyan activity. This activity conducted on the occasion of the Mahatma Gandhi Jayanti every year.	400
6.	Nirmalya Dan Project	1 Day	On the occasion of Ganesh Visarjan, student of the institute collected the nirmalya from devotees and composted it instead of throwing in a well.	70

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

Table 1.9 Details of Activity
Environmental Education

Sr. No.	Type of activity	Duration	Details of activity	Participants (students & faculty)
1.	Tarunyabhan	3 Days	Tarunyabhan an event about adulthood and problems and solutions of young age. Maharashtra Bhushan Dr. Rani	500

			Bang conducted this workshop.	
2.	National Service Scheme	Regular and Special camp activities.	The Institute has university approved NSS unit of 100 volunteers.	100
3.	Water Management	1 Day	How to utilize the water and sustainability. Saving water is the need to todays. Amount of water saving is amount of water generated.	70
4.	Water conservation	1 Day	Water conservation through public contribution. The government has initiated the work related to water conservation at various rural areas but villagers not taking the caring and maintenance.... So we motivate them to utilize the these resources.	80

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

Institute takes feedback from stakeholders and considers it in enriching the curriculum. As per industry requirement workshops, seminars are conducted for students to bridge the gap between curriculum and industry.

For example:

The active participation of stakeholders is considered as a part of improvement in the curriculum through their valuable feedbacks. Feedbacks from stakeholders like alumni, employers and parents are analyzed which plays a key role in enriching the curriculum to come up with corrective measures which helps to fulfill the needs of technological up gradation. The feedback responses of these stakeholders are presented in front of the head of the department for taking necessary decisions in regards to enriching the curriculum as follows:

- Alumni feedbacks evaluate the improvements in various aspects like skill enhancements, aptitude building, employability skill up gradation, software literacy, etc. Soft skill development programs are organized through alumni guest lectures. Alumni feedbacks are collected during every alumni meet.
- Employers feedback visualizes the field and market demands on the need

of communication skills, leadership and managerial qualities, knowledge on emerging technologies and advanced innovative practices. Employability skills are introduced as one of the subject in the curriculum by the university on the feedback from the industry. Employer survey feedbacks are taken from recruiters.

- Parents' feedback helps in organizing trainings related to placement and market needs. It also MPSC and UPSC. This helps to improve the coordination between the students and parents with the college curriculum which assists in their overall personality development through efficient career planning. Mentorship scheme helps to create a continuous interaction with parents. Parents' feedbacks are collected during every parent meet.

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

Table 1.10 List of Enrichment Programmes

Sr. No	Enrichment programme	Nature of programme	Evaluating authority
1.	IPT	Internship	Company Mentor and Faculty Mentor
2.	Competitive Exam Guidance	Aptitude, Verbal & Non- Verbal Reasoning	Departmental Coordinator
3.	GATE Guidance	Technical, Engineering Mathematics	Department
4.	Enterprise Development Program	FDPs and awareness program	Coordinator

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?

- Experienced senior teachers from the institute contribute to update syllabus to incorporate the requirement of stakeholders.

- Faculty member of institution are chairman, members of BoS. The college forwards the suggestion to the University for Development of the curriculum. The details are available in Table 1.3

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:

- The Institute has a well-established mechanism to obtain feedback of Theory/ Practical classes from students. Also, feedback of alumnus and parents is obtained during parents meet/alumni meet.
- The feedback of students is analyzed and conveyed to the faculty members for improvements. Feedback of parents and alumnus which are helpful for curriculum improvement are implemented. The faculties of the institute are members on board of studies and they can incorporate these changes during the regular curriculum revision or else a letter of suggestions to make the changes in the curriculum is sent to the university to get it done.
- The feedback of parents and alumnus regarding creation of additional facilities in infrastructure /laboratories/career guidance and planning are also implemented.
- To comply the parents and alumnus feedback additional Workshop, Seminars, Courses on new software, GATE Exams, Soft Skills Courses, Expert Lectures by alumni on higher positions and Expert Lectures by thought leaders are arranged throughout academic year.

Mechanism for feedback:

- Alumni feedback & Employer feedback form
- Oral feedback from employer and industry during informal meets or during their visits to the institute for campus interviews.
- Oral feedback from students during curriculum delivery is taken by the course co-coordinator and communicated to the respective head of the department.

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?) Any other relevant information regarding curricular aspects which the college would like to include.

Following programmes were introduced by the institute.

Table 1.12 List of Programmes Introduced

Sr. No.	Academic	Name of the Programme	Sanctioned
1.	2012-13	Ph.D. Mechanical Engineering	In proportion to guides available
2.	2013-14	M. Tech. Computer Science and	24
3.	2013-14	M. Tech. Food Processing	24
4.	2014-15	Electrical Engineering (UG)	60
5.	2014-15	M. Tech. Electronics Telecommunication	24
6.	2015-16	Ph.D. Electronics & Telecommunication	In proportion to guides available

Rationale behind introducing these programmes:

- Institute has set a standard benchmark of academic excellence at U.G. and P.G. level.
- To provide assistance to nearby private and Government /technical/ industries in the form of consultancy services and support in solving live problems of nearby areas.
- To meet the contemporary requirements of corporate at global level.
- To create self-disciplined, motivated research scholars.
- To create research environment in the institute by enhancing R & D activities.
- To fetch research grants from agencies like BCUD, DST, ISRO, AICTE etc.

CRITERION II: TEACHING-LEARNING AND EVALUATION

2.1 Student Enrollment and Profile

2.1.1 How Does the College ensure publicity and transparency in the admission process?

The college ensures publicity and transparency in the admission process by the following means:

Publicity

The admission process of students is conducted and monitored by the Commissioner, CET Cell and Directorate of Technical Education (DTE), Government of Maharashtra. The DTE publishes brochure involving details regarding engineering disciplines (Courses) offered by our college and intake capacity and all the required information is made available during the admission process on the DTE website www.dte.org.

Transparency

Institute ensures transparency in admission process, guidelines regarding reservations policy in the admission and strictly adheres to the rules and regulations formulated by the Government of Maharashtra and Dr. B. A. M. University, Aurangabad. The merit lists for various programs, are displayed on the DTE website. Institute takes efforts to reach up to the students and also to make admission process a transparent one.

Publicity and Transparency is made through

College prospectus, institute website <http://btech.mit.asia>, advertisement in local as well as National daily newspapers and in electronic media, hoardings and information brochure and Student's counseling.

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 programs of the Institution.

The Institute follows admission rules and regulations of centralized admission process (CAP) conducted by Commissioner, CET Cell and Directorate of Technical Education, Government of Maharashtra. The allotment of the seats is carried out on the basis of the order of preference given by the applicants and their position in the merit list, considering the reservation policy. The criteria for the selection of students for admission in different levels of courses are given in table 2.1 below:

Table 2.1: Criteria for UG, PG and Ph.D. admission

Sr. No.	Course	Criteria for UG, PG and Ph.D. admission
1	F.Y.	HSC/Diploma in engineering/B. Sc. Degree at least 50% Marks (at least 45% in case of Backward class categories and person with Disability) as per the centralized admission process conducted by Commissioner, CET Cell and Directorate of Technical Education, Government of Maharashtra.
2	Direct S.Y. (lateral entry)	Merit list on the basis of final year diploma marks as per the centralized admission process conducted by Commissioner, CET Cell and Directorate of Technical Education Government of Maharashtra.
3	M.E./M. Tech.	General merit list/GATE as per the centralized admission process conducted by Commissioner, CET Cell and Directorate of Technical Education, Government of Maharashtra.
4	Ph.D.	GATE/Ph.D. entrance examination/ Exempted faculty from Entrance examination as per rules of Dr. B.A.M. University, Aurangabad.
5	M.B.A.	50% marks in Graduation (45% in case reserved category) and should have appeared CET conducted as per the centralized admission process conducted by Commissioner, CET Cell and Directorate of Technical Education, Government of Maharashtra OR CMAT, ATMA, XAT,CAT

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

Following are the details of percentage of graduation marks in respect of students admitted at entry level.

Table 2.2: FY B. Tech. Admission CET Minimum and Maximum Marks during last four years

Sr. No	Courses	2016-17		2015-16		2014-15		2013-14	
		CET Max. Marks	CET Min Marks						
1	Agricultural Engineering	75	36	79.6	24.63	78.33	20.68	63	47
2	Civil Engineering (I st Shift)	100	43	92.4	27.81	79.8	26.61	122	32
3	Civil Engineering (II nd Shift)	67	43	70.92	14.73	57.85	12.17	#	#
4	Computer Science and Engineering	127	40	86.14	15.41	85.3	12.39	94	46.66
5	Electronics & Telecommunication Engineering	100	30	82.18	4.66	78.57	11.08	122	28
6	Mechanical Engineering (I st Shift)	121	30	93.96	20.26	88.66	21.17	145	29
7	Mechanical Engineering (II nd Shift)	68	39	85.32	20.35	73.83	8.62	102	44
8	Plastic and Polymer Engineering	77	35	70.42	21.23	75.8	21.27	85	45
9	Electrical Engineering	127	35	79.52	15.49	78.14	17.89	#	#
10	MBA (CET)	96.22	6.47	79.31	3.62	70.44	2.03	108	11

Table 2.3: FY B. Tech. Admission AI Minimum and Maximum Marks during last four years

Sr. No	Courses	2016-17		2015-16		2014-15		2013-14	
		AI Max Marks	AI Min Marks						
1	Agricultural Engineering	85	75	48.34	32.75	48.76	48.76	*	*
2	Civil Engineering (I st Shift)	91	68	45.42	21.63	46.73	20.05	70	45
3	Civil Engineering (II nd Shift)	79	66	52.65	31.47	88.88	49.05	#	#
4	Computer Science and Engineering	118	89	40.44	16.71	48.74	24.72	136	37
5	Electronics Telecommunication Engineering	99	53	81.51	54.45	72.67	35.7	65	36
6	Mechanical Engineering (I st Shift)	111	89	36.24	21.3	61.43	21.15	100	47
7	Mechanical Engineering (II nd Shift)	87	64	46.72	30.74	47.85	25.05	61	42
8	Plastic and Polymer Engineering	87	60	107.17	77.91	90.32	26.36	16	16
9	Electrical Engineering	93	73	55.6	30.6	73.25	27.19	#	#
10	MBA (CET)	58.32	31.14	85.86	29.32	57.78	7.53	71	38

Civil (II Shift) and Electrical Engineering was started in 2014-15, * No admission through AIEEE quota to Agricultural Engineering

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?

A. Review of admission process

- Institute follows rules, regulations and guidelines set up by the Commissioner, CET Cell, and Directorate of Technical Education, Government of Maharashtra.

B. Review of student profile

- Institute analyses student profile on the basis of their CET, AIEEE, JEE and PCM scores.
- Based on the analysis students with poor scores are identified as possible academically weaker students.
- For such weaker students, make up classes are conducted to impart basic skills in engineering
- Mathematics and Applied Science.
- Similarly for the direct second year (lateral entry) extra classes are conducted.

C. Outcome

- This has been reflected in improvements in results of first year and direct second year students. It also helped in understanding the potential of the students (Through Mentoring scheme).
- Sharing of student related (academic and extracurricular activities) data with parents.
- The process of identifying weaker students and conducting extra classes for them has resulted in their ability to understand engineering concepts.

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
- Women
- Differently abled
- Economically weaker sections
- Minority community

Institute follows the reservation policy framed by the DTE in accordance with state and central government policies on the reservations.

As per the Commissioner, CET Cell, and Directorate of Technical Education Government of Maharashtra policies the seats are reserved for SC/ST, OBC, women, differently able, economically weaker sections and minority community.

The number of students admitted during last four years under various reservations

and number of students belonging to minority communities is tabulated below. All the students belonging to SC, ST, NT, OBC, SBC, VJ and Minority receive respective scholarships. Eligible candidates belonging to OPEN category also receive EBC scholarship.

Table 2.4: Category wise student admitted during last four years

Categories	2015-16		2014-15		2013-14		2012-13	
	Male	Female	Male	Female	Male	Female	Male	Female
SC	242	91	204	85	214	86	186	69
ST	20	7	17	5	18	3	11	0
VJDT	52	16	44	10	39	14	154	52
NT 1 B	40	21	39	12	31	13		
NT 2 C	60	13	87	25	49	19		
NT 3 D	65	15	38	12	52	16		
SBC	30	12	35	15	23	14	25	7
OBC	408	122	368	105	365	75	331	60
General	939	315	866	315	945	264	1118	285
Total	1856	612	1698	584	1736	504	1825	473
TOTAL	2468		2282		2240		2298	

- Reservations under J&K quota is also provided as per the Commissioner, CET Cell, and Directorate of Technical Education Government of Maharashtra policy.
- Ramps and lift is provided to assist the physically challenged students.
- Apart from strictly following government policies institute also takes a step forward in this regard and provides concession in tuition fee, free accommodation in hostel to a few genuinely deserving students.
- The institute is having Earn and Learn Scheme for the students from economically weaker sections.
- The institute admits students under TFWs (Tuition Fee Waiver Scheme).

2.1.6 Provide the following details for various programs 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.

Table 2.5: Details of various programs offered by the institution during the last four years

Sr. No.	Programme	Year	Intake	Number of Applications	Number of Students Admitted	Demand Ratio
					X	Y
1	Mechanical Engineering (I Shift)	2015-16	120	The Centralized Admissions Process (CAP) is carried out by the DTE Maharashtra State. The institute wise data for number of applications is not made available by the DTE. (for demand ratio calculation sanctioned intake of programme is considered as denominator)	117	0.98
		2014-15	120		106	0.88
		2013-14	120		114	0.95
		2012-13	60		62	1.03
2	Mechanical Engineering (II Shift)	2015-16	6		48	0.80
		2014-15	6		65	1.08
		2013-14	6		56	0.93
		2012-13	6		53	0.88
3	Civil Engineering (I Shift)	2015-16	6		61	1.02
		2014-15	6		62	1.03
		2013-14	6		61	1.02
		2012-13	6		60	1
4	Civil Engineering (II Shift)	2015-16	6		47	0.78
		2014-15	6		26	0.43
		2013-14	0		0	0
		2012-13	0		0	0
5	Computer Science and Engineering	2015-16	6		64	1.07
		2014-15	6		57	0.95
		2013-14	6		54	0.90
		2012-13	6		52	0.87
6	Electronics & Telecommunication Engineering	2015-16	120		58	0.48
		2014-15	120		101	0.84
		2013-14	120		104	0.87
		2012-13	120		104	0.87

7	Agricultural Engineering	2015-16	30		21	0.70
		2014-15	30		17	0.57
		2013-14	30		8	0.27
		2012-13	30		16	0.53
8	Plastic and Polymer Engineering	2015-16	60		11	0.18
		2014-15	60		13	0.22
		2013-14	60		13	0.22
		2012-13	60		15	0.25
9	Electrical Engineering	2015-16	60		51	0.85
		2014-15	60		30	0.50
		2013-14	0		0	0
		2012-13	0		0	0

Reasons for increase / decrease actions initiated for improvement

- All the undergraduate seats were filled against the sanctioned intake capacity with an exception for the year 2014-15 (A few seats of Plastic Polymer Engineering, Agriculture Engineering and Electronics & Telecommunication Engineering were vacant). Demand for particular engineering disciplines has been changing year on year. Recently disciplines such as Mechanical, Civil and Electrical Engineering are more popular amongst the applicants.
- The overall economic and employment scenario affects the number of applications for engineering courses.
- Most of the engineering graduates prefer employment rather than pursuing higher studies. The limited number of applicants and the rise in number of institutes offering PG courses has resulted in fewer admissions for PG courses.

Actions initiated for improvement

- The institute has started giving more publicity for its credentials, ranking and facilities.
- The institute participates in various industrial/educational fairs.
- Strengthen placement activity through IPT. Continual improvements in the infrastructural facilities.

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?

As a part of social values Institute gives comfortable environment for differently-abled students, the institute follows government policies to cater to the needs of differentially-abled students by means of

- Provision of lift, Ramp, Wheel Chair
- Special seating arrangement in the classrooms and lab.
- Extra time in the examination hall as per the Dr. BAMU, Aurangabad rules.
- For the differently-abled students as per the Dr. BAMU, Aurangabad rules a writer is also provided.
- For the differently-abled students toilets with special facilities are available.

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

Yes, the Institute has well defined strategies for assessing the student's knowledge immediately before the commencement of program. After admissions all the admitted students undergo following procedure

- Every start of the academic year, before the commencement of First Year Technology (FY) course, an induction programme of First Year students, parents and teachers is organized.
- Before the commencement of the program the institute assesses the student's needs in terms of knowledge and skills.
- Assessment is also carried out based on students qualifying marks and their ranking in the merit list.
- At the beginning of the semester concerned faculty members conduct orientation classes to ascertain knowledge based needs and skills of the students. For example on the commencement of the course, Mathematics and Applied Science faculties conduct lectures for a week to cover prerequisites and fundamentals required for engineering studies.
- To satisfy their needs we conduct soft skill classes, organize Group Discussion, debate, quiz, aptitude tests and value added courses.

- Based on the inputs from students and as per their needs, guidance for Civil services, competitive exams, GATE is provided.

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

Institute conducts various programs for newly admitted first year engineering students immediately after commencement of first semester. For candidates with the lateral entries, extra classes are arranged particularly in the mathematics subject. Special classes, remedial classes and tests are conducted for slow learners.

- Special topics for each subject to bridge the gap in the University syllabus if any are covered by the faculties.
- Contents beyond syllabus are also taught to the students through Expert lecture to make them aware about the recent trends in their disciplines.
- Institute arranges industrial visits, organizes technical events, paper and poster presentations, seminars, symposium to bridge the knowledge gap to enable them to cope with advances in their respective fields of studies.
- The institute offers remedial classes and extra classes as per the student needs and to fulfill the curriculum/syllabus prescribed by the University.
- For the second, third and final year students, the respective departments conducts various add-on, enrichment courses.
- Institute arranged different technical trainings as per needed.

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

Environment awareness:

- The Institute promotes environmental and social awareness amongst the faculty and student community through different activities like Jal Kranti, etc.
- The NSS volunteers undertake various social activities and environment protection drives in the nearby villages as a part of their annual NSS camps.
- Tree plantation and paper saving is regular practice in the institute.

Gender sensitization:

- The Institute provides equal opportunity to ladies and gents faculty with respect to appointments, promotions, administration, deputation to courses, higher studies.
- The Institute provides equal opportunity to girls and boys students with respect to participation in extracurricular activities, sports and placements.
- The Institute carefully handles the issues of ragging by forming monitoring committees for boys and girls which actively functions throughout the academic year. The monitoring committee includes gents and ladies faculty of the institute which takes care of the issues of ragging according to their scheduled time.
- The Institute has Grievance Redressal committee and Women's Grievances Redressal committee (Internal Complaint Committee) which also plays an important role in sensitizing the gender issues.

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

The student council comprising of class toppers provides suggestions regarding their special educational/learning needs. Based on the suggestions provided by student council the institute undertakes following measures to fulfill their needs.

- Every department of the institute provides guidance and organizes expert talks and Guest Lectures for the students appearing for competitive examinations such as GATE, CAT, GRE, and TOEFL.
- Students are encouraged to participate in paper and poster presentations, project exhibitions held at state and national level.
- Students are encouraged to do live project in industries by assigning them industry sponsored projects.
- Promote advanced learner to undergo value added courses and certifications.
- Institute organizes various activities under professional bodies such as CSI, IETE, IGBC, IPI and ISTE.
- Institute also organizes value added courses like training programs, Infosys Campus Connect program, and Industrial training program for the students.

2.2.6 How does the institute collect, analyze and use the data and information on the academic performance (through the program 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)?

Procedure adopted to collect and analyze data:

- Results of online and offline class test and end-semester university examinations are readily available with the concerned faculty for analysis.
- Result analysis for the university examinations is carried out after every semester. Based on the result analysis students having failure in more than three subjects and are at the risk of drop out are identified.
- Poor performance in online and offline class test and end-semester university examinations gives us indication about the students who are probably at the risk of drop out.
- Teacher /guardian assigned for the group of students regularly counsel the students regarding their academic progress, poor attendance. Feedbacks received from the students and the discussions carried out during counselling gives us insight about the poorly performing students.
- The continuous assessment sheet contains the data which helps us to monitor their progress.
- The students from the disadvantaged sections of society, physically challenged, economically weaker sections are also identified.
- For the students from disadvantaged sections of the society the benefits of reservations in admissions and scholarships are provided as per government norms.
- Student section creates awareness and provides all necessary information regarding various scholarships and social welfare schemes available to the students.
- The institute is having Earn and Learn Scheme for the students from economically weaker section.
- The institute admits students under TFW (Tuition Fee Waiver Scheme) of DTE.
- For the physically challenged students, if any, the institute provides necessary facilities such as wheelchair, lift, and ramp. Physically challenged students are

regularly counseled to know their special needs and difficulties in learning process and their problems are then resolved as per the need.

- For the slow learners faculty conducts extra classes as per their need. Also during the course of teaching the faculty slows down the pace of delivery of the course content for the proper understanding. Handouts, class notes are provided to the slow learning students for easy understanding of the topic.

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.)

The Institute plans and execute its academic calendar in align with university calendar. The University has two semesters in each academic year. A fixed number of courses are taught in each semester through different teaching methods: lectures, tutorials, assignments, house-tests etc. Every faculty member prepares teaching plan for their respective theory subjects and adheres to it during the delivery lectures.

The library provides old question papers and syllabus for each subject.

Internal Quality Assurance Cell is formed in the college which ensures the improvement in the teaching learning process.

Specimen copies of academic calendar, teaching plan and evaluation blue print are given below to illustrate planning and organization of teaching, learning and evaluation schedules.

Academic calendar

Teaching Plan

Teaching Plan						
Unit - I						
Bloom Levels (BL): 1. Remember 2. Understand 3. Apply 4. Evaluate 6. Create						
Sr. No	Planned Date	Actual Date	Topics / Sub - Topics	Course Outcome/s Addressed	BL Level	Reference (Text Book, Website)
1	11/7/16	11/7/16	Logic and proofs:- Proposition, conditional proposition, Logical connectivity	C01	2	Elements of Discrete Mathematics by C.L. Liu
2	12/7/16	12/7/16	Propositional calculus	C01	2	—II—
3	13/7/16	13/7/16	Universal and Existential quantifier	C01	2	—II—
4	14/7/16	14/7/16	Proof Techniques	C01	2	Elements of Discrete Mathematics by C.L. LIU
5	15/7/16	15/7/16	Mathematical Induction	C01	2	—II—
6	18/7/16	18/7/16	Mathematical Induction.	C01	2	—II—
7	19/7/16	19/7/16	Set, combination of sets	C01	2	—II—
8	20/7/16	20/7/16	Finite and Infinite sets, Un-countably Infinite sets.	C01	2	—II—

Continuous Evaluation Sheet (Evaluation blue print): Tutorial

Students Attendance Status (Tutorial Session) Class: BTech Division: A																	Sign														
Roll No.	1	2	3	4	5	6	7	8	9	1	1	1	1	1	1	1	2	3	4	5	6	7	8	9	1	1	1	2	3	4	5
01	27	3	10	17	31	8	21	28	5	10	9	7	8	9	7	8	9	7	8	9	7	8	9	7	8	9	7	8	9	7	
02	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
03	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
04	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
05	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
06	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
07	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
08	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
10	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
11	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
13	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
14	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
15	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
16	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
18	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
20	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
21	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
22	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
23	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

CAPT: Continuous Assessment for practical: C: Cognitive skill A: Affective P: Psychomotor :total

Students Attendance Status (Tutorial Session) Class: BTech Division: A																				
Roll No.	1	2	3	4	5	6	7	8	9	1	1	1	1	1	1	1	1	1	1	1
25	1	2	3	4	5	6	7	8	9	1	1	1	1	1	1	1	1	1	1	1
26	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	0	1	2	3	4
27	1	2	3	4	5	6	7	8	9	0	1	0	2	0	0	0	0	0	0	0
28	1	2	3	4	5	6	7	8	9	0	1	0	2	0	0	0	0	0	0	0
29	1	2	3	4	5	6	7	8	9	0	1	0	2	0	0	0	0	0	0	0
30	1	2	3	4	5	6	7	8	9	0	1	0	2	0	0	0	0	0	0	0
31	1	2	3	4	5	6	7	8	9	0	1	0	2	0	0	0	0	0	0	0
32	1	2	3	4	5	6	7	8	9	0	1	0	2	0	0	0	0	0	0	0
33	1	2	3	4	5	6	7	8	9	0	1	0	2	0	0	0	0	0	0	0
34	1	2	3	4	5	6	7	8	9	0	1	0	2	0	0	0	0	0	0	0
35	1	2	3	4	5	6	7	8	9	0	1	0	2	0	0	0	0	0	0	0
36	1	2	3	4	5	6	7	8	9	0	1	0	2	0	0	0	0	0	0	0
37	1	2	3	4	5	6	7	8	9	0	1	0	2	0	0	0	0	0	0	0

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Roll No.	Students Attendance Status (Practical Session) Class:												Division: A				Sign		
	Experiment No. 6			Experiment No. 7			Experiment No. 8			Experiment No. 9			Experiment No. 10		Experiment No. 11		Experiment No. 12		
	C	A	T	P	A	T	C	A	P	T	C	A	P	T	C	A	P		
01	02	03	03	08	02	03	03	08	03	05	03	09	03	02	08	03	03	08	
02	02	03	03	08	03	03	03	09	03	03	09	03	03	09	02	03	03	08	
03	02	03	02	07	03	03	02	08	03	03	09	02	03	09	02	03	03	08	
04	02	03	03	08	03	03	03	09	03	03	09	02	03	03	08	03	03	09	
05	02	03	03	08	03	02	03	08	03	03	09	02	03	03	09	03	03	09	
06	02	03	03	08	02	03	02	07	02	03	06	08	02	03	03	09	03	02	
07	03	03	01	07	02	03	03	08	03	03	09	02	03	03	08	03	03	09	
08	02	03	03	08	03	03	03	09	03	03	09	02	03	03	08	03	03	09	
10	02	02	02	06	02	03	02	07	02	03	03	09	02	03	03	09	02	07	
11	02	03	03	08	02	03	03	08	02	03	03	09	03	03	09	03	03	09	
13	02	03	03	08	02	03	03	08	02	03	03	09	02	03	03	09	02	07	
14	02	02	03	07	02	03	03	08	02	02	03	07	02	03	08	03	02	08	
15	02	02	02	06	02	03	02	07	02	03	07	02	03	08	02	02	06	09	
16	02	03	03	08	02	03	03	08	03	03	09	02	03	09	02	03	03	08	
18	02	03	03	08	03	02	08	03	03	04	09	02	03	08	02	03	03	08	

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

In our institute for improving teaching learning process two committees are formed other than

Internal Quality Assurance Cell (IQAC).

- Academic and Administrative Audit Committee:

Academic and Administrative Audit Committee check Course files, theory and practical attendance sheets, CAPT, Lab manuals, staff feedback etc. in every semester and submit the report of same to the Principal and concerned Program Coordinator corrective actions are taken, if required.

- Teacher Guardian Scheme:

Teacher Guardian Scheme meetings are conducted every fortnight to counsel the students and to discuss issues related to academics, hostel, mess and overall facilities.

Based on the issues raised by the above mentioned committees, the Principal, Program Coordinator takes corrective measures to improve teaching learning process.

2.3.3 How is learning 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?

Student centric learning

- Students are encouraged for participative learning.
- Self-learning assignments are given to the students.
- Expert lectures, seminars, workshops, paper presentation, aptitude test, quiz, group discussion and industrial visits are arranged for students in every semester for collaborative learning.
- Training and placement cell organizes activities like personality development and also guidance for competitive examination for GATE, GRE etc.
- Entrepreneurship development cell organizes expert lectures, entrepreneurship awareness camp, and industrial visits.

Support structures and systems available

- State of art laboratories with flexible access.
- Library facility with access to e-learning resources, e-journals, magazines, subscriptions to IEEE journals and transactions, Science Direct, Springer etc.
- Digital Classrooms
- Language/soft skill laboratory
- Virtual laboratory
- Pearson education resources.
- NPTEL course material in the form of videos from IIT Professors.
- Industry sponsored and interdisciplinary projects.
- Self-learning assignments.
- Mini projects.
- Robotic club.
- BAJA/SUPRA vehicle designing and racing competition participation every year.
- Provision of In-Plant Training to each and every student for practical industry exposure.

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

Nurturing Critical Thinking and Creativity

- Institute organizes different events such as, Robotics workshop under Maharashtra Institute of Technology Robotics Academy (MITRA), Kalavihangam, Sci-Clone, Texas Instrument's Analog maker contest, Mini Projects, student association's events to develop creativity and critical thinking among the students.
- Institute motivates students to participate in national level project competitions organized by other institutes and universities such as Avishkar, Dipex, BAJA/SUPRA, GIZ, MASSIA, Praggya, Mindspark, Technovenza VIIT, Perception, Nirmaan 2017, MATA, Plastovision, Wings, Agnitio, RYLA etc.
- Institute motivates students to select industry sponsored projects, societal and interdisciplinary.

Nurturing Scientific temper

- Expert lectures of industry persons, eminent persons, scientists, entrepreneurs are organized to share their experiences and to make them aware of new technology and best practices followed in industry. Particularly on the occasion of science day Sci-Clone is organized for nurturing scientific temper at first year level itself. In this projects based on science and technology are exhibited by school going children and one science talk is organized for first year students every year.
- Students are motivated to become members of Professional society's chapter and student forums like IETE, ISTE, CSI, IGBC, IPI, IIIE, SAE India.
- Students are encouraged to present and publish research papers in national and international conferences and journals.

2.3.5 What are the technologies and facilities available and used by the faculty for effective teaching? E. g: 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.

Technologies and facilities available and used by the faculty for effective teaching

- E-learning resources from National Programme on Technology Enhanced Learning (NPTEL).
- Institute has a Virtual lab Nodal Centre (VLNC-45) associated with IIT Mumbai.
- Pearson educational resources which contains smart Classrooms.
- Open educational resources such as NPTEL lectures and Webinars. Students are encouraged to register for NPTEL online courses.
- The entire campus is connected with high speed (1 GBPS leased line) and Wi-Fi on the campus.

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

Numbers of activities are carried out at the institute to encourage faculty and student to advanced level of knowledge and skills. Institute deputes faculty members and students to various Seminars, Workshops, Training Sessions

organized by local chambers of committees. Institute organizes and motivates students to participate in workshops, conferences, project competitions, paper and poster presentation, debates and technical events.

Students

- Institute has the student chapters of professional bodies like IETE, ISTE, CSI, SAE India, IPT, IGBC which organize events to expose the students for advanced level of technology.
- Institute offers earn and learn scheme for the students who are from economically weaker sections.
- Industrial visits are arranged for students to have exposure of experimental learning.

Faculty

- Institute supports and motivates the faculty to participate in expert /guest lecture by eminent persons from various recognized institutes like IIT's NIT's to get exposure for learning with latest industrial technology.
- Institute organizes faculty development program, seminar, conferences, workshops, short term training program to advance the level of knowledge.
- Institute motivates staff to participate in workshops, seminars, conferences, STTPs, and guest lecturers organized by other institutes and for higher studies.
- Industrial visits are arranged for faculty to have exposure of experimental learning.
- Faculty members are also encouraged to register for ICT based online courses/certifications like Coursera, etc.
- Faculty members are also sent abroad if required to get international exposure and to acquire advanced level of knowledge.

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?

Academic, personal, psychosocial support is provided to students through mentoring system at institute.

Academic Support

- Book Bank Facility to all Students.

- Printed Laboratory Manuals to students.
- Remedial and extra classes as per the need.
- Advanced courses as per need on recent trends.
- Expert lectures from the adjunct faculty having industrial experienced of more than 10 years are conducted.

Personal and psycho-social support

- Individual level counseling through teacher guardian scheme.
- Teacher Guardian Scheme is followed in the institute in which every faculty is assigned 15-20 students. This scheme helps the students to overcome psychological barrier and inferiority complex. They can communicate their personal issues to the teacher guardian and intern can get psychological support.
- Mentors offer suggestion and advice to students as and when needed and continuously monitor attendance and progress of students.
- Mentors are in contact with parents of their students on regular basis.
- Parent meets are organized to discuss strengths and weaknesses of their wards and provide them double support.
- Professional counselor (Psychologist) is appointed and counseling sessions are arranged, particularly for girl students.
- MIT running club is formed for improving fitness for this activity faculty advisor and bus facility is provided if required.

Guidance Services

- The training & placement cell provides professional counseling to the students.
- The personality, professional development, entrepreneurship awareness sessions are organized for students.
- Various skill development courses are organized.
- Guidance for advanced technology, competitive exam and higher studies are provided.

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 faulty to adopt new and innovative approaches and the impact of such innovative practices on student learning?

Innovative teaching approaches adopted by the faculty

The Faculty members continuously adapt different innovative teaching methodologies. Some of the innovative teaching methodologies are as follows.

- Project based learning and experimental learning like field work, visit to industry and guest lecture are organized on regular basis
- Interactive teaching learning approach.
- Use of flash animations.
- Use of models, charts, analogy, brain storming.
- Use of open educational resources, E-learning - resources such as NPTEL and Webinars.
- Learning through industry projects.
- Webinars.
- Providing technical solutions to society problem.

Efforts made by the institution to encourage the faculty

- Encouragement and motivation of faculty for up-gradation and updating of professional knowledge through participation in STTP's, National and International Conferences etc.
- Deputes faculty for attending innovative teaching learning programs like Infosys campus connect, Gurukul for Gurus for senior faculty members.
- Faculties are encouraged to use online resources like NPTEL, webinar for effective teaching learning process.

Impact on Students

Impact on the students has been reflected by,

- Increase in confidence level.
- Increased attendance for the classes.
- Improvement in analytical ability.
- Increase in motivational level.
- Increased participation in technical events.
- Increased participation is observed in curricular and extracurricular activities.
- Improvements in result and overall academic environment.
- Development of critical thinking and creativity.

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

The institute provides library facility with access to e-learning resources, e-journals, periodical section with magazines, subscriptions to Science Direct (Elsevier), Springer, ASME, ASTM digital library, J-Gate Social and management science.

The institute has remote access with central library of Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.

The library resources are used to augment teaching-learning process in the following manner:

- Students are made to refer text books, reference books prescribed in curriculum.
- Book bank facility is provided to the students.
- Guidance for the use of e-learning resources is available in library.
- References to handbooks, manuals and the data sheets.
- Use of e-journals and subscribed contents from Science Direct, ASME, Springer, ASTM, J- Gate.
- Open access system is followed
- Students have direct access to books, magazines and journals.
- Old question papers of university of all subjects are available to the students.
- All these library resources complement the students learning in classrooms and laboratories and hence help to improve teaching learning process.

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, challenges are faced by the institution for completing the curriculum within the planned time frame and calendar. The challenges are posed because of

- Late admissions due to delays in admission process carried out by Directorate of Technical Education for first year and direct second year (lateral entry).
- University provides uniform time slots for all the subjects but certain subjects need more time depending upon the grasping power of students.
- Declaration of late results by university.

Efforts to overcome the challenges

- Considering above challenges academic calendar is prepared with optimal utilization of available weeks for teaching learning activities.
- Extra lectures and practical sessions are arranged to cover the syllabus.
- Provision of additional working days and extra classes against unexpected holidays helps institute to manage this challenges effectively.
- For some subjects additional teaching hours are provided by the institute to cover prerequisites and the actual curriculum.

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

Institute monitors and evaluates the quality of teaching learning through:

- Regular follow up is taken through regular meetings of the faculty members by HoD, Principal and Vice Principal through HoD meetings.
- Student attendance monitoring and reporting of the same to the parents.
- Mid semester and end semester teacher feedback given by the students and based on the feedback received from the students, faculty members are informed about their weakness and suggestions are given for improvement.
- Result analysis of class tests and taking remedial measures.
- Supervision of lecture and practical sessions by HoD, Counseling of faculty members for improvement.
- Feedback is received from students by Vice Principal (Academics) to identify gaps in teaching and learning process, subsequently feedback is given to faculty members and HoD for improvement.
- Quality of teaching learning is assessed from the assessment of outcomes of teaching learning process for each course in the form of course outcomes.

Evaluation of teaching learning quality

- Institute conduct test, mock practical/oral and analyses the result.
- Analysis of the university examination result.
- Remedial classes for improvement.
- Continuous evaluation of seminars, projects are carried out.

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

Strategies adopted by institute in planning and management of its human resources to meet the requirement of the changing requirement of the curriculum are as follows.

- To satisfy the required student/teacher ratio and to meet the changing requirements of the curriculum recruitment process is carried out by means of Online Test, Local Selection Committee interview, University Selection Committee interviews and walk-in interview at different places.
- To retain existing faculty the institute provides release of salary on time every month, regular increments, equal opportunities for promotions, group insurance schemes, provident fund and gratuity to the eligible faculty members.

Recruitment of faculty

While recruiting faculty, Institute ensures faculty qualification and profile as per AICTE norms.

- Applications are invited after the approval for the advertisement by Dr. B.A.M. University, Aurangabad from eligible candidates through advertisement in the national daily newspapers.
- Scrutiny Committee is appointed for scrutiny of applications received, by the governing body and call letters are sent to the eligible candidates for interview.
- The Vice Chancellor of University appoints the selection committee consisting of VC Nominee, Reservation Nominee, subject experts and interviews are conducted by this committee.
- Selected candidates are appointed by the management.
- Proposal for approval of the teachers is submitted to the Dr. B.A.M. University, Aurangabad.
- Recruitment of faculty as per AICTE norms takes place annually and also on regular basis as and when the need arises.

- In case of vacancy arising in between two interviews conducted by University, walk in interviews are conducted, for which advertisement is given in local newspapers. Suitable candidates are selected by local selection committee formed by the Principal and written tests and interviews are conducted at institute level under the supervision of this selection committee.
- In some cases to get the good faculty member's interviews are also conducted in other cities and even in other state.

Retention strategies

- Institute provides equal opportunity to all the faculty members for promotions based on their qualification and performance.
- Institute sponsors/deputes faculty for higher studies.
- Institute sponsors/deputes faculty for conferences, workshops etc.
- Faculty is felicitated based on their achievement and performance.
- Resources for research are provided to faculty.

Qualified and competent faculty at the Institute is as given below.

Table 2.6: Details of faculty at the Institute

Highest Qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent Teachers							
Ph. D.	2	0	3	1	1	1	8
MBA.	-	-	-	-	2	1	3
ME/M. Tech./M. Sc./M. Phil.	-	1	4	5	16	13	39
BE/B. Tech.	-	-	-	-	3	1	4
Adhoc Teachers							
Ph. D.	3	-	3	-	8	3	17
MBA	1	-	-	-	1	4	6
ME/M. Tech./M. Sc./M. Phil.	-	-	-	-	70	21	91
BE/B. Tech.	-	-	-	-	2	0	2
Adjunct Teachers					37	2	39
Total	06	01	10	06	140	46	209

The existing faculty is encouraged for higher studies. The details of faculty pursuing higher studies are as given below.

Table 2.7: Details of Faculty Pursuing Higher Studies

Number of faculties pursuing PG (ME/M. Tech./M. Sc./M. Phil.)	08
Number of faculties pursuing PhD (Engg./Tech/MBA/Science & Humanities & Mathematics)	30

2.4.2 How does the institution cope with the growing demand/ scarcity of qualified senior faculty to teach new programs / modern areas (emerging areas) of study being introduced (Mechatronics, Nanotechnology, Cloud Computing, Green Building etc.)? Provide details on the efforts made by the institution in this direction.

With increase in number of institutes and exponential growth in technology there is growing demand for qualified faculty to teach new programs introduce to new emerging trends like IOT, Robotics, Cloud Computing, Big Data etc. to

cope with demand following measures are taken

- The scarcity of qualified senior faculty to teach emerging areas is tackled by conducting expert talks, guest lecturers, webinar and seminar series.
- Experts from academia as well as industry are called to deliver guest lectures on modern and emerging areas.
- The institute appoints adjunct professors from reputed industry and organizations.
- The institute encourages for training the faculty members in new emerging areas of engineering and technology and even sends them abroad if required.
- The outcome of training faculties in emerging fields is that these topic/courses may be introduced in the curriculum of the students to enrich the industry requirement.
- Students get benefited by the updated knowledge about the developments in their fields and basic curriculum only.
- Institutes also conduct interviews in big cities like Pune, Bangalore to get good faculty members.
- Makes use of online (NPTEL) video lectures by eminent professors from IIT's and other reputed institute.
- Institute encourages faculty members for qualification improvement.

Outcome during last three years:

1. Number of faculty joined as adjunct faculty – 37
2. Number of Ph.D.s joined in last three years – 15
3. Faculty recruited in Pune/Bangalore interviews

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

Strategies:

- Sending faculty members to the STTPs and FDPs to various reputed institutes.
- In-house STTPs and other faculty development programs.
- Encouraging faculty members to publish papers in various National &

International Journals and Conferences.

- Organizing National & International Conferences.
- Encourage faculty members to go through NPTEL videos

a) Nomination to staff development programs

Table 2.8: Details of faculties nominated in faculty development programs

Academic Staff Development Programs	Number of faculties nominated
Agricultural Engineering	26
Basic science and Humanities	32
Civil Engineering	42
Computer Science and Engineering	101
Electronics and Telecommunication Engineering	88
Mechanical Engineering	26
Plastic and Polymer Engineering	12

Table 2.9: Details of Faculties Participated in Faculty Development Programs During Last Four Years

Sr. No.	Events	No. of faculties participated			
		2013-14	2014-15	2015-16	2016-17
1	Summer, Winter Schools, Workshops, Refresher Programs	46	66	68	09
2	Short Term Training Programs	17	21	42	09
3	Faculty Development Programs	11	04	05	Nil

b) Faculty Training programs organized by the institution to empower and enable the use of various tools and technology for improved teaching-learning.

- Teaching leaning methods/approaches- 02
- Handling new curriculum- 02
- Content/knowledge management- 11
- Selection, development and use of enrichment materials- 01
- Cross cutting issues - 04
- Audio Visual Aids/Multimedia- 01
- Open Educational Resources- 01
- Teaching learning material development, selection and use- 02

c) Percentage of Faculty

- Invited as resource persons in workshops/Seminars/Conferences/ Organized by external professional agencies – 10 %
- Participated in external workshops / Seminars / Conferences recognized by national / international professional bodies – 50 %
- Presented papers in Workshops / Seminars / Conferences conducted or recognized by professional agencies – 60 %

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

To recharge the teachers, the Institute has following policies:

- Teachers are motivated to apply for obtaining research grants from various funding agencies such as AICTE, DST.
- Teachers are encouraged to carry out quality research and present/publish papers in national international conferences/journals.
- A study leave is granted to faculty pursuing higher education such as PG and Ph.D. and encouraged to improve qualification under QIP scheme.
- The institute provides on duty leave for attending seminars, conferences, STTP and FDP in IITs and NITs.
- Institute provides the high end equipment's to faculty members to carry out their research.
- Faculty members are also given sabbatical leave to work in industry to get practical exposure.
- Faculty members are also sent abroad for training & development and to present papers at international level.

2.4.5 Give the number of faculty 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

Institution motivates and supports faculty members for participation in STTPs, FDPs and National & International Conferences, also encourages faculty members to be on various university bodies and work actively for betterment of students in this region. This institutional culture and environment which is very much conducive for teaching/learning through research and development activities and self-development of faculty members contributes to better performance by faculty members.

Table 2.10: Number of Faculty Received Awards / Recognition

Sr. No.	Name of Department	No. of faculty received awards/recognition
1.	Agricultural Engineering	1
2.	Basic sciences and Humanities	1
3.	Computer Science and Engineering	6
4.	Civil Engineering	2
5.	Electronics and Telecommunication Engineering	4
6.	Mechanical Engineering	5
7.	Plastic and Polymer Engineering	2

Table 2.11: Details of faculty who received awards / recognition

Sr. No.	Department	Name of faculty	Award/recognition	Year
1	Agricultural Engineering	Mr. S.S. Nalwade	Cash prize of Rs. 2000/- by Devgiri Engineering College, Aurangabad.	2015-16
2	Basic sciences and Humanities	Dr. B. G. Toksha	SAP Award of Excellence for the course "Use of ICT in Education for Online and Blended Learning " from IIT Bombay	2016
3		Dr. B. G. Toksha	Educational Technology for Engineering Teachers by IIT Bombay	2016
4	Computer Science and Engineering	Mr. R. B. Naik	recognized by Infosys as Silver partner Faculty	2015-16
5		Mr. B. S. Sonwane	recognized by Infosys as Silver partner Faculty	2015-16
6		Ms. V. Kala	recognized by Infosys as Bronze partner Faculty	2015-16
7		Ms. S.S. Vishnu	recognized by Infosys as Bronze partner Faculty	2015-16
8		Ms. S.A.Deshmukh	recognized by Infosys as Bronze partner Faculty	2015-16
9		Mr. R. B. Mapari	recognized by Infosys as Bronze partner Faculty	2015-16
10	Civil Engineering	P. R. Awasarmal	Maharashtra Shiksha Bhushan Award 2016	Jan,2016

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11	Electronics and Telecommunication Engineering	P. R. Awasarmal	Member of "Indian Society For Technical Education" ISTE New Delhi LM-55839	Jan,2016
12		R. P. Agrawal	Member of "Indian Society for Hydraulics, Pune" (ISH) (LM-1217)	Feb,2016
13		Dr. Abhilasha Mishra	IETE Prof S.N. Mitra Memorial Award 2013	2013
14		Ms. V. M. Kulkarni	Best Paper Award by Pre Science Congress Conference On Science And Technology	Dec 2014
15		Mr. R.K. Kanhe	Travel Bursary Award by SGGSIET, Nanded.	2016
16	Mechanical Engineering	Mr. Mohammed Laeeq	GIZ & MASSIA Project Challenge award, for the project titled "Internal Thread checking using IOT" by MIT, Aurangabad	2016
17		Dr. S.P .Bhosle	State level 'Dronacharya Award'	2016
18		Dr .A.J. Keche	Best research paper award in the National Symposium held at NIT Warangal.	2016
19		Dr. P.M. Ambad	Certificate of International Excellence as a project guide of students of final year.	2014
20		Dr. P.M. Ambad	Highly commended paper award in Journal of Advances in Management Research.	2014

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21	Plastic and Polymer Engineering	Mr. S.R. Kulkarni	'Dronacharya Award' by SAEINDIA SUPRA.	2016
22		Mr. S.B. Patil	Second Prize in MIT-GIZ-MASSIA summer project competition	2016
23		Dr. Anirudhha Chatterjee	DST-FASTRACK Young Scientist Fellowship for post-doctoral research.	2014-15
24		Dr. Anirudhha Chatterjee	Excellence Award for Quality Research Paper-2014, North Maharashtra University	2014
25		Dr. Anirudhha Chatterjee	Excellence Award for Quality Research & Development-2013, North Maharashtra University.	2013
26		Dr. Anirudhha Chatterjee	Recognition as Post Graduate Teacher / Ph.D. Guide in the subject of Chemical Technology under the faculty of Engineering & Technology, North Maharashtra University	Nov,2013
27		Dr. Anirudhha Chatterjee	Recognition as M. Phil. and Ph.D. Guide in the subject of Chemistry under the faculty of Science, North Maharashtra University	July,2013

28		Dr.Prashant Gupta	Award of Excellence for presenting poster in International Conference of Polymers on the Frontiers of Science and Technology at Chandigarh, India.	2013
29		Dr. Prashant Gupta	Gold Medalist in Post Graduate Diploma in Chemical Technology Management (PGD-CTM)	2014

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, the Institute evaluates teachers by taking feedback from students and external peers.

Direct method:

Evaluation of Teachers by students

- The evaluation of teachers by students is carried out every semester by means of feedback forms.
- The students fill up the feedback forms given to them wherein they respond to a set of questions.
- Based on student's responses the analysis is carried out.

Indirect method:

Evaluation of Teachers by external peers

- The Vice Principal (Academics) takes the feedback from the students in presence of HoD of the concerned department regarding the teaching by every faculty member and the same is communicated to him personally by Vice Principal (Academics) and Principal so as to make the desired improvement. Here the Vice Principal (Academic) is considered to be external peer to the department concerned.

Corrective measures based on evaluation

- Feedback and suggestions given by the students/class monitoring committee are brought to the notice of the concerned faculty. The faculty is then counseled to bring necessary changes in the teaching learning approach and is encouraged to undergo training and STTPs in weak areas.

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?

Institute ensures that the stakeholders are aware of the evaluation process by timely informing them about the various avenues to know about the evaluation process

Awareness of the Evaluation Processes

- The regulations, curricula and syllabi of all the programs offered by the Institute are available in the Institute Library and respective department also on the affiliating University website. The regulations contain the details of the evaluation process.
- Institute notifies the evaluation process and related documents like frequency, nature of internal and University evaluation on the notice board for information to the students and also conducts the awareness lectures in case of major changes such as from marking system to grading system.
- Newly admitted students are well informed about the criterion for allocation of term work marks.
- The newly admitted students are informed about the system of class tests.
- The question paper pattern and model answer paper is informed to the students by the concerned faculty members during implementation of curriculum.
- Internal papers are shown to the students and discussed properly.
- Information regarding verification and revaluation for UG and PG university examination which is provided by the college office by displaying notices from time to time.
- At the time of major changes in the curriculum and evaluation process

faculty members are allowed to participate in the workshops conducted by university.

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?

Institute adopts all the major reforms in curriculum, examination pattern and evaluation process prescribed by the Dr. B.A.M. university to discuss the adopted reforms in exam pattern.

University Reforms adopted by the Institute

- Institute has accepted online/ offline tests for FY to B. Tech (UG) and PG students as suggested by university.
- The choice based credit system is introduced by Dr. BAMU, Aurangabad for all courses and our institute is first engineering college to accept it amongst all the engineering institute under this university.
- Photocopy of answer sheets can be obtained by the individual student in case he/she is not satisfied with the assessment.

Reforms initiated by the Institute

- Internal evaluation process is automated for online class test and student can see the result immediately.
- In few cases external examiner is invited for assessment of project/dissertation work even if not prescribed by university.
- Departments conduct the oral examination of the students at the time of submissions of term work.

2.5.3 How does the institution ensure effective implementation of three valuation reforms of the University and those initiated by the institution on its own?

University has a systematic procedure of online evaluation, offline evaluation re-checking, re- evaluation and photocopying of the answer sheet. Institute helps students for any of these related issues.

- University Evaluation: The reforms recommended by the Dr. BAMU, Aurangabad and those initiated by the college are effectively implemented by the Institute.
- To conduct online examinations, institute has sufficient IT infrastructure.
- Institute has test coordinator in each department for smooth

conduction of online examination and internal tests. One Central Class Test Coordinator is also appointed for smooth conduction of all class tests.

- The duty of Chief Superintendent and under study has been assigned for smooth conduction of University examination.
- Internal Class tests are conducted and records are shown to the students and taking sign of students also on answer sheet marking as seen. Any doubt about test copy evaluation is made clear to the students to encourage them or counsel them for better future performance.
- Regular assignments along with self-learning assignments are given and answers are discussed in the class.

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

Formative Evaluation Process

Formative assessment is essential to monitor individual student learning and modify the teaching methodology of the teacher accordingly. Assessment is done on the basis of:

- Assignments (From syllabus content, self-learning)
- Presentations (on selective topics from subject contents)
- Industrial Visits
- Group Discussions, technical quiz/debate
- Workshops/Seminars
- Mini projects
- Department Functions/Events
- Social activities
- Participation in inter departmental/state level/National/ International competitions
- Overall attendance and conduct throughout the semester.

Summative Evaluation Process

Summative assessment is conducted by the university at the end of each semester in the form of:

- Class Test
- University written examination
- Online and offline examination conducted by the University
- Practical examination
- Viva voce and seminar
- Project examination

Sample Example:

Many of our students achieved excellent performance in the University examinations and obtained institute ranks as follows.

Table 2.12: Agricultural Engineering Student performance in the University examination during last five years

Sr. No.	Exam	Name of student	Branch	Percentage/ CGPA	Rank
1	May-June 2012	Mr. Radhesh L. Dhongade	Agricultural Engineering	79.75 %	I
2		Ms. Monica A. Tonge	Agricultural Engineering	78.75 %	II
3		Ms. Bhagyashree B. Patil	Agricultural Engineering	77.62 %	III
4	May-June 2013	Kure Ajit Manojkumar	Agricultural Engineering	83.68 %	I
5		Nalwade Sandeep Satish	Agricultural Engineering	79.95 %	II
6		Herode Vivek Mahadeo	Agricultural Engineering	78.59 %	III

7	May-June 2014	Mallikarjun Hiremath	Agricultural Engineering	84.50 %	I
8		Prashant Dekate	Agricultural Engineering	80.25 %	II
9		Rahul Diliprao Jadhav	Agricultural Engineering	78.25 %	III
10	May-June 2015	Najan Anantkumar Annasaheb	Agricultural Engineering	8.06 (CGPA)	I
11		Whon Suraj Prakash	Agricultural Engineering	7.55 (CGPA)	II
12		Mundhe Akshay Ashokrao	Agricultural Engineering	7.00 (CGPA)	III
13	May-June 2016	Patil Tushar Surgonda	Agricultural Engineering	8.23 (CGPA)	I
14		Jadhav Prashant Dilip	Agricultural Engineering	8.07 (CGPA)	II
15		Pande Avinash Shivaji	Agricultural Engineering	7.51 (CGPA)	III

Table 2.13: Plastic and Polymer Engineering Student performance in the University Examination During Last Five Years

Sr. No.	Exam	Name of student	Branch	Percentage/ CGPA	Rank
1	May-June 2012	Pal Amarjeet	Plastic and Polymer Engineering	80.5 %	I
2		Kulkarni Parag	Plastic and Polymer Engineering	80 %	II
3		Ajay Rane	Plastic and Polymer Engineering	79.60 %	III

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4	May-June 2013	Katheria Umesh	Plastic and Polymer Engineering	82.68 %	I
5		Gawade Amit	Plastic and Polymer Engineering	81.75 %	II
6		Bhargab Mahanta	Plastic and Polymer Engineering	79.93 %	III
7	May-June 2014	Hase Ankush	Plastic and Polymer Engineering	82 %	I
8		Jignesh Prajapati	Plastic and Polymer Engineering	81.18 %	II
9		Gavhale Ashvini	Plastic and Polymer Engineering	79.93 %	III
10	May-June 2015	Panchal Badal S.	Plastic and Polymer Engineering	9.22 (CGPA)	I
11		Shah Akash S.	Plastic and Polymer Engineering	8.41 (CGPA)	II
12		Deshmukh Yogesh	Plastic and Polymer Engineering	8.37 (CGPA)	III
13	May-June 2016	Thakur Vikramsingh	Plastic and Polymer Engineering	8.64 (CGPA)	I
14		Damani Vivek	Plastic and Polymer Engineering	8.49 (CGPA)	II
15		Dave Dwij	Plastic and Polymer Engineering	8.48 (CGPA)	III

Table 2.14: Electronics & Telecommunication Engineering Student performance in the University examination during last five years

Sr. No.	Exam	Name of student	Branch	Percentage/ CGPA	Rank
1	May-June 2012	Kulkarni Renuka Rajendra	E&TC Engineering	86.93 %	I
2		Khandre Varsharani Ramesh	E&TC Engineering	83.25 %	II
3		Manjramkar Kaustubh Anilrao	E&TC Engineering	82.93 %	III
4	May-June 2013	Shaikh Samreen Nisarahemad	E&TC Engineering	84.38 %	I
5		Md.Anjum Hussain	E&TC Engineering	84 %	II
6		Chendke Disha Deepak	E&TC Engineering	83.88 %	III
7	May-June 2014	Parul Singh	E&TC Engineering	86.13 %	I
8		Natu Aditya Suhas	E&TC Engineering	86.06 %	II
9		Abhishek Baid	E&TC Engineering	85 %	III
10	May-June 2015	Somvanshi Ganesh Ashok	E&TC Engineering	8.96 (CGPA)	I
11		Ghodke Swati Bujang	E&TC Engineering	8.29 (CGPA)	II
12		Shaikh Amer Kamal Shaik	E&TC Engineering	8.16 (CGPA)	III

13		Nagarkar Puja Uday	E&TC Engineering	9.07 (CGPA)	I
14	May-June 2016	Fernandes Lynn Sebastian	E&TC Engineering	8.52 (CGPA)	II
15		Pathade Ashwini Badrinath	E&TC Engineering	8.48 (CGPA)	III

Table 2.15: Computer Science & Engineering Student performance in the University examination during last five years

Sr. No.	Exam	Name of student	Branch	Percentage/ CGPA	Rank
1	May-June 2012	Karadkhedkar Amey	Computer Science & Engineering	84.16 %	I
2		Suryavanshi Kamlesh	Computer Science & Engineering	83.34 %	II
3		Chaudhari Sonal	Computer Science & Engineering	82.91 %	III
4	May-June 2013	Anand Sinha	Computer Science & Engineering	83.25 %	I
5		Yogita Chichani	Computer Science & Engineering	82.87 %	II
6		Sarvagya Kumar	Computer Science & Engineering	82.75 %	III
7	May-June 2014	Shete Rasika	Computer Science & Engineering	86.81 %	I
8		Abhishek Bansal	Computer Science & Engineering	84.19 %	II
9		Chintawar Ashwini	Computer Science & Engineering	83.63 %	III
10	May-June 2015	Kulkarni Neha Narayan	Computer Science & Engineering	8.79 (CGPA)	I

11	May-June 2016	Kholgade Rutuja Kishor	Computer Science & Engineering	8.38 (CGPA)	II
12		Jadhav Satish Dattu	Computer Science & Engineering	8.36 (CGPA)	III
13		Deshpande Yugandha Mahendra	Computer Science & Engineering	8.99 (CGPA)	I
14		Ansari Talha Lutfullah	Computer Science & Engineering	8.71 (CGPA)	II
15		Dange Avinash Sureshappa	Computer Science & Engineering	8.62 (CGPA)	III

Table 2.16: Mechanical Engineering Student performance in the University examination during last five years

Sr. No.	Exam	Name of student	Branch	Percentage/ CGPA	Rank
1	May- June 2012	Alok Kumar Chaudhary	Mechanical Engineering	83.31%	I
2		Abhishek Agrawal	Mechanical Engineering	83.06%	II
3		Akhilesh Manchandani	Mechanical Engineering	83.06%	III
4	May- June 2013	Kulkarni Aniruddha Dilip	Mechanical Engineering	87.1 %	I
5		Mutha Shravan Santosh	Mechanical Engineering	82.2 %	II
6		Patil Nishant Vasantrao	Mechanical Engineering	81.8 %	III
7	May- June 2014	Jagtap Mukund Sunil	Mechanical Engineering	86.93 %	I
8		Chamnikar Ameya Sanjay	Mechanical Engineering	84.37 %	II
9		Disale Gokarna Gautam	Mechanical Engineering	83.31 %	III

10	May-June 2015	Jadhav Sandeep Sahebrao	Mechanical Engineering	8.69 (CGPA)	I
11		Disale Gokarna Gautam	Mechanical Engineering	8.41 (CGPA)	II
12		Chamnikar Ameya Sanjay	Mechanical Engineering	8.41 (CGPA)	III
13	May-June 2016	Ghorpade Prasad Prakash	Mechanical Engineering	8.91 (CGPA)	I
14		Joshi Vaibhav Vinod	Mechanical Engineering	8.81 (CGPA)	II
15		Mahindrakar Sumit Sudhir	Mechanical Engineering	8.63 (CGPA)	III

Table 2.17: Civil Engineering Student performance in the University examination during last four years

Sr. No.	Exam	Name of student	Branch	Percentage/ CGPA	Rank
1	May-June 2013	Sandeep Jain	Civil Engineering	86.87 %	I
2		Shaikh Zainulabedeen		83.12 %	II
3		Deshpande Shripad		81.93 %	III
1	May-June 2014	Zakir Inamdar	Civil Engineering	85.75 %	I
2		Mandakini Takle		83.62 %	II
3		Shraddha Deshpande		82.74 %	III
1	May-June 2015	Mali Pradip	Civil Engineering	8.23 (CGPA)	I
2		Satya Mishra		7.94 (CGPA)	II
3		Sanap Devidas		7.58 (CGPA)	III

1	May-June 2016	Manish Kumar Gupta	Civil Engineering	8.32 (CGPA)	I
2		Mirza Farjad Baig		8.08 (CGPA)	II
3		Jadhav Manoj		7.93 (CGPA)	III

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 (weightage for behavioral aspects, independent learning, communication skills etc.

Efforts are taken by the institute authority to ensure rigor and transparency in the internal assessment during last four years, which are as follows:

- Display of academic calendar on notice board consisting details of class test slot and institute/department events, at the start of semester.
- Students have been given ample opportunity to discuss issues regarding test performance with the concerned teacher.
- For failure in the class test, improvement test is conducted at the end of the semester.
- Institute has developed assessment sheet which considers attendance, conduction of practical, performance in internal oral, student behavior, social work done by the student and his/her participation in extracurricular activities inside or outside the institute.
- The academic progress of the students is monitored by the appointed class teachers, tutors and respective subject teachers.
- Monthly attendance and Class Test marks communicated to the parents.
- Also, every year, Teachers and Parents Meet is organized through which progress of the students and institute achievements are communicated to the parents.
- For special cases, irregularities parents are called in between as well.
- Student's progress in various fields is communicated to the students and the parents.
- The respective department maintains record for every student which

contains details of the student such as their attendance record, test marks for theory, CAPT conduction for practical and their applications/documents for participation/leave and so on.

2.5.6 What are the graduates attributes specified by the college/affiliating university? How does the college ensure the attainment of these by the students?

Graduate Attributes (GA) for various programs at the Institute are as mentioned below:

Engineering knowledge:

Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.

Problem analysis:

Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

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.

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.

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.

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.

Environment and sustainability:

Understand the impact of the professional engineering solutions in societal and environmental context, and demonstrate the knowledge and need for sustainable development.

Ethics:

Apply ethical principles and commit to professional ethics, responsibilities and norms of the engineering practice.

Individual and team work:

Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

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.

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.

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.

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

As per the University recommendation, institute appoints Chief Superintendent (CS) and under study depending on number of appearing student for University examination. Evaluation related grievances are forwarded to the University through the CS.

The college level grievances related to evaluation are resolved by discussing test papers with the individual student.

The University settles the grievances using its own mechanism.

2. 6 Student Performance and Learning Outcome

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, Each programme of the college has clearly stated learning outcomes in terms of program educational objectives (PEOs), program outcomes (POs) , Program Specific Outcomes (PSOs) , Course Objectives and course outcomes (COs).

These are also reflected in course files, college website and through notice boards.

As an example the Program Educational Objectives and Outcomes of Department of Computer Science and Engineering are stated below.

Program Educational Objectives are as below:

PEO 1: To prepare the students to achieve success in computing domain to create individual careers, innovations or to work as a key contributor to the private or government sector and society. **PEO 2:** To develop the ability among the students to understand Computing and mathematical fundamentals and apply the principles of Computer Science for analyzing, designing and testing software for solving problems.

PEO 3: To empower the students with ability to quickly reflect the changes in the new technologies in the area of computer software, hardware, networking and database management.

PEO 4: To promote the students with awareness for lifelong learning introduces them to professional practice, ethics and code of professionalism to remain continuous in their profession and leaders in technological society.

Programme specific outcomes are as below:

Upon satisfactory completion of a B. Tech. degree in Computer Science and Engineering, graduates will be able to:

1. Identify appropriate data structures and algorithms for a given contextual problem and also develop programs to design and implement web applications.
2. Design and manage the large databases and develop their own databases to solve real world problems and to design, build, manage networks and also apply wireless techniques in mobile based applications.
3. Design a variety of computer-based components and systems using computer hardware, system software, systems integration process and use standard testing tools for assuring the software quality.

Programme Outcomes are as below:

Engineering graduates will be able to

1. Apply knowledge of mathematics, science, and engineering fundamentals to solve problems in Computer Science and Engineering.
2. Identify, formulate and analyze complex problems.
3. Design system components or processes to meet the desired needs within realistic constraints for the public health and safety, cultural, societal and environmental considerations.
4. Use research based knowledge and research methods including design of experiments, analysis and interpretation of data for valid conclusions.
5. Select and apply modern engineering tools to solve the complex engineering problem.
6. Apply knowledge to assess contemporary issues
7. Understand the impact of engineering solutions in a global, economic, environmental, and societal context.
8. Apply ethical principles and commit to professional ethics and responsibilities
9. Work effectively as an individual, and as a member or leader in diverse teams and in multidisciplinary settings.
10. Communicate effectively in both verbal and written form.
11. Demonstrate knowledge and apply engineering and management principles to manage projects and in multi-disciplinary environment.
12. To engage in life-long learning to adapt to the technological changes.

PEOs and POs are made available to all stakeholders by following means:

- a. POs are published on the website of the institute and are displayed at prominent places in each department
- b. These are disseminated to the stakeholders through interactions such as, student-class teacher meetings, parent meetings and meeting with industry persons.
- c. The faculty explains the program outcomes and course outcomes expected from the course offered to the students before the commencement of course in every semester

2.6.2 Enumerate on how the institution monitors and communicates the progress and performance of students through the duration of the course/ programme?

The institution aims at enhancing the quality of teaching, learning and assessment by providing academic leadership for the sustained growth in academic practice. Institution has a well-defined process to monitor the progress and performance of students implemented at programme level. All departments follow this process and communicate this to their parents at regular intervals.

Performance Monitoring

Student academic performance is monitored by six mechanisms are as follows.

1. Attendance:

Attendance is the most important parameter which impacts the performance of the students and is monitored monthly for higher classes and weekly for first year. At the end of every month, class teacher collects the attendance of each subject from respective subject teacher including theory, practical and tutorials and generate the attendance report. The report is displayed to the students and same is communicated to the parents. At the end of every semester, defaulter list is prepared and appropriate action is taken on defaulter students. In the parent teacher meet, attendance issues are communicated to parents.

2. Class Tests:

Class Tests are conducted to evaluate the performance of students during the semester. Class test schedule are prepared by the central CT Coordinator and based on the schedule the tests are conducted. Question papers are prepared by the concerned course coordinator and sent to the departmental class test coordinator where they are printed and kept as a confidential one. The performance of students in unit test is informed to the students and communicated to parents. Based on performance, weak and bright students are found and some efforts are taken for the weak students through remedial classes.

3. Term work:

Term work marks are given to the students on the basis of their attendance and continuous assessment of practical.

4. End Semester Examinations and PR/Oral examinations:

End Semester Examinations and PR/Oral examinations are conducted by Dr. Babasaheb Ambedkar Marathwada University, Aurangabad and the results are

also declared by them. The results are communicated to students as soon as it is received from university. Result analysis is carried out for taking corrective actions.

5. Seminars and Project:

Every student has to select a recent topic for his/her seminar/Project, which is to be delivered in the fifth semester for all programmes. The guides are allocated to every student depending on the seminar topic of students. Every student or a group of students have to select a recent topic for his/her project, which is to be developed in the sixth and seventh semester for all programmes. The guides are allocated to every student/group depending on the project topics of students for performance monitoring of each and every student during the process of seminars and projects completion.

6. IPT:

The B.Tech Program incorporates in- plant training during last semester of study. Students undergo IPT for 20 weeks with systematic evaluation by department. Students appear for first review after 8 weeks, for second review after 14 weeks and for final examination in front of external examiner after 20 weeks. This is how, performance monitoring takes place during IPT.

Performance Communication

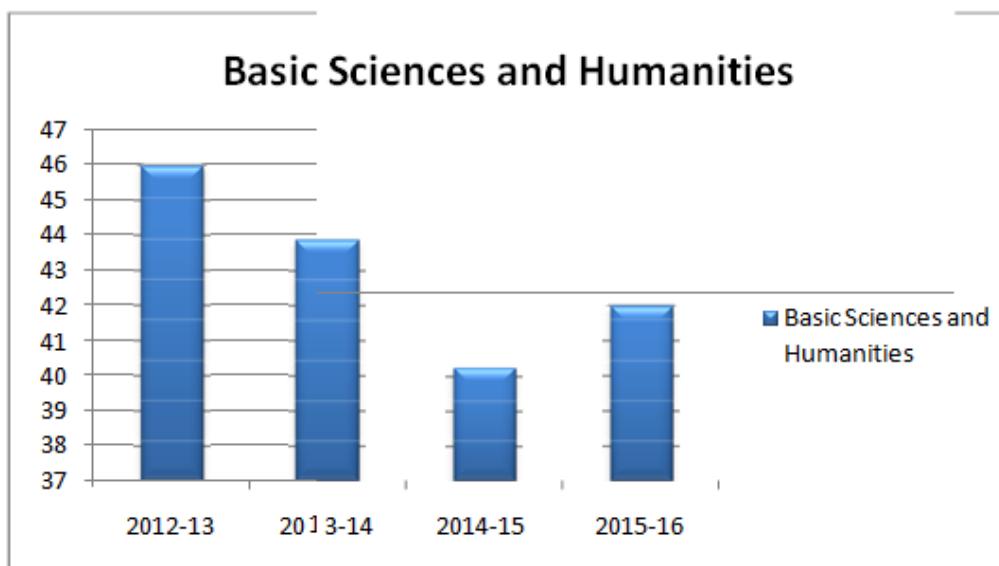
The attendance report is displayed to the students on departmental notice boards and also conveyed to the parents every month. Parents are called to the department if attendance of their ward is considerably low. Results of class tests are communicated to students by every subject teacher and the reports are displayed on departmental notice boards after every class test whereas results of end semester examinations are declared by University every semester and are displayed on notice board as soon as received from university.

Parent meet is conducted in each semester to communicate about the overall progress of each student to their parent. University rankers are felicitated during the parent meet. The results are available online on university website and in the form of hard copy at the institute. Parents can view the results online. Detailed result analysis is done after declaration of result by Dr. BAMU in every semester by each department.

The results of all programs (FY to B.Tech) for all Academic years are shown below.

Table 2.18: FY (All) Student performance in the University examination during last four years

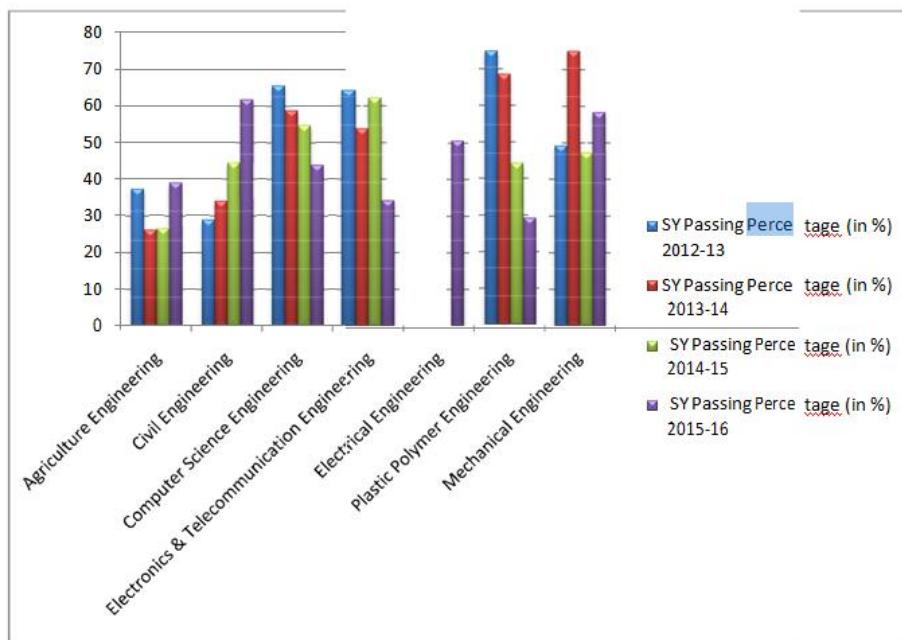
FY All passing percentage (in %)				
Department	2012-13	2013-14	2014-15	2015-16
Basic Science and Humanities	45.99	43.9	40.26	42



Graph 2.1: FY (All) Student performance in the University examination during last four years

Table 2.19: SY (All) Student performance in the University examination during last four years

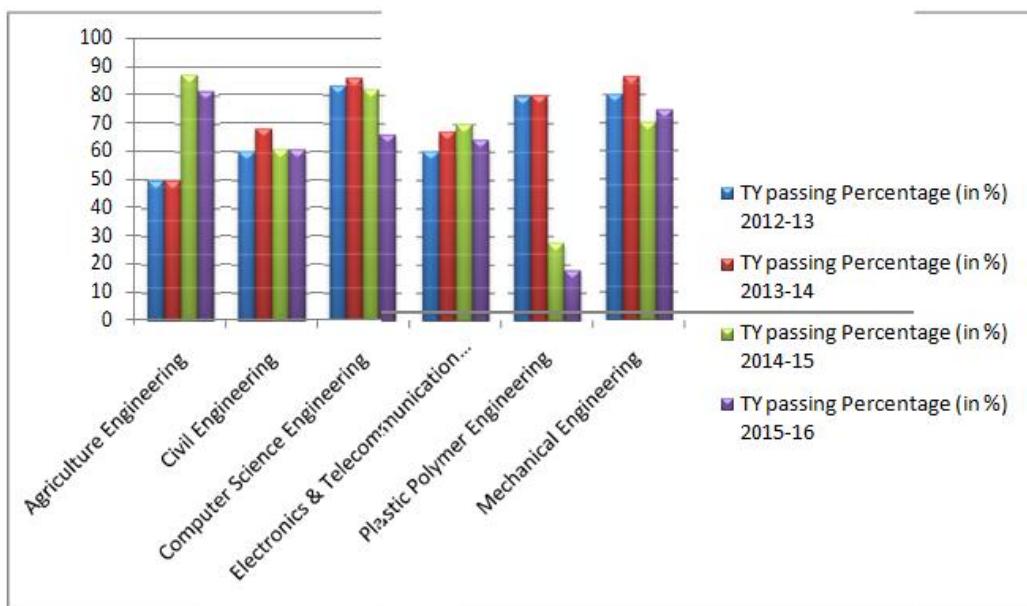
SY Passing Percentage				
Department	2012-13	2013-14	2014-15	2015-16
Agricultural Engineering	37.5	26.32	26.67	39.13
Civil Engineering	29.03	34.17	44.59	61.84
Computer Science and Engineering	65.71	58.9	54.79	44
Electronics & Telecommunication Engineering	64.38	53.9	62.3	34.31
Electrical Engineering	NA	NA	NA	50.7
Plastic and Polymer Engineering	75	68.65	44.28	29.31
Mechanical Engineering	49.32	75.16	47.33	58.39



Graph 2.2: SY (All) Student performance in the University examination during last four years

Table 2.20: TY (All) Student performance in the University examination during last four years

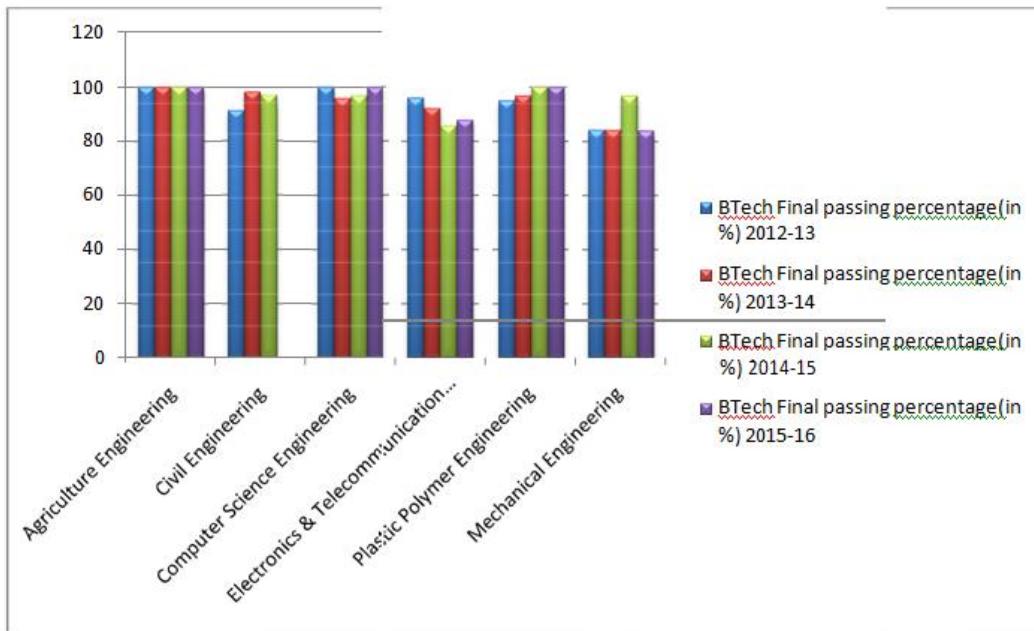
TY passing Percentage				
Department	2012-13	2013-14	2014-15	2015-16
Agricultural Engineering	50	50	87.5	81.82
Civil Engineering	60.46	68.62	61.19	61.17
Computer Science and Engineering	83.56	86.15	82.25	66.18
Electronics & Telecommunication Engineering	60.43	67.42	70.12	64.5
Plastic and Polymer Engineering	79.66	80	27.86	18.19
Mechanical Engineering	80.19	86.47	70.33	74.65



Graph 2.3: TY (All)Student performance in the University examination during last four years

Table 2.21: B.Tech (All) Student performance in the University examination during last four years

B.Tech Final passing percentage				
Department	2012-13	2013-14	2014-15	2015-16
Agricultural Engineering	100	100	100	100
Civil Engineering	91.22	98.03	96.83	0
Computer Science and Engineering	100	95.83	96.83	100
Electronics & Telecommunication Engineering	96.06	92.21	85.69	87.88
Plastic and Polymer Engineering	95.12	96.87	100	100
Mechanical Engineering	84.21	84.27	96.92	84

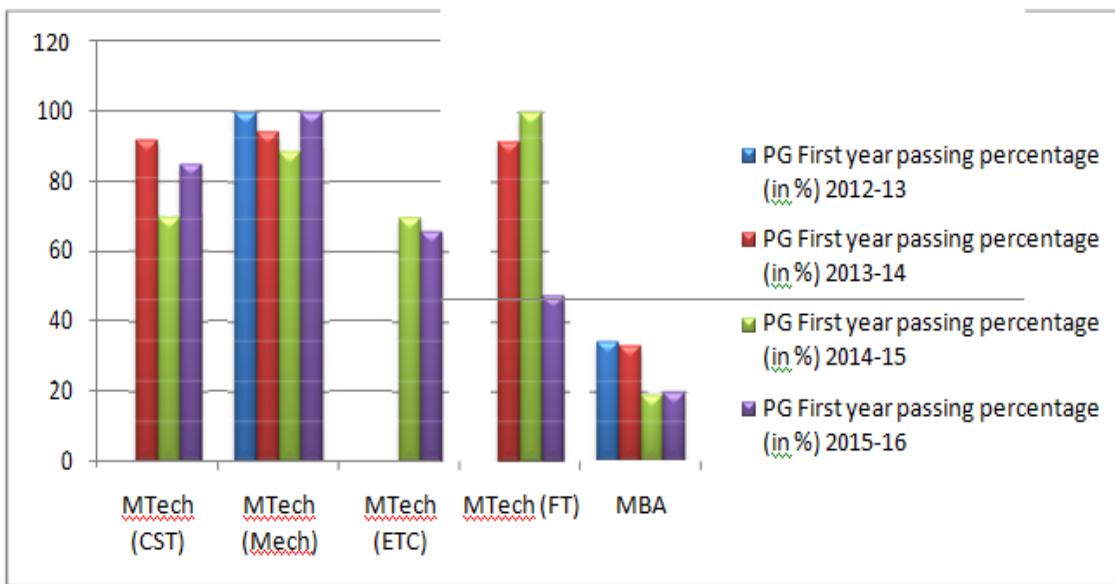


Graph 2.4:B.Tech (All) Student performance in the University examination during last four years

The results of all PG programmes for all Academic years are shown below.

Table 2.22: PG (All) Student performance in the University examination during last four years

PG First year passing percentage				
Department	2012-13	2013-14	2014-15	2015-16
M.Tech (CST)	NA	92	70	85
M.Tech (Mechanical)	100	94.44	88.89	100
M.Tech (ETC)	NA	NA	70	66
M.Tech (FT)	NA	91.67	100	47.62
MBA	34.54	33.33	19.23	20



Graph 2.5: PG (All) Student performance in the University examination during last four years

2.6.3 How teaching, learning and assessment strategies of the institute designed to assist procurement of intended learning outcomes?

Teaching Strategies

- **Academic Calendar** - Institute level academic calendar is prepared for fourth coming semester and furnished to each department. The departments prepare and adhere-by the detailed department level calendar scheduling all the planned events, industry visits, audits etc.
- **Course File**-Before proceeding for semester , each faculty prepares the course file which includes-lesson plan, assignment-experiment list, course material-notes and activities related to the course. Institute has opted a systematic course file format since last year.
- **STTP/FDP/FTP**- To cope up with recent trends and industry know-how, faculties are encourage and supported, in terms of duty-leave/financial aid, for attending/organizing STTPs, FDPs within the institute, in other institute and also in industry or local chamber of commerce like CMIA, MASSIA
- **QIP/ Ph.D.** - Institute stimulate faculty pursuing full time Ph.D. at renowned institute, under QIP, and encourages M.E. / M. Tech. and part time Ph.D. for qualification enrichment.

Learning Strategies

- **Active Learning-** Student engagement in activities like- brainstorming, group discussion, problem solving, etc. to promote efficient synthesis and apprehension of class content. Use of digital class room- audio/ video methods for content delivery is preferred. Institute also holds NPTEL and Spoken Tutorial Local Chapters to supplement learning.
- **Industrial Visits-** To aid industry insights special industrial visits are organized during the program. Students are encouraged and promoted to attend/ organize various skill development ventures to strengthen hands-on experience.
- **In-Plant Training-** The B.Tech Program incorporates in- plant training during last semester of study. Students undergo IPT for 20 weeks with systematic evaluation by department on regular basis and at the end of semester as well.
- **Slow and Fast Learners-** Remedial lectures are arranged for slow learners and a provision of remedial Class Test is made to give a chance of improvement.
- For fast learners department provides guidance and support to excel in area of their interest and promotes their participation in outside conferences, workshops and other skill development programs and also in competitions like BAJA, SUPRA, Hackathon and other competitions related to robotics.
- **Career Guidance and Further Study-** To uncover career opportunities, talks from experts are organized at department also for further study GATE/ GRE related awareness and preparation guidance is aided by department.
- **Teacher Guardian Meets-** TG meetings are held to discover the academic and other knowhow of students. A TG counsels students for their weaknesses.

Assessment Strategies

- **CGPA Awareness-** Students are made aware of CGPA system and evaluation criteria/ scheme, throughout the program, during their induction at the department.
- **Class Tests-** To evaluate performance of the students, two class tests are scheduled per semester; also the provision of remedial class test is made for the weak performers.
- Result analysis of class tests are forwarded to respective subject in charges for necessary action.
- **Monthly Attendance-** Subject wise and consolidated monthly attendance is

displayed, defaulter students are counseled by TG and/or HOD and same is communicated to parents as well.

- **Result Analysis-** Result analysis for semester end examinations result is done by department and accordingly remedial lectures are arranged for subjects with low-lying result statistics.
- **Parents' Meetings-**Communication to parents is done for slow learners and attendance defaulters. Parent meetings with respective subject teacher and/or HOD is also arranged every semester to understand difficulty and to assist student improvement.
- **Student Feedback-** To discover the prospects for improvement in teaching learning methodology systematic feedback from students are taken at the end of semester. Additionally verbal/Written feedbacks are taken periodically by Vice Principal/ HOD/ senior faculty to keep check of semester ongoing.

2.6.4 What are measures/ initiative 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?

To enhance the social and economic relevance of the courses offered following initiatives are taken up by Institute.

- Institute has the unique feature of “IPT” by which the final year students get the opportunity to work in the industry environment where they learn the economic relevance of all the activities that are being carried out.
- Institute has signed Memorandum of Understanding (MOUs) with many leading industries like Infosys, Red hat, Cloudera, IGTR, Precision Power, Maven Technology etc. which helps the students to acquire additional knowledge and skill thereby improving their chances of placements.
- Institute has adequate online and offline learning resources available in the library for teaching, learning as well as research.
- Institute has formed entrepreneurship cell to develop the awareness about self-employment and this cell conducts workshops for encouraging students to become entrepreneur.
- Institute has established “MIT Innovation Cell” (Research and Development) which plays an active role in improving the quality of research work at MIT.

- Institute has membership of different professional bodies such as ISTE, CSI etc.
- Institute organizes guest lecture of HR persons, Adjunct Faculties from pioneer organizations or Industry to get awareness of present market scenario and to get idea of social and economic relevance of what they learned in theory.
- Institute organizes technical paper presentation and project competitions which help students to inculcate a professional approach and imbibe ethical engineering practices.
- Students are encouraged to participate in state/ national/international technical events like BAJA, SUPRA etc. that improve their social connect with outside world and also they learned about the techno commercial aspects of design and manufacturing.
- The college has established a strong student group under NATIONAL SERVICE SCHEME (NSS) which strives to work for the development of the society. Institute has adopted a village Ranjangaon approximately 15 Km from Aurangabad, for various social development activities and also one Anathalaya (Orphanage) called Balgram in Georai, Dist. Beed.
- Few groups of the institute work for providing the technical solutions to the problems of rural areas and learn about the innovative approaches to solve such problems and also develop their social angle towards people in rural.
- Institute has participated in activities which are carried out in association with MASSIA and also participated in activities like summer project challenge organized by GIZ.

Table 2.23: Summary of NSS Program

Academic Year	Event Details
2012-13	<ul style="list-style-type: none"> • 26/02/2013: A play named “Mr. India” happened in the Instituite. • 06/02/2013: Personality Development Program by • 15/10/2013: Tree Plantation. • 11/09/2013:- “Bharat JaagoDaud” coordinated by Swami Vivekanand Kendra, Kanyakumari. • 08/08/2013:- “Blood Donation Camp”, 150 Donars.
2013-14	<ul style="list-style-type: none"> • 24/09/2014 : NSS Foundation Day. • 26/09/2014 : “Yuvak Biradari Shibir” • 02/10/2014 : “Swatch Bharat Abhiyaan” • 10/10/2014 : Speech on “Wyasan- Mukti” • 10/10/2014 :“Dnyan Setu” Event. • 13/10/2014 :Voting awareness by Sweep. • 20/08/2014: A speech on ”Social concern” by Dr. Dilip Peshwe VNIT, Nagpur. • 19/02/2014: “Blood Donation Camp”, 147 Donars.
2014-15	<ul style="list-style-type: none"> • 27/07/2015: “Swatch Bharat Abhiyaan” • 05/09/2014: A program on “Jadutona & Chamtkar” by Shri Shahaji Bhosle, Member of ANIS. • 25/01/2014: NSS Members visited “Dattaji Bhale Rakta Pedhi”.
2015-16	<ul style="list-style-type: none"> • 26/11/2016: “Savidhhan Day” • 23/09/2016 : "Aarogya Shibir" • 08/08/2016: Blood Donation camp. • 01/07/2016: Tree Plantation Program. • 19/11/2015 To 25/11/2016: "Raste Suraksha Saptah & Janjagruti". • 27/09/2015: "Nirmalyaa Daan Upkram" • 08/08/2015: Blood Donation Camp. • 08/03/2016: A program on “World Woman's Day”

2016-17	<ul style="list-style-type: none">• 12/01/2017: "Rashtriya Yuva Din": Swami Vivekanand Jayanti.• 16/02/2017 To 22/02/2017: "Rashtriya Seva Yojna Vishesh Shibir, Balgram Govindwadi at Ta. Gewrai, District: Beed "
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NCC Activity

- The National Cadet Corps plays a significant part in moulding a person's character. It fosters the spirit of teamwork and man-management and leads to the development of a more pleasing overall personality.
- Recognizing the importance of the NCC, the Institute offers the students an opportunity to be part of the NCC. The Institute cadets are part of the 50 Maharashtra Battalion NCC Aurangabad.

Activities

1. General

- Parades are regularly held to train the cadets in foot drill and command, weapon training, field craft, civil defense, map reading etc.
- Guard of Honor is given on 26th January and 15th August to commemorate the Republic Day and Independence Day of India.

2. Camp

- An Annual Training Camp is held to further enhance and inculcate a feeling of independence in the cadets.
- Extensive knowledge about devices used in the Army weapons etc. is imparted in camp.
- Rigorous physical Military training is provided in the camp with a view to increasing the physical endurance of the cadets.
- Following are the year wise camps held at Military Cantonment Area- Chhawani, Aurangabad.

Table 2.24: year wise camps held at Military Cantonment Area- Chhawani, Aurangabad.

Sr. No.	Year	Date
1	2012-2013	03 Sept to 12 Sept 2012
2	2013-2014	28 Jan to 06 Feb 2013
3	2014-2015	24 Jan to 02 Feb 2014
4	2015-2016	09 Sept to 19 Sept 2015
5	2016-2017	10 Aug to 19 Aug 2016

- Training & Placement cell at MIT trains the students for placement and helps them to develop an all-round personality by conducting a variety of sessions on aptitude training, soft skills etc.

Table 2.25: Summary of placements and progression to higher studies is given below.

(Year- wise Record)T&P Training sessions

Academic Year	No. of aptitude sessions	No. of soft skill sessions	Other sessions	Total
2012-13	02	02	03	07
2013-14	04	02	03	09
2014-15	04	02	05	11
2015-16	06	05	09	20
2016-17	23	04	10	37

As a result of the efforts of the T&P cell student placement is sustained despite a sluggish recruitment scenario.

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?

Student's performance analysis includes internal test, University examination, assignments and Faculty observation. Faculties make sure that syllabus is completed within stipulated time. Barriers in learning are overcome by counseling students and motivating them.

Institute Collect Data on Students performance and Learning outcomes through:

- Attendance: The college maintains the attendance record of individual students in all subjects throughout the semester.
- Classroom Performance observation: There is a continuous evaluation system through classroom assignments, presentations, group activities, case study analysis and laboratory performance.
- Class Test: The College conducts two internal tests in a semester and also one more improvement test for weaker students and performance assessment periodically.
- University Exam result: The result analysis of every student provide the academic progress of the student.
- TG meets are scheduled to interact with students to find the problem they are facing in academics.
- Declaration form for Attendance Shortage: The students who have attendance shortage is required to submit a declaration form which is also signed by his/her parents stating that he/she is aware of the rules regarding attendance requirements and will abide by the regulations .

Mechanism of Analysis

- Periodically attendance is assessed for shortage and students are made alert against absenting in the class. The college strictly follows them and at or attendance requirement of the University. Student gets an opportunity to take effort to compensate for the shortage of attendance during the remaining period of time and becomes eligible to take the examinations.
- The evaluated answer booklets of Class Test are given to the students to convince them of their performance. For poor performance, if any,

respective faculty guides the student and takes appropriate measures to improve performance.

- University examination result analysis is used for feedback on student progress in the consecutive semesters. Necessary actions are taken by subject teacher under HODs supervision.
- Mentors will use assessment data to suggest learning techniques to the students for improvement.

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

The data collection and analysis required for computation of attainment POs are presented.

Process to monitor the degree of PO attainment:

1. Direct Assessment Tools

- Data Collection Processes /Assessment Tools used: Assignment- Students are given course related tasks and assessment will be done based on their performance. Marks/ Grades are assigned depending on their innovation in solving the problems. The assignment is a qualitative performance assessment tool designed to assess students' knowledge of engineering practices, framework, and problem solving. An analytic rubric is developed to assess students' knowledge with respect to the learning outcomes associated with the scenario tool.
- Online Class Test - Online Examination System is a Multiple Choice Questions (MCQ) based examination system that provides an easy to use environment for both Test Conductors and Students appearing for Examination.
- Written Class Test - written Class Test is descriptive questions based examination system. For all the tools, the degree of attainment for each course will be evaluated by taking the average passing percentage of the class for the course. This passing percentage is compared with department threshold value to categorize them as High, Medium and Low levels of attainment. PO attainment is also evaluated by specially designed seminar and project rubrics.

2.Indirect Assessment tools

Participation of students in professional bodies/student chapters / workshops / seminars / conferences / paper presentations/ industry visit etc. This statement is considered to indirectly assess the POs.

Survey reports- Indirect assessment strategies can be implemented through

- Course- end survey/Exit Survey: During the program
- Graduate Survey: After one year of graduation
- Alumni Survey: After three years of graduation
- Employer Survey: After three years of graduation

The enlisted surveys/ feedbacks are collected periodically and their statistical analysis is carried out. This analysis is compared with department threshold value to categorize them as high, medium and low levels of attainment.

Module coordinator consolidates the attainment of POs from all the courses and prepares the final attainment report. The consolidated PO attainment is presented in front of PAC (Programme Assessment Committee) and then DAB (Departmental Advisory Board).

Monitoring Mechanism

- The Internal Quality Assurance Cell in the Institute monitors the achievement of learning outcomes through Academic and Administrative Audit committee.
- The achievements of learning outcomes are ensured by the institute through the feedback from its stakeholders and the industry.
- Students' placement through in campus and off campus interviews and number of students pursing higher studies indicates the achievement of learning outcome. Teaching learning process is continuously monitored and immediate remedial measures are taken to overcome the problems in achievement of learning outcomes.

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

Yes, The institution and individual teachers use assessment/ evaluation outcomes as an indicator for evaluating student performance, achievement of learning objectives and planning.

Institution and individual teachers use following guidelines for learning

objectives and planning for evaluating student performance.

- Course file is prepared with learning objectives clearly mentioned in it.
- Students are questioned personally in class to take verbal feedback.
- Online/ offline test helps in deciding further necessary course of action and teachers take the corrective actions if necessary.
- Students participate in different academic activities viz. tutorial, mini-projects, seminar, oral etc. These activities help to assess proficiency of students in application of mathematical and engineering concepts, effective communication skills. Students' performance in all such activities provides the information about their overall development and is used by teachers for their further development.
- Best performers observed in teaching learning process through the assessment of learning outcomes are felicitated publicly so as to encourage them to maintain their performance and also the others to get inspired and improve their performance as well like felicitation of first year toppers, felicitation of our student Siddartha Kadam for receiving Shivchattrapati Purskar, awarded by Government of Maharashtra for excellence in Aerobics.

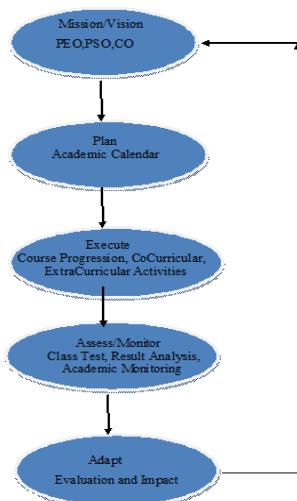


Figure 2.1 Teaching Learning Flow

Criterion III: Research, Consultancy, 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?

- Yes, the Institute has recognized research Centre in two departments, affiliated to Dr. Babasaheb Ambedkar Marathwada University, Aurangabad. The recognitions of these Centers are as follows.

Table 3.1 Affiliation Details of Research Centers

Sr. No.	Department	Affiliation Details
1	Mechanical Engineering	ACAD/AFFIL/R.C./ABL/2015-16/125-31 Dated: 11/08/2015
2	Electronics & Tele. Engineering	ACAD/AFFIL/R.C./MCM/2014-15/10183-90 Dated: 20/06/2015

- The Departments identified as Research Centers are well equipped with state-of-the art equipment to carry out research activities and are also well connected with industries/research organizations.
- Many faculty members /Students are carrying out their research in these centers and full-time/part-time Ph.D. / M. Tech.

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. The institute has a Research Committee to monitor and address the issues of research. The composition of Committee members is mentioned below.

Research Committee

1. Dr. S. P. Bhosle- Chairman
2. Dr. R. B. Naik (VP-Academics)
3. Dr. A. Chatterjee (HPPED) – Co-ordinator
4. Dr. G. S. Sable (HETCED)
5. Dr. A. J. Keche (HMED)
6. Dr. Ms. A. D. Mishra (ETCED)

7. Dr. P. M. Ambad (MED)
8. Dr. A. G. Dahake (HCED)
9. Dr. H. P. Bobade (HAED)

- Research Committee periodically takes the review of Research Scholars.
- It plays an active role in improving the quality of research and development (R&D). The board formulates and implements R&D policies and encourage faculty to pursue research that will ultimately be useful to students.

Recommendations made by the committee for implementation.

- Faculty and student development with respect to training need and arranging the same.
- To promote, Industry Institute Linkages, Collaborative Research, Entrepreneurship and incubation centers.
- Motivating faculty to develop project and write projects reports.
- To monitor the effective utilization of funds of externally funded projects.
- Facilitate the consultancy work in the institution.
- Shall maintain and update the records of Research Publications.
- For promoting research culture, sponsoring the faculty for attending conferences /seminar/workshops as per institute norms.
- To formulate policy for consultancy projects.

Impact of Research Committee Recommendations

- The publications by the faculty in national/international journals and conferences are improved.
- National and International Seminars/conferences/workshops/trainings related to research are conducted on regular basis.
- Every department has MoUs with industries and research organizations.
- Laboratories are modernized with latest equipment, experimental set-ups and software to promote research activity in the campus.
- Industry based research projects are undertaken.

3.1.3 What are the measures taken by the institution to facilitate smooth progress and implementation of research schemes/ projects? (Evidential Documents in Criterion 2.4.3)

- The faculty members are given the freedom to carry out their projects independently along with their team, to devote time for research. The team comprises UG and PG

students, research scholars and faculty members.

- Institute has provided research laboratories/Centers of Excellence equipped with latest technologies. The facilities are open beyond normal working hours.
- Permission to attend conferences and workshops are always encouraged, office duty leave and other facilities are also sanctioned.
- The Institute has subscribed to major online journals like IEEE, Science Direct, etc.
- Institute is keenly looking through the submission of the Research Projects to various government organizations (DST /DRDO) and accordingly several proposals are in pipeline.
- Institute is continuously encouraging and also permitting many faculty members for Ph.D.
- Institute invites eminent industry persons, scientists and reputed researchers to share their experiences which enhance the research awareness in the campus.
- Institute encourages faculty to visit different industries in the vicinity and study the problems so that those could be taken up as projects at different levels, i.e. UG, PG and Ph.D.

Following faculty members enjoyed the privilege of pursuing higher education like Ph.D.in last five years because of this initiative.

Table 3.2 List of Faculty Members Permitted for Ph.D. Course

Sr. No.	Name of the Faculty Member	Post	Year of Permission
1.	Mr. S. B. Charthankar	Asst. Professor	2016-17
2.	Mr. P. S. Kulkarni	Asst. Professor	2016-17
3.	Ms. S. Mandal	Asso. Professor	2015-16
4.	Ms. K. V. Bhosle	Asso. Professor	2015-16
5.	Mr. R. B. Mapari	Asst. Professor	2015-16
6.	Mr. V. G. Jadhao	Asst. Professor	2015-16
7.	Ms. A. H. Mulay	Asst. Professor	2015-16
8.	Mr. M. N. Farooqui	Asst. Professor	2014-15
9.	Mr. A. S. Gore	Asst. Professor	2014-15
10.	Mrs. S. J. Nandedkar	Asst. Professor	2014-15
11.	Ms. A. A. Somani	Asst. Professor	2014-15
12.	Ms. M. D. Pawar	Asst. Professor	2014-15

13.	Mr. V. R. Gosavi	Asst. Professor	2014-15
14.	Mr. U. D. Shirale	Asst. Professor	2014-15
15.	Mr. B. S. Sonawane	Asst. Professor	2014-15
16.	Mr. D. T. Bornare	Asst. Professor	2014-15
17.	Mr. P. T. Borlepwar	Asst. Professor	2013-14
18.	Mr. S. V. Bhivsane	Asst. Professor	2013-14
19.	Mr. J. M. Kshirsagar	Asso. Professor	2012-13
20.	Mr. S.V. Lomte	Asso. Professor	2011-12
21.	Mr. A. J. Keche	Asso. Professor	2011-12

Various research Projects are undergoing at Research Centre in Electronics and Telecommunication Engineering and Mechanical Engineering. Some of them are mentioned below.

Table 3.3 List of Research Projects in Research Centers

Sr. No.	Name of the Research Scholar	Name of the Research Project
1.	Mr. S. W. Bhise	Discrete wavelet transform based image watermarking for cryptographic and steganographic
2.	Mr. P. S. Kolhe	Recognition and information retrieval from document image
3.	Ms. M. D. Pawar	Performance analysis using multimodal recognition techniques
4.	Mr. M. G. Nakrani	Fuzzy image enhancement for computer tomography images
5.	Mrs. S. J. Nandedkar	Antenna array for massive MIMO systems
6.	Mr. A. G. Gaikwad	Wireless sensing based on UHF RFID passive tag
7.	Mr. T. D. Shep	Analyzing effect of electromagnetic waves on ECG
8.	Mr. Daniel Figueiredo	Design and development of grid tied transformer-less solar photovoltaic based PWM inverter
9.	Mr. B. N. Bansode	Detection of disease of eyes by using soft computing techniques.

10.	Mr. S. P. Dabhade	Energy reduction in optical networks using software defined optical interfaces.
11.	Mr. S. V. Lomte	Some Investigation into residual stresses and dimensional stability of cryogenically treated tool steel.
12.	Mr. S. S. Patil	Investigations into friction stir welding of heat treatable aluminium alloys.
13.	Mr. D. S. Khedekar	Investigation in to the response of age hardenable aluminium alloys to cryogenic treatment.
14.	Mr. Prashant Jain	Diagnosis of faults in antifriction bearings using vibration signal analysis and finite element analysis.
15.	Mr. Sanjay Surwase	An investigation into the effects of residual stresses and distortion on the performance mechanical behaviors of welded joints.
16.	Mr. Ravindra Karwande	Six sigma approaches to improve operational performance in manufacturing industries.
17.	Mr. Pankaj Shitole	Material removal analysis of works-piece in ECM process using CAE system.
18.	Mr. Nilesh Ahirrao	Dynamic optimization with vibration measurement and analysis in high speed cam follower systems and vehicles.
19.	Mr. Mahaveer Shetti	Study of various approaches to enhance productivity and quality of work life.
20.	Mr. Jeevan Salunke	A study of implementation of JIT manufacturing system in automotive industry.
21.	Mr. Sachin Agrawal	Investigating the potential of non-edible vegetable oil in industry application.
22.	Mr. Ritesh S. Fegade	Analysis of Pull-in of Aluminium in continuous casting mould design.
23.	Mr. Siddiqui Mohd. TareqZiaulmustahsan	Cycle time reduction in Vapor Phase Drying of Transformer Coils.

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

- The institute organizes annual national level mega technical event like **Techkshetra**, **TechnoMIT**, **SCI-Clone** for the students to conceptualize, design, implement and present novel ideas. The event includes technical poster presentation, paper presentation, project exhibition, coding competition, quizzes, technical games, aptitude test and robotics competition to develop scientific temper and research culture in students.
- Students are encouraged to attend conferences, workshops/seminars and other technical events to interact with external world and enrich their scientific knowledge. Students are also encouraged for visiting national and international exhibitions, industries. Students had participated in different research and technical events and won the competitions.
- MIT-MASSIA and GIZ assigned an industrial project to the engineering students in summer 2016 to solve the industrial problems. Students from Department of Mechanical Engineering participated in the "Summer Project Competition" and won the first three prizes. Special cash prize was also awarded to students by the companies due to their sincere and dedicated work.
- Interactions with eminent scientists, from various institutes inculcate a strong desire in the student to pursue research which leads to a better teaching learning process. Scientists from IITs, NITs and other foreign universities do visit the campus for interacting with students.
- Many experienced industry/Academic (Govt. Institute) people are appointed in the institute as Adjunct Professors to inculcate research culture among students in various departments.
- In-plant training of UG students is undertaken in collaboration with several research institutes like DRDO, ISRO, BASF, IIT Bombay, IIT Delhi and industries like Siemens, TATA technologies, L&T, etc.
- All departments organize student conferences/FDP and several workshops round the year in order to promote interaction among academia, R & D institutes and industries.
- In view of providing an opportunity for expression of academic talent project competitions like AVISHKAR (project competition held by Dr. Babasaheb

Ambedkar Marathwada University, Aurangabad to inculcate scientific temper among students) are organized by Institute. Students from UG, PG, Post-PG category along with teachers present their research work thorough Poster and oral presentation in such competitions.

- The institute has organized visits to many research institutes and reputed industries and technical exhibitions like "**IMTEX**" every year so as to meet the thirst of the budding engineers and to give them food for thought.
- Electronics and Telecommunication department had organized a workshop "**MITRA**": A Robotics Academy for grooming the scientific temper of High school Students.
- Institute has Students' chapters of **IIIE**, **SAE** and **ISTE** Institute membership of professional bodies like ISTE, QCFI through which various technical programs such as expert lectures of renowned scientists, workshops and technical fest are organized.
- Students of Mechanical MIT participates in renowned automobile designing and manufacturing competition namely, SAE- BAJA and SAE- SUPRA at national level under the guidance of Mr. S. R. Kulkarni since 2009 and received national champion award and many other awards in it. Mr. S. R. Kulkarni had also received the prestigious "**DRONACHARYA AWARD**"- 2016 for his restless and dedicated efforts. Industries have provided sponsorships to such events. As well as institute also provide financial support to students in order to promote such activities amongst students.

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 are actively involved in Research to improve the research culture in the institution. Faculty guides the UG and PG students for seminars, projects and technical papers. Faculty and students are involved in industry sponsored projects. Faculty regularly presents research papers in conferences and journals.

- The Institute has 6 recognized Ph.D. research guides and 35 P.G. approved teachers guiding the Ph. D. and PG students.
- Following faculty members are registered *Ph. D. research guides*

- Dr. S. P. Bhosle
- Dr. R. B. Naik
- Dr. G. S. Sable
- Dr. A. Chatterjee
- Dr. A. D. Mishra
- Dr. S. R. Patil

Table 3.4 List of Ph. D. Scholars with their Guides

Sr. No.	Name of Ph.D. Scholar	Name of Guide
1.	Mr. Prashant Jain	Dr. S. P. Bhosle
2.	Mr. Sanjay Surwase	Dr. S. P. Bhosle
3.	Mr. Ravindra Karwande	Dr. S. P. Bhosle
4.	Mr. Pankaj Shitole	Dr. S. P. Bhosle
5.	Mr. Nilesh Ahirrao	Dr. S. P. Bhosle
6.	Mr. Mahaveer Shetti	Dr. S. P. Bhosle
7.	Mr. Sunil Bhise	Dr. G. S. Sable
8.	Mr. Mahender Nakrani	Dr. G. S. Sable
9.	Mr. Sarika Patil	Dr. R. B. Naik

Table 3.5 List of University Approved P.G. Teachers

Sr. No.	Name of Guide	Designation
Mechanical Engineering		
1	Dr. S. P. Bhosle	Professor
2	Dr. A. J. Keche	Associate Professor
3	Mr. V. M. Chidri	Associate Professor
4	Dr. P. M. Ambad	Associate Professor
5	Mr. S. V. Lomte	Associate Professor
6	Mr. J. M. Kshirsagar	Associate Professor
7	Mr. P. S. Kulkarni	Assistant Professor
8	Mr. A. S. Kousal	Assistant Professor
9	Mr. S. V. Bhivsane	Assistant Professor
Civil Engineering		

10	Dr. A. G. Dahake	Associate Professor
11	Dr. J.H. Godihal	Professor
12	Ms. R. Srinivasan	Assistant Professor
13	Mr. S.R. Kendre	Assistant Professor
14	Mr. P.R. Awasarmal	Assistant Professor
Electronics and Telecommunications Engineering		
15	Dr. G.S. Sable	Professor
16	Dr. A. D. Mishra	Associate Professor
17	Prof. R. K. Kanhe	Associate Professor
18	Prof. S. P. Kodgire	Associate Professor
19	Dr. S. R. Patil	Associate Professor
20	Ms. A. A. Somani	Assistant Professor
21	Mr. V.R. Gosavi	Assistant Professor
22	Ms. S.B. Wagh	Assistant Professor
23	Ms. S. J. Nandedkar	Assistant Professor
24	Ms. M. D. Pawar	Assistant Professor
Computer Science and Engineering		
25	Prof. K. V. Bhosle	Associate Professor
26	Prof. V. Kala	Associate Professor
27	Ms. S. R. Chaudhary	Associate Professor
28	Ms. B. P. Choudhari	Assistant Professor
29	Ms. B. B. Gurav	Assistant Professor
30	Mr. R. B. Mapari	Assistant Professor
31	Ms. S. B. Bangar	Assistant Professor
32	Mr. J. S. Dhage	Assistant Professor
Agricultural Engineering		
33	Mr. V.G. Jadhao	Assistant Professor
34	Mr. D. T. Bornare	Assistant Professor
Plastic and Polymer Engineering		
35	Dr. A. Chatterjee	Assistant Professor

- Teachers guide UG and PG students' in their final year in-house projects and In-plant Training.

Following Staff members are involved in enhancement in research activities amongst the student and staff.

- Dr. P. M. Ambad has organized a District Level Research Competition “AVISHKAR 2016” in association with Dr. Babasaheb Ambedkar Marathwada University at MIT, Aurangabad.
- Dr. P. M. Ambad coordinated the GIZ-MASSIA sponsored “Summer Project Challenge Project Competition” held in summer of 2016.

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 (Current year + last four years)

Several departments of Institute organized various workshops, seminars, conferences to build and imbibe research culture among the faculty members and students.

Table 3.6 Programmes conducted by Department of Agricultural Engineering

Sr. No.	Title of the Programme	Date/s
1	Two days workshop on Statistical Data Analysis	13 th to 14 th March, 2016
2	Internal Auditor Training on Food Safety Management System	17 th to 18 th March, 2015

Table 3.7 Programmes conducted by Department of Mechanical Engineering

Sr. No.	Title of the Programme	Date/s
1.	Six days STTP on Finite Element Methods and Ansys Software	25 th , 26 th March , 1 st , 2 nd , 8 th , 9 th April, 2017
2.	District Level Research Competition “AVISHKAR 2016” in Association with Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	5 th Nov, 2016

3.	DST sponsored and ISTE approved one week national level Short Term Training Programme (STTP) on “Modelling and Simulation”	27 th June, 2016 to 2 nd July, 2016
4.	Techkshetra-2015	14 th to 16 th September 2015
5.	Two days workshop on “Characterization & Surface Engineering”	9 th to 10 th April, 2015
6.	Two days workshop on “Science Writing and Journalism”	25 th to 26 th Feb, 2015
7.	Two-day CEP Course on Research Methodology	9 th to 10 th Aug, 2013
8.	Two Day Workshop on Reliable Welds	5 th and 6 th July, 2013
9.	Two days National level workshop on Advances in Heat and Cryogenic Treatments	7 th & 8 th July, 2012
10.	One day workshop “Opportunities in DRDO”	21 st April, 2012

Table 3.8 Programmes conducted by Department of Plastic and Polymer Engineering

Sr. No.	Title of the Programme	Date/s
1.	6 Days Certificate course on Fourier Transform Infrared Spectroscopy	20 to 25 th Feb, 2017
2.	National Conference on Materials for Advanced Technology and Application	20 to 21 st Sept, 2016
3.	Five days workshop on Plastics Product Design and Modelling using CAD	1 st March to 5 th March, 2016
4.	6 Days Certificate course on Fourier Transform Infrared Spectroscopy	1 st Feb, to 6 th Feb, 2016
5.	Four Day Workshop on Analytical testing and Characterization	31 st Aug to 3 rd Sept, 2015
6.	National Symposium on Poly-Plast advance tech “Polyxplore-14”	4 th to 5 th April, 2014

Table 3.9 Programmes conducted by Department of Electrical

Sr. No.	Title of the Programme	Date/s
1	Need of Electronics in industry for Electrical & Electronics and Telecommunications Engineer	21 st Feb, 2017

Table 3.10 Programmes conducted by Department of Electronics and Telecommunications Engineering

Sr. No.	Title of the Programme	Date/s
1.	Two Days National Level Workshop on Research Methodology	13 th and 14 th March, 2015
2.	Four Days National Level Workshop on MATLAB, Simulink & Low Cost Design Using Signal & Image Processing Toolbox	16 th June, 2015 to 19 th Dec, 2015
3	1 st International Conference on Digital Signal and Image Processing (ICoDSIP2017)	7 th and 8 th March, 2017

Table 3.11 Programmes conducted by MBA Department

Sr. No.	Title of the Programme	Date/s
1.	One day Workshop on SWOT Analysis	15 th Oct, 2015
2.	One day Workshop on "Entrepreneurship & Business Planning	6 th Oct, 2014

Table 3.12 Programmes conducted by Department of Computer Science and Engineering

Sr. No.	Title of the Programme	Date/s
1.	One day workshop on “Deep dive in Big Data Analytics”	7 th March, 2017
2.	Seminar on open source by Mr. Arun Epan, Red Hat Mumbai.	7 th Feb, 2017
3.	Two days workshop on Java Technology	11 th Feb to 12 th Feb, 2016
4.	One day workshop on JSP	7 th Oct, 2015

Table 3.13 Programmes conducted by Department of Civil Engineering

Sr. No.	Title of the Programme	Date/s
1.	Two days national level event “NATURALAMI”	28 th Jan, 2016 to 30 th Jan, 2016
2.	One Day national level workshop on “Advanced Foundation Engineering”	27 th Aug, 2011

3.1.7 Provide details of prioritized research areas and the expertise available with the institution. (Current year + last four years)

All departments are strengthened with qualified and experienced faculty members. The research areas and the respective faculty expertise are shown in the following Table.

Table 3.14 Research Areas and Respective Faculty Expertise

Sr No	Department	Name of Faculty Member	Areas of Research
1	Mechanical Engineering	Dr. S. P. Bhosle	Reliability Engineering
		Dr. A. J. Keche	Renewable energy, Machine Design and Non conventional Machining Processes
		Dr. P. M. Ambad	Reliability Engineering, Warranty Management Systems, Multi-agent System
		Dr. A. T. Autee	Multi-phase Fluid Dynamics
		Dr. C. D. Kuthe	FEM, Bio- Mechanics
		Mr. J. M. Kshirsagar	Heat Transfer, Nano Fluids
		Mr. P. J. Palkar	Robotics and Automation
		Mr. V. M. Chidri	Machine Design
		Mr. S.V. Lomte	Materials
		Mr. V. G. Pandit	Manufacturing [Rolling and Forming]
		Mr. S. V. Bhivsane	Machining [Hard Turning] and

		Manufacturing
	Mr. S. B. Charthankar	Thermal Science; Fluid Dynamics and Heat Transfer
	Mr. P. S. Kulkarni	Machine Design
	Mr. A. S. Kousal	Multi-phase Flow Dynamics and Heat Transfer in process flow equipment
	Mr. T.P. Kulkarni	Manufacturing and Production
	Mr. A. G. Mapari	Manufacturing and Production
	Mr. A. S. Gore	CAD/ CAM; Finite Element Methods
	Mr. M. N. Farooqui	Mechanical Vibration
	Mr. B. D. Gurav	Manufacturing and Production
	Mr. S.R. Sayyed	Heat and Power
	Mr. S. N. Joshi	Design and Manufacturing
	Mr. P. A. Lad	Machining and Cutting Fluids
	Mr. P. S. Khandelwal	Heat Transfer
	Mr. M. B. Gavandgave	Refrigeration and Heat Transfer
	Dr. C. D. Kuthe	Bio-Mechanics
	Mr. P. Chakravarthy	Product Design
	Mr. S. L. Sathe	Machine Design
	Mr. G. B. Awankar	Manufacturing and Production
	Mr. S. S. Lahane	Industrial Process Equipment Design; Manufacturing
	Mr. Alok Chaudhary	Solid Mechanics
	Mr. P.T. Borlepwar	NCMP, NDT
	Mr. S .V. Surya	Production and Manufacturing
	Mr. R. M. Jadhav	Manufacturing and Production
	Mr. S. B. Patil	Mechatronics and Automation.
	Mr. S. D. Rakhunde	Refrigeration and Air Conditioning
	Mr. S. L. Gomte	Machine Design
	Mr. S. S. Ingale	Machine Design

		Mr. N. M. Sakhare	Thermodynamics and Heat Transfer
		Mr. I. A. Quazi	Manufacturing [Welding]
2	Electronics and Telecommunication Engineering	Dr. G. S. Sable	Signal & Image Processing
		Dr. A. D. Mishra	Antenna Designing, Signal and Image Processing
		Dr. S. R. Patil	Signal & Image Processing
		Mrs. S. P. Kodgire	VLSI & Embedded System
		Mr. R. K. Kanhe	Process Control & Biomedical Signal Processing
		Ms. S. J. Nandedkar	Communication & Antenna
		Ms. M. D. Pawar	Signal & Image Processing
		Ms. A. A. Somani	VLSI & Embedded System
		Mr. V. R. Gosavi	Electromagnetic Engineering
		Ms. S. B. Wagh	VLSI Design
		Mr. B. B. Wattamwar	Communication Engineering & VLSID
		Mr. R. L. Gaike	VLSI Design
		Ms. R. B. Palve	Communication Engineering
		Ms. A. H. Utgikar	Electronics Design & Technology
		Mr. U. D. Shirale	Electronics Design & Technology
		Mr. S. B. Biradar	Electronics Design & Technology
		Mr. S. Y. Gadkari	Electronics Design & Technology
		Ms. P. P. Patil	Electronics
		Mr. S. S. Chate	Image processing & Robotics
		Mr. A. S. Bhalerao	Signal processing
		Mr. S. R. Chavan	Embedded System
		Ms. S. R. Zambre	Signal & Image processing
		Mr. A. V. Navalagire	VLSI
		Mr. P. G. Ambhore	Signal Processing
		Mr. P. D. Bharad	Signal Processing & VLSI
		Mr. M. S. Khan	Communication Engineering

		Mr. Mohammed Laeq	Embedded Systems & AI
		Mr. Gaurav Jawale	Electronic Ceramics
		Mr. Jeya Selvan Renius	Power Electronics & Drives
3	Civil Engineering	Dr. A. G. Dahake	Structure
		Prof. B. M. Deshmukh	Quantity Survey
		Dr Jagdish Godihal	Env. Engg
		Ms. Rashmita Srinivasan	Const. Engg. Mgm
		Mr. Swapnil Kendre	WRE
		Mr. Prashant Aswormal	Structure
		Ms. Poonam Patil	Structure
		Ms. S. D. Mankar	Structure
		Mr. Umesh Vajurkar	Structure
		Mr. Akshay Joshi	Structure
		Ms. Gauri Pande	WRE
		Ms. Kausalya Londhe	WRE
		Mr. Amol Satpute	Structure
		Ms. Shruti Bansode	WRE
4	Plastic and Polymer Engineering	Mr. Bhupal Welke	Transportation
		Ms. Pooja Shah	Environment
		Mr. Rahul Agrawal	WRE
		Mr. Saad Lodhi	Structure
		Dr. A. D. Ashtaputre	Liquid Crystal
		Ms. S. Mandal	Superabsorbent Polymers
		Dr. A. Chatterjee	Nanomaterials and Composites
		Ms. A. H. Mulay	Reaction Kinetics and Design
		Ms. A. S. Dutta	Novel Inorganic Materials
		Ms. J. S. Suryawanshi	Membrane Technology

			Nanocomposites
		Mr. A. Dey	Nano Hydrogels
		Mr. Y. G. Thakare	High Solid Resins
		Mr. A. V. Patil	Particulate Filled Polymer Composites
5	Agricultural Engineering	Mr. V. G. Jadhao	Hydrological modelling, Remote Sensing, GIS
		Mr. D. T. Bornare	Natural Resources Management and Environment & Agriculture
		Dr. W. A. Khan	Food Processing
		Mr. D. M. Rathod	Agricultural Process and Food Engineering
		Mr. V. R. Wankhade	Dehydration of fruits and vegetables and their mathematical modeling, process optimization using response surface methodology software.
		Mr. M. P. Ingle	Product development, HACCP, Quality control.
		Mr. M. G. Bhosale	Product development, plant setup
		Dr. H. P. Bobade	Processing of whole grain cereals and functional foods
		Dr. V. S. Patil	Post-Harvest Process and Food Engineering
		Dr. K. P. Babar	Food Safety, Food Rheology
6	Computer Science and Engineering	Dr. V. B. Shinde	Renewable Energy and Bio Energy
		Ms. S. B. Dabhadse	Economic design of sprinkler irrigation laterals
		Mr. S. R. Patil	Development of Farm Machinery & Food Processing Equipment
		Dr. R.B. Naik	Real Time System, Internet of Things
		Prof. K. V. Bhosle	Remote Sensing, Data Mining

		Prof. V. Kala	Cloud Computing, Software Engineering
		Ms. S. R. Choudhary	Data Mining
		Ms. S. S. Vishnu	Networking, Linux
		Mr. B. S. Sonawane	Open Source Technologies
		Mrs. B. B. Gurav	Image processing
		Mrs. B. P. Chaudhari	Image processing
		Mrs S. A. Deshmukh	Software Engineering, DBMS
		Mrs. S. B. Bangar	Image processing
		Mr. J. S. Dhage	Image Processing, Network Security
		Mr. R. B. Mapari	Image Processing, Network Security
		Ms. S. S. Patil	Networking, Network Security
		Mr. S. S. Kankal	Networking, Network Security
		Ms. D. Deshmukh	Cloud Computing, Big Data
		Ms. Asra Anjum	Data Mining
		Mr. K. R. Khandarkar	Image Processing , Network Security
		Mr. P. E. Khosare	Cloud Computing, Network Security
		Mr. Nihit Agrawal	Algorithms, Data Mining
		Ms. Preeti Mishra	Software Engineering, Algorithms
7	Electrical Engineering	Mr. Kishan Mahamuni	Harmonic analysis of Arc furnace
		Mr. Rajendra Naik	Industrial automation of Power Systems
		Mr. Anupam Roy	Grid Interconnection of Renewable Energy Sources with power quality improvement features
		Mr. Pavan Padghan	Optimization of Wind/Fuel cell hybrid energy system for off-grid power generations
		Mr. Amol Chopde	Power Quality analysis in

		distribution system
Mr. M. N. Saravana Kumar	Analyzing key parameters of a railgun	
Mr. Vikash Rajak	AI application in Power Systems	
Mr. Dhanesh Radhakrishnan	Maximum power tracking of solar energy using power electronics devices	
Mr. (Ms.) Gouthami Trivedula	Power Electronics application in Power Systems	
Mr. B. Rajaguru	Design of ZCS and ZVS	

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

- Departments from institute are conducting various National workshop/seminar/Expert talks and conferences round the year and researchers/ Experts from various fields visit the campus and interact with teachers and students through these conferences.
- The Eminent researchers from foreign, scientists, industry persons are invited as key note speakers and resource persons. Some of them are attached to institute as adjunct faculties.
- Students and faculty members are encouraged to visits to industries, research organizations and interact with the eminent persons during visit. So that those can be invited to visit the campus to interact with teachers and students.
- Most of the students are working on industry related problems in order to increase the productivity and this improves the relationship with the experts from industry which in turn helps in inviting these persons on campus for interaction purpose.

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? (Current year + last four years)

Institute has not given in specific sabbatical leave to any of the faculty member. However in order to improve quality of research and imbibe research culture on campus institute provide permission to faculty for Part Time Ph.D. as well as M. Tech. under QIP and also provides study leave for the course work and full time M. Tech. course.

Table 3.15 List of Faculty Members availed Study Leave

Sr. No.	Department	Name of faculty member	No. of days of study leave	Name of institute/ Organization	Research work
1.	Agricultural Engineering	Mr. V.G. Jadhao	1 Month	IIT, Roorkee (2015-16)	Soil and Water Conservation Engineering
2.	Agricultural Engineering	Mr. V.G. Jadhao	1 Month	IIT, Roorkee (2016-17)	Soil and Water Conservation Engineering
3.	Agricultural Engineering	Mr. D. T. Bornare	6 Month	IIT, Bombay (2014-15)	Water resource Engineering
4.	Civil Engineering	Mr. S. R. Kendre	2 Years	IIT Madras (July 2012 June 2014)	Hydraulics and Water Resource Engineering
5.	Computer Science and Engineering	Dr. R.B. Naik	41 Days	Infosys Limited, Pune (16 th Dec, 12 to 25 Jan, 2013)	Develop computer based modelling representation of various existing use cases for Green house. Create a generic concept software model to enable development of system which will plug and play sensor's data, and configurable get Reports and Dashboard Analytics information, Notifications and Alerts.

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 (lab to land) (Current year + last four years)

- Electronics and Telecommunications and Mechanical Department and publishes departmental magazine namely, ‘E-Rêves’ and ‘Mechzine’ a quarterly magazine. This magazine strives for increasing the technical knowledge, enhancing the critical thinking, ability to change information into knowledge and power of analyzing the things technically of each and every individual of ever changing society through students. Beside this departmental magazine discussed social issues and events takes place in the departments.
- Civil Engineering Department is actively involved in water harvesting activities in the water scarcity villages in the vicinity of Aurangabad. At many places even the small water harvesting structures are established and people are benefited by this novel activity.
- Initiatives through various programs like expert lectures, workshops and seminars are taken up at the Institute to create awareness amongst the students.
- Institute actively participates in at all levels of exhibits namely, Technology Meet 2016, Advantage Maharashtra Expo, Aurangabad, IMTEX 2016, Defexpo India 2016 to showcase the institute research potentials available in different research domains.

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.

Table 3.16 Budgeted Expenses v/s Actual Expenses and Percentage of total budget earmarked for research

ITEMS	Budgeted Expenses in 2016-17(in lakhs of Rs.)	Actual Expense 2016-17(in lakhs of Rs.)	Budgeted Expenses in 2015-16(in lakhs of Rs.)	Actual Expense 2015-16(in lakhs of Rs.)	Budgeted Expenses in 2014-15(in lakhs of Rs.)	Actual Expense 2014-15(in lakhs of Rs.)	Budgeted Expenses in 2013-14(in lakhs of Rs.)	Actual Expense 2013-14(in lakhs of Rs.)	Budgeted Expenses in 2012-13(in lakhs of Rs.)	Actual Expense 2012-13(in lakhs of Rs.)
Administrative / Office Exps	174.33	53.60	109.95	100.91	164.78	157.68	139.30	156.63	61.76	29.70
Manpower Expenses	1456.91	818.62	1023.65	828.55	1140.79	682.46	927.41	649.93	679.24	562.44
Research & Development	150.99	0.56	228.10	4.63	92.85	0.00	22.51	0.00	0.00	0.00
Laboratory Exps (Consumables & Semi-Consumables)	15.85	11.47	0.20	5.33	3.35	1.75	2.20	1.63	10.00	1.44
Repairs & Maintenance	10.68	40.23	30.50	89.59	27.51	25.59	16.83	27.51	14.50	12.30
Rent To GSM	277.00	252.04	300.00	252.04	302.33	252.04	351.08	274.84	180.00	109.54
Travelling & Conveyance (Petrol & Diesel)	19.50	9.57	3.00	17.68	0.50	2.61	2.20	0.40	1.50	1.86
Training & Placement Office	144.30	0.58	136.50	0.59	2.05	3.07	1.50	0.55	2.10	0.00
Capital Expenditure	417.58	105.91	419.70	150.68	326.40	57.30	402.12	205.24	296.61	256.82
Other Establishment Expenses (Advertisement, Sports, Water charges, Co-curricular/Extra-curricular Expenses Etc.)	117.65	221.82	231.81	58.73	103.49	74.72	1.35	220.25	12066.00	439.49
Total Expenses	2784.79	1408.49	2483.41	1508.73	2164.04	1257.22	1860.52	1536.96	13311.71	1413.58
R&D Budget Percentage w.r.t. Total Budget	5.4	0.04	9.2	0.3	4.3	0.0	1.2	0.0	0.0	0.0

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, Institute encourages research culture and provides financial assistance to faculty members for various research activities like expenses towards participating in Seminar, Workshops, STTP, FDP, National and International Conferences, foreign tours for research collaborations.

Number of faculty members have availed this facility in the last four years. The total amount utilized in last four years is as given below (In lakhs of Rs.):

Table 3.17 Expenses towards Participation in Various Research Activities

2012-13	2013-14	2014-15	2015-16
2.50	8.72	12.81	8.88

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

The institute supports the student research projects in following way.

- Institute is contributing to two major industrial clusters as an equity partners with Marathwada Auto Cluster and Brownfield Electronics Manufacturing Cluster. Students can use these facilities at the minimum cost.
- However Institute provides access to Centers of Excellence, the facility created for carrying out the research project work.
- Each department has sophisticated labs with testing facilities as well as various software for research work.
- The library resources are also made available to students during extended Institute hours.
- Students are encouraged to participate in exhibitions, projects competitions, poster presentations and national/international conferences.

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

Table 3.18 Details Of Interdisciplinary Undertaken by Various Departments

Sr. No.	Department	Name of Faculty member(s)	Name of Project	Challenges faced in organizing research
1.	Mechanical Engineering	Dr. S. P. Bhosle (Mechanical Engineering faculty member and student worked in the area of Plastics and Polymer Engineering)	Study of Mechanical Properties and effect of ultra-violet exposure on coconut fiber reinforced PF composite	--
2.	Mechanical Engineering	Dr. S. P. Bhosle (Mechanical Engineering faculty member and student worked in the area of Plastics and Polymer Engineering)	Mechanical and Thermal characterization of fly filled Acrylonitrile butadiene styrene (ABS) Composites	--
3.	Mechanical and Electronics and Telecommunications	Mr. Mohd. Laeeq (Faculty member of E&TC and students of Mechanical Engineering)	Internal Thread Inspection IoT	Learning of coding.

4.	Mechanical Engineering	Mr. P. J. Palkar Mr. S.N. Joshi (Mechanical Member Engineering faculty worked in the area of Mechatronics and Automation where knowledge of Electronics Engineering is also required.)	1. Automated parking system 2. PLC based pick and place model 3. Automated solar panel cleaning project 4. PLC based water level controller 5. Automated water theft controller 6. Automated ASRS system 7. Conveyer based automated Sorting system	
5.	Computer Science and Engineering	Mrs. K. V. Bhosle (Computer Science and Engineering faculty member and Students worked in the area of Computer Engineering and Electronics Engineering)	Android Mobile App	GPS location Tracking
6.	Computer Science and Engineering	Mrs. B.B. Gurav (Computer Science and Engineering faculty member and Students worked in the area of Computer Engineering and Electronics Engineering)	Wearable Smart watch device	Learning of Raspberry pie

7.	Computer Science and Engineering	Mrs. B.P. Chaudhari (Computer Science and Engineering faculty member and Students worked in the area of Computer Engineering and Electronics Engineering)	Data Management and hoisting application	
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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 laboratory and library facilities available in the institute can be utilized by the staff and students involved in research.
- Reading room facility is available for 24 hours for the students.
- Log books are available to record the usage in different laboratories, digital library, reference library, Centers of Excellence.
- Laboratory facilities are made available to the researchers as per their needs on a flexible time schedule.
- Facilities in research laboratories, Center of excellence are also allowed to be used by research students from other institutes.
- Research equipment and facilities of other institutes of parent trust that are present in the city are also available to our institute and vice versa. Students and faculty members of all institutes can take benefit.

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.

As far as support is concerned the faculty members are encouraged to write for research grants to various funding agencies. Recently two proposals are sent by Plastic and Polymer Engineering department to DRDO, New Delhi and DST Nano mission and this culture of writing grants is now expected to take up momentum within the institute because of the starting of taking special efforts regarding this. The ongoing projects and grants received during last four years is Rs. 54.88 Lakhs to Agricultural Engineering Department from Dept. of Agriculture, Govt. of Maharashtra.

The G. H. Endress Process Automation Laboratory has been established by Endress+Hauser in association with Dr. Babasaheb Ambedkar Marathwada University, Aurangabad. The laboratory contains following equipment which are useful for students.

Table 3.19 List of Equipments in G. H. Endress Process Automation Laboratory

Sr .No.	Items	Supplementary Items
Flow Meters		
1.	Prowirl 72	Converted into demo model, mounted on board and table
2.	Promass 80	
3.	Promag W	
4.	Promag 10	
5.	Prosonic Flow W	
6.	Prosonic Flow 93	
Pressure Meters		
7.	Cerabar S	Mounted on board
8.	Cerabar M	
9.	Deltabar S	
10.	3 power adapters and one extension cord	
Level Meters		
11.	Prosonic M	Mounted on board
12.	Levelflex M	
13.	Micropilot M	
14.	3 power adapters and one extension cord	
15.	Liquiphant M	Mounted on board
16.	Soliphant M	
17.	Liquicap M	
18.	1 power adapters and one extension cord	

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.

Institute provides the necessary support to the interested faculty members to apply for research grants from different sponsoring agencies.

- Securing Research Funds from various funding Agencies:** Agricultural Engineering department has received Grant from Dept. of Agriculture, Govt. of Maharashtra.

Table 3.20. Research Funds Secured from Govt. Funding Agency

Sr. No.	Department	Nature of the Project	Duration of Year	Title of Project	Name of Funding Agency	Total Grant		Total Grant received till Date
						Sanctioned (in Lakhs of Rs.)	Received (in Lakhs of Rs.)	
1	Agricultural Engineering	Major Project	14-03-2015	National Sustainable Agriculture Programme Under Land Health Management Includes Mobile Soil Testing Laboratory	Dept. of Agriculture, Govt. Of Maharashtra	54.88	54.88	54.88

Some of the research proposals submitted by different faculty members are as follows:

Table 3.21 Research Proposal Submitted to various Govt. Funding Agency

Sr. No.	Title	Duration	Sponsoring Authority	Funds Budgeted (in Lakhs of Rs.)	Present Status
Research Projects Submitted by Dr. Aniruddha Chatterjee (Principal Investigator) and Dr. Subhendu Bhandari (Co-Investigator)					
1	Development of Hybrid Layered Double Hydroxide/Silica Filled Polymeric Insulator with Improved Flame Retardancy	3 yrs	DRDO, New Delhi	39.99	Submitted
2	Sonochemical synthesis of polyacrylonitrile based activated carbon grafted	3 yrs	DST Nano mission	48.68	Submitted

	layered double hydroxide: eco-friendly nano-adsorbents for removal of toxic pollutants from drinking and industrial wastewater				
Research Projects Submitted by Dr. Aniruddha Chatterjee (Principal Investigator), Dr. Subhendu Bhandari (Co-Investigator) and Mr. Ayan Dey (Co-Investigator)					
3	Stimuli Responsive imidazole meant for water treatment	3 yrs	Ministry of Env. And Forest, New Delhi	49.88	Submitted

3.3 Research Facilities

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

Institute has created number of research facilities to motivate, encourage and facilitate students for research. Some of the facilities available are as follows:

- High speed broadband internet connection (1 GBPS Capacity)
- Wi-Fi facility
- Library resources like digital library, national and international journals (both print and e -journals).

Table 3.22 Details of Research Facilities Available to Students and Research Scholars

Sr. No.	Name of Department	Name of Laboratory	Year of establishment	Name of research facility	Cost of Equipment / Instrument. (in Lakhs of Rs.)	Working hours of the facility
1	Plastics & Polymer Engineering	MIT-Shimadzu Analytical Testing Laboratory	January 2015	Following characterization instruments are available. UV-Visible spectrophotometer Fourier Transform infrared spectrophotometer Differential	40.80	7 to 8 hour per day

				scanning calorimeter		
				Thermogravimetric analyzer		
				Digital Weighing balance	0.32	
2	Mechanical Engineering Department	MIT-SIEMENS (Centre of Excellence for Automation and Mechatronics (COEAM))	November 2013	PCS 7 Training kit	6.96	8 – 10 hour per day or as and when required
				Cube assembly kit	41.60	
				S7 300 PLC Training kits with Pneumatic press kits	5.40	
				Step-7 Version 12 Software	64.41	
		Research Lab	2013	Lenovo Computer Systems	9.46	11 hours 30 minutes
				ANSYS V14	3.30	
				CATIA V5	3.78	
				Solid Edge CAD Software	6.75	
				SolidWorks	1.28	
				ALTAIR Hyper works	16.57	
3	Agricultural Engineering Department	Soil Testing Lab		AAS	11.74	8-10 hour per day
				GC-MS	40.00	
				Flame photometer	0.39	
				pH meter	0.20	
				Conductivity meter	0.20	
				Spectrophotometer UV	4.37	
				ICP-OES	58.87	
				HPLC	30.00	
				Automatic	4.95	

Potentiometer Titrator		
kjeloplus nitrogen estimation system.	2.51	
Distillation Unit	6.04	
Orbital Shaker Spectra lab	0.80	
Mobile Soil Lab	75.10	
7.5 KVA Microtech Inverter	1.95	
Dust Sampler	1.00	
Personal Sampler VOC	0.50	
Stack Sampler VSS 1 PLS	1.60	
Sound Level Meter SLM-109	1.00	
Micro Meteoro Monitor	1.15	
Spares & Acc. For Rainfall Sensor	0.10	
Spares & Acc. For WM-Solar Radiation Sensor	0.25	
Spares & Acc. For WM- Barometric Pressure Sensor	0.22	
Handy Sampler APM-821	0.16	
PM1 Particulate Sampler APM 577	0.99	

				CO Analyzer	4.00	
				Internal Pump CO Analyzer	1.00	
4	Electronics and Telecommunication Engg.	Research Lab		Lenovo Think CentreE73 Systems	4.23	
		Computer Laboratory		Lenovo ThinkCentre E73 Systems	4.93	
				Labview Software	5.65	
				MATLAB Software	9.93	
				DSP Starter Kit(DSK)TMS 320C6713 with Code Composer Studio	1.56	
				UltiboardV11 Batch:M75X18740		
				MultisimV11 Batch:M75X35954		
				NI ELVIS - II Board 780381 - 01		

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?

Institution has a research committee to inculcate and promote research culture. Institute has created Centers of Excellence in different areas in order to meet the emerging needs of the industry in different areas. Following Centers of Excellence are established in the institute.

- Center of Excellence for Automation and Mechatronics
- MIT-Shimadzu Analytical Testing Lab
- Center for Analytical Research and Studies (CARS)
- Center of Excellence in Open Source Technologies

A) Name of Department: Plastic & Polymer Engineering

- Name of the Lab facility: MIT-Shimadzu Analytical Testing Lab
- Name of the program conducted for faculties: Four days workshop of Analytical Testing & Characterization
- Date: 31st August 2015 to 3rd September 2015
- Number of participants: 34
- Remark: It was a self-supported program where faculties from within & outside institute participated. Also some participants were from various industries from Aurangabad as well as some research scholars also participated in the workshop. Speakers were called from Shimadzu Singapore like Ms. TakakoTokura, Ms. Chua Ei Ming, Dr. Ajit Datar and Mr. R. Girijan

B) Name of Department: Plastic & Polymer Engineering

- Name of the Lab facility: MIT-Shimadzu Analytical Testing Lab
- Name of the program conducted for students: Six day certificate course on Fourier Transform Infrared spectrophotometer
- Date: 1st February 2016 to 6th February 2016
- Number of students: 24
- Remarks: It was a self-supported program where students from the department participated and had theory as well as practical knowledge of the instrument. They had hands on experience too.

C) Name of Department: Mechanical Engineering Department

- Name of the Lab facility: Centre of Excellence for Automation and Mechatronics
- Courses conducted at COEAM
 - 1. Basic PLC - 35 students passed
 - 2. Basic SCADA - 03 students passed
 - 3. Basics of Mechatronics – no students participated
 - 4. SMSCP L1 - 05 students
- Name of the Facility: Research Laboratory
- Name of the Training Program: STTP on Modeling & Simulation

- Date: 27th June, 2016 to 2nd July, 2016
 - No. of days: 06
 - No. of participants: 31
 - Remarks: It was a national level STTP supported by DST in which participants from different parts of the country were participated and they have undergone through theory as well as hands on training.
-
- Name of the Facility: Research Laboratory
 - Name of the Training Program: STTP on Finite Element Method and Ansys Software
 - Date: 25th March, 2017 to 9th April, 2017 (On every Saturdays and Sundays)
 - No. of days: 06
 - No. of participants: 68
 - Remarks: It is a workshop arranged for students in order to upgrade their analysis knowledge and learn analysis software Ansys. Students are undergoing through theory as well as hands on training.

D) Name of Department: Electronics and Telecommunications Engineering

- Name of the Workshop: MATLAB, Simulink and Low Cost Design Using Signal and Image Processing Toolbox
- Date: 16th June, 2015 to 19th Dec, 2015
- No. of days: 04
- No. of participants: 55
- Remarks: It was a national level self-supported STTP in which participants from different parts of the country were participated and they have undergone through theory as well as hands on training.

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.

1. Mobile Van -

In Agricultural department, in 2015, Mobile Van was started to provide the facility of soil testing to the nearby farmers in Marathwada region. This van goes to various places in the region and along with testing of the soil samples; they create awareness among farmers for soil testing & its importance in increasing the yield, simultaneously with lower or required amount of fertilizers in their fields.

Total cost of this Mobile van is Rs. 75,10,150/-, out of which Government share is about Rs.54, 88,000/- and remaining amount was given by MIT.

2. G. H. Endress process Automation Laboratory has been established by Endress+Hauser in association with Dr. Babasaheb Ambedkar Marathwada University, Aurangabad. For the list of equipment please refer criterion 3.2.6.

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

- The institute encourages students and research scholars to visit special labs for research purpose by sanctioning special leaves and other facilities.
- Every Year, M.Tech and B.Tech Students are encouraged to carry out their dissertation/ research work in different industries, research organizations and research institutes of national repute like IITs, NITs, ISRO, DRDO, etc.
- In addition, students are using the facilities at following research Institutes, organizations for their research work.
 - Jawaharlal Nehru Aluminum Research Development and Design Centre
 - Indian Institute of Technology Delhi, New Delhi
 - Marathwada Auto Cluster, Aurangabad
 - Visvesvaraya National Institute of Technology, Nagpur
 - College of Engineering, Pune
 - Indo-German Tool Room, Aurangabad
 - Computer Science and Information Technology Department, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad

- National Institute of Electronics & Information Technology (NIELIT), Aurangabad
- Central Food Technological Research Institute (CFTRI), Mysore
- Bhabha Atomic Research Centre (BARC), Mumbai
- College of Food Processing Technology and Bio Energy, Anand Agricultural University, Anand
- National Environmental Engineering Research Institute, Nagpur
- ICAR- National Research Centre on Pomogranate, Solapur
- University Institute of Chemical Technology, Dr. BAMU, Aurangabad
- Department of Food Science and Technology, Mahatma PhuleKrishiVidyapeeth (MPKV), Rahuri
- National Remote Sensing Center (NRSC), Hyderabad

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

The Institute has budgetary allocations for library facilities like Journals, reference books, e-books exclusively for research. The institute has facility of digital library for all research students. Digital library is facilitated with 92 high end configured computers connected to 1 GBPS internet leased line. Following are the details of the resources available in Central Library.

Table 3.23 Library Facilities Available for Researchers/ Students

Course	Sr. No.	Branch	Title	Volumes	Journals	E-Journals	No. of CDs		
UG	1	Civil Engineering	721	2938	6	5 Packages 1) Science direct 2) ASME 3) Springer 4) ASTM digital Library	Video		
	2	Mech. Engineering	2011	7474	19				
	3	Prod. Engineering							
	4	Electronics & Tele. Engg.	1203	7971	30				
	5	Electrical Engg.							
	6	Computer Science Engg.	978	4005	9				
	7	Plastic & Polymer Engg.	651	1990	7				

	8	Agricultural Engg.		913	1374		12	5) J- Gate - Mgt & Sci. Total -9677 6) Remote access to Dr. BAMU, Central Library Course Material CDs: 70	Lectures: 29	
9	App. Science	1) Physics	51	262	400	2	-			
		2) Chemistry	64		635	2				
		3) Mathematics	147		1244	9				
	10	General Books		1009	1577					
PG	11	MBA		1419	4339		12			
	12	M. Tech. (Mech)		155	408					
	13	M. Tech. (FPT)		66	200					
	14	M. Tech. (Comp. Sci.& Tech)		44	207					
	15	M. Tech (Ele. & Tele Comm.)		42	273					
	Total			9474	35035		94	9677	99	

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

Currently there is no research facilities established in association with research institutions.

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
- (Current year + last four years)**

Table 3.24 Patents obtained and filed (process and product)

Sr. No	Department	Name of Faculty	Name of project on which patent is filed	Date of Submission	Date of publication
1.	Plastic and Polymer Engineering	Dr. A. D. Ashtaputre	Recycling of PET bottles to fill pot holes on road	07/07/2014	25/07/2014
2.	Plastic and Polymer Engineering	Dr. A. C. Chatterjee	Biosurfactant functionalized biodegradable filler and polymer composite derived therefrom	26/08/2014	12/09/2014 (Online Publication)
3.	Plastic and Polymer Engineering	Dr. A. C. Chatterjee	Biodegradable masterbatches and compositions thereof	26/08/2014	26/09/2014 (Online Publication)
4.	Plastic and Polymer Engineering	Dr. A. C. Chatterjee	A Process for Synthesis of Polymer Latex Nanoparticles by Monomer Atomization in Microemulsion	16/03/2009	11/01/2013
5.	Plastic and Polymer Engineering	Dr. Subhendu Bhandari	Synergistic Combination Of Dual Dopants For Improved Electrical Conductivity In Conducting Polymer	27/08/2013	26/08/2016
6.	Electronics and Telecommunications Engineering	Dr. A.D. Mishra	Smart travel alarm	2/08/2013	08/08/2014
7.	Electronics and Telecommunications Engineering	Mr. Shaikh Mohammed Laeeq	Method, Apparatus, System and Process of internal thread inspection by an embedded system.	21/11/2016	--
8.	Electronics and Telecommunications Engineering	Dr. Arti Rushi	Annealing induced control for fictionalization of single walled carbon nanotubes matrix and applications thereof.	04/01/2017	--

9.			Automated equipment for thin film by dip coating and successive ionic layer adsorption and reaction.	03/01/2017	--
10.			A method select porphyrins as building blokes for selective volatile organic compound	04/01/2017	--
11.	Mechanical Engineering	Dr. C. D. Kuthe	Technique to quantify recovery post-surgery / trauma / treatment.	19/05/2016	26/08/2016
12.	Mechanical Engineering	Aniket Adsule and Vishvas Chavan	Method, Apparatus, System and Process of internal thread inspection by an embedded system.	21/11/2016	--

Table 3.25 Original research contributing to product improvement

Sr. No.	Department	Name of faculty	Contribution for development	Name of organization	Comment on improvement
1	Electronics and Telecommunications Engineering	Shaikh Mohammed Laeeq	Air quality monitoring index	YPCPL Pvt. Ltd	In process

Table 3.26 Research Studies or Surveys Benefiting the Community or Improving The

Sr. No.	Department	Name of faculty	Research survey carried	Relative impact on society
1	Civil Engineering	Mr. S.R. Kendre	CRT	SWM master plan development
2	Civil Engineering	Mr. S.R. Kendre	Ground Water	Contamination and depletion of Satara village
3	Civil Engineering	Ms. Kausalya Londhe	Drinking Water	Qualitative analysis of Drinking water

* **Research inputs contributing to new initiatives and social development.**

Institute encourages projects for social development.

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?

Institute is planning to start for publication of research journal. However some of the departments publish newsletter in every semester. This gives platforms to students to publish their articles on innovative idea.

3.4.3 Give details of publications by the faculty and students:

Table 3.27 Number of papers published by faculty and students in peer reviewed journals (National / International)

Sr. No.	Faculty Name	Journal	
		National	International
	Civil Engineering Dept.		
1.	Dr. A. G. Dahake	16	9
2.	Dr. J. G. Godihal	3	0
	Mechanical Engineering Dept. (First Shift)		
3.	Dr. S. P. Bhosle	0	3
4.	Mr. V. M. Chidri	0	2
5.	Dr. A. J. Keche	1	20
6.	Dr. A. T. Autee	0	7
7.	Mr. J. M. Kshirsagar	0	5
8.	Mr. S. B. Charthankar	0	1
9.	Mr. A. S. Kousal	0	2
10.	Mr. A. S. Gore	0	1
11.	Mr. B. D. Gurav	0	1
12.	Mr. Sayyed Siraj Rafik	0	10
13.	Mr. P. J. Palkar	0	2
14.	Mr. P. A. Lad	0	2
15.	Dr. C. D. Kuthe	1	4
16.	Mr. S. L. Sathe	0	1
17.	Ms. G. B. Awankar	0	2

Mechanical Engineering Dept. (Second Shift)			
18.	Dr. P. M. Ambad	2	4
19.	Mr. S. V. Lomte	0	2
20.	Mr. P. T. Borlepwar	0	4
21.	Mr. R. M. Jadhav	0	2
22.	Mr. S. V. Surya	0	2
23.	Mr. S. S. Ingale	0	1
24.	Mr. Izharuddin A Quazi	0	1
Agricultural Engineering Dept.			
25.	Mr. V. G. Jadhao	3	10
26.	Mr. D. T. Bornare	3	4
27.	Dr. H.P. Bobade	4	3
28.	Dr. K.P. Babar	0	3
29.	Dr. V.S. Patil	3	2
30.	Dr. V.B. Shinde	0	4
31.	Mr. S.R. Patil	1	1
Plastic and Polymer Engineering Dept.			
32.	Dr. A. Chatterjee	0	20
33.	Ms. A. H. Mulay	0	1
34.	Ms. A. S. Dutta	3	2
35.	Dr. S. Bhandari	1	13
36.	Mr. M. A. Ansari	1	1
37.	Ms. P. N. Shindikar	0	2
38.	Dr. P. A. Gupta	0	1
39.	Mr. Ayan Dey	0	11
Computer and Science Engineering Dept.			
40.	Dr. R. B. Naik	0	16
41.	Prof. K.V. Bhosle	0	2
42.	Mr. B.S. Sonwane	0	2
43.	Ms. B.P. Chaudhari	0	1
44.	Ms. S.B. Bangar	0	4

45.	Mr. R.B. Mapari	0	4
46.	Mr. S.S. Kankal	0	3
47.	Ms. D.R. Deshmukh	0	1
48.	Ms. Asara Anjum	0	1
49.	Mr. K. R. Khandarkar	0	2
50.	Mr. P. E. Khosre	0	2
51.	Ms. S. R .Chaudhari	0	6
52.	Ms. Aparna Chavan	0	1

Electronics and Telecommunication Engineering Dept.

53.	Dr. G.S. Sable	0	36
54.	Dr. A.D. Mishra	0	19
55.	Dr. S.R. Patil	0	6
56.	Mrs. S.P. Kodgire	0	19
57.	Mr. R.K. Kanhe	0	4
58.	Mrs. S.J. Nandedkar	0	2
59.	Ms. M. D. Pawar	0	5
60.	Ms. A. A. Somani	0	1
61.	Mr. V. R. Gosavi	0	4
62.	Mr. B.B. Wattamwar	0	4
63.	Mr. R.L. Gaike	0	2
64.	Ms. R.B. Palwe	0	1
65.	Ms. A. H. Utgikar	0	4
66.	Mr. S. B. Biradar	0	1
67.	Ms. P. P. Patil	0	2
68.	Mr. S. S. Chate	0	1
69.	Mr. A. S. Bhalerao	0	3
70.	Mr. S. R. Chavan	0	1
71.	Mr. A.V. Navalagire	0	2
72.	Mr. P. G. Ambhore	0	3
73.	Mr. P. D. Bharad	0	1
74.	Mr. M. S. Khan	0	2
75.	Mr. Mohammed Laeeq	0	1

76.	Mr. Gaurav Jawale	0	1
77.	Mr. Jeya Selvan Renius	0	5
Department of Basic Sciences and Humanities			
78.	Mrs. R. A. Suryawanshi	0	1
79.	Dr. B. G. Toksha	0	15
80.	Dr. L. V. Uttarwar	3	5
81.	Mr. A. B. Bagul	4	2
82.	Dr. P. S. Bora	1	3
83.	Mr. S. S. Patil	0	4
84.	Mr. N. B. Gawali	2	4
85.	Dr. A. D. Rushi	0	14

Table 3.28 Details of Books Published by Faculty Members

Sr. No.	Name of Department	Name of faculty as an Author	Title and Place of conference	Year	Complete reference of book (publisher, edition, page no.)
1.	Electronics and Telecommunication Engineering	Dr. G.S. Sable	Microprocessor and computer organization	2009	Saraswati Prakashan
2.	Electronics and Telecommunication Engineering	Mr. S.S. Chate	Human Palm: Biometric Recognition and Challenges	2013	LAMBERT Academic Publishing ,Heinrich Böcking- Str. 6-8, 66121,Saarbrücken, Germany.
3.	Agricultural Engineering	Dr. V. S. Patil	Moisture Dependent Engineering Properties of Bean (Definition and Procedure)	2013	LAP Lambert Academic Publishing
4.	Computer Science and Engineering	Ms. S.S. Vishnu	Linux	2016	TechMax Publication Pages-259

5.	Computer Science and Engineering	Mr. B S Sonawane	Open Source Software Technologies	2010	Samarth Publication Pages-84
6.	Plastic and Polymer Engineering	Subhendu Bhandari	Nano structured Conducting Polyaniline: Synthesis, Characterization and	2016	Lambert Academic Publishing

Table 3.29 Details of Book Chapter Published by Faculty Members

Sr. No.	Department	Name of the faculty member as author	Title of the book chapter	Title of the book	Year	Publisher
1.	Plastic and Polymer Engineering	Aniruddha Chatterjee	Graphene Based Functional Hybrid Nanostructures: Preparation, Properties And Applications	Advanced Functional Materials: Properties and Applications	2016	Trans Tech Publications Ltd. Laubisrutistr. 24, CH-8712 Stafa-Zuerich, Switzerland. <i>Published Online</i> 18/02/2016, Vol. 842, pp 53-75
2.	Plastic and Polymer Engineering	Aniruddha Chatterjee	Green Polymer Nanocomposites: Preparation, Properties and Biomedical Applications	Green Polymer Composites Technology: Properties & Applications	2016	CRC Press and Taylor & Francis <i>Published on</i> 07/11/2016, pp-291
3.	Plastic and Polymer Engineering	Aniruddha Chatterjee	Styrene-Butadiene Rubber Based	Rubber Nanoblends: Preparation,	2016	Springer <i>Published on</i> 11/2016,

			Nanoblends (SBR-nB): Preparation, Characterization Application	Characterization and Application		<i>pp-209-248</i>
4.	Agricultural Engineering	Dr. H. P. Bobade	Functional Potential and Food Utilization of seaweeds	Functional Foods and Nutraceuticals- Sources and their Development Techniques	2014	New India Publishing Agency, New Delhi
5.	Agricultural Engineering	Mr. V. G. Jadhao	Estimation of curve number for different conservation practices at Akola	Handbook on Hydrology and Watershed Management	2005	Himanshu Publications, New Delhi, (ISBN: 81- 7906-097-7)
6.	Computer Science and Engineering	Prof. K. V. Bhosle and Prof. S. R. Chaudhary	Anomaly detection using semi supervised learning for sericulture cocoon production	Computer Vision and Information Technology, Advances and Applications	2010	IK International Publishing House Pvt. Ltd. New Delhi (ISBN: 978-93- 80026-95-4)

3.4.4 Provide details (if any) of

- * **Research awards received by the faculty**
- * **Recognition received by the faculty from reputed professional bodies and agencies, nationally and internationally**
- * **Incentives given to faculty for receiving state, national and international recognitions for research contributions.**

Provide details of research awards received by faculty

Table 3.30 Details of Research Awards Received by Faculty Members

Sr. No.	Department	Name of faculty	Prize/Award received	Organization/ Institute	Year
1.	Mechanical Engineering	Dr. S. P. Bhosle	Certificate of Merit	Institution of Engineers	2008
2.	Mechanical Engineering	Dr. A. J. Keche	Best Paper Award	NIT Warangal	2016
3.	Mechanical Engineering	Dr. A. J. Keche	First Prize at National level	Government College of Engineering, Aurangabad	2005
4.	Mechanical Engineering	Mr. V. M. Chidri	Shrestha Gurujan Award	Rotary Club, Aurangabad	1999
5.	Mechanical Engineering	Dr. P. M. Ambad	Highly Commended paper of 2013	Journal of Advances in Management Research	2013
6.	Mechanical Engineering	Dr. P. M. Ambad	Best project prize at State Level	International Society for Scientific Research and Development	2014
7.	Mechanical Engineering	Mr. S. R. Kulkarni	Dronacharya Award	SAE INDIA	2016
8.	Mechanical Engineering	Mr. S. R. Kulkarni	Dronacharya Award	SAE INDIA	2010
9.	Plastic and Polymer Engineering	Dr. A. Chatterjee	DST Young Scientist 2013-14	NMU, Jalgaon	2013-14
10.	Plastic and Polymer Engineering	Dr A Chatterjee	Excellence Award for Quality	NMU, Jalgaon	2012-13
11.	Plastic and Polymer Engineering	Dr A Chatterjee	Excellence Award for Quality	NMU, Jalgaon	2013-14

12.	Plastic and Polymer Engineering	Dr. Prashant Gupta	Award of Excellence	International Conference of Polymers on the Frontiers of Science and Technology (APA-2013)	February 21-23, 2013
13.	Plastic and Polymer Engineering	Dr. Prashant Gupta	First Prize	National Conference "RANGOTSAV	2010
14.	Plastic and Polymer Engineering	Dr. Prashant Gupta	Gold Medallist	ICT, Mumbai	2014
15.	Electronics and Telecommunications Engineering	Dr. G.S. Sable	Best Paper Award		2016
16.	Electronics and Telecommunications Engineering	Mr. R.K. Kanhe	Best Paper Award	SGGS, Nanded	2015
17.	Agricultural Engineering	Dr. H. P. Bobade	First rank (Gold Medal)	Marathwada Agricultural University, Parbhani	2009
18.	Agricultural Engineering	Dr. H. P. Bobade	Young Scientist Award	International Science Congress Association, India	2014
19.	Agricultural Engineering	Dr. V. B. Shinde	First prize	Oral presentation in 2 nd Agricultural Graduate Student Conference 2014 TNAU, Coimbatore	2014
20.	Agricultural Engineering	Dr. V. B. Shinde	Mahatma Jyotirao Phule National Teacher Awards 2017	MJP, Shikshan Parishad, Maharashtra	2017

Recognition received by the faculty from reputed professional bodies and agencies, nationally and internationally

Table 3.31 Details of Recognitions Received by Faculty Members

Sr. No	Title of Award	Name of Faculty	Name of Organization
1	Recognized by Infosys as Silver partner Faculty	Dr. R. B. Naik	Infosys Pvt. Ltd.
2	Recognized by Infosys as Silver partner Faculty	Mr. B. S. Sonawane	Infosys Pvt. Ltd.
3	Recognized by Infosys as Bronze partner Faculty	Ms. V. Kala	Infosys Pvt. Ltd.
4	Recognized by Infosys as Bronze partner Faculty	Ms. S.S. Vishnu	Infosys Pvt. Ltd.
5	Recognized by Infosys as Bronze partner Faculty	Ms. S.A. Deshmukh	Infosys Pvt. Ltd.
6	Recognized by Infosys as Bronze partner Faculty	Mr. R. B. Mapari	Infosys Pvt. Ltd.

Table 3.32 Details of Faculty Serving on Editorial Board/Reviewer for Journal

Sr. No.	Name of Faculty in Editorial Board	National/ International Journal Name
1.	Dr. S P. Bhosle	Reviewer of Journal of the Institution of Engineers (India), Part PR: Production Engineering Division
2.	Dr. R.B. Naik	Editorial Board Member: Advances in Electrical and Electronics Engg.
3.	Prof. S. Mandal	Reviewer of the one chapter of the book entitled "Biopolymers and Biomaterials"
4.	Prof. S. Mandal	Reviewer of "Journal of Green and Sustainable Chemistry"
5.	Prof. S. Mandal	Reviewer of "Macromolecular Symposia"
6.	Prof. S. Mandal	Reviewer of "Journal of Materials and Environmental Science"

7.	Dr. G.S. Sable	Editorial Board Member: International Journal of Advance Scientific Research and Engineering
8.	Dr. G.S. Sable	Editorial Board Member: International Journal of Innovative Research in Sciences ,Engineering and Technology
9.	Dr. G.S. Sable	Reviewer of International Journal of Engineering Emerging and Innovative technologies
10.	Dr. G.S. Sable	Reviewer of International Journal of Computer Science and Technology
11.	Dr. A. G. Dahake	Editorial Board Member: International Journal of Scientific Research Publication: IJSRP
12.	Dr. A. G. Dahake	Editorial Board Member: Journal of Experimental and Applied Mechanics, STM Publications
13.	Dr. A. G. Dahake	Reviewer of "Latin American Journal of Solid and Structures (LAJSS)".
14.	Dr. A. G. Dahake	Reviewer of "OMICS Group – Engineering Journals"
15.	Mr. R.K Kanhe	Editorial Board Member: International Journal of Emerging Technologies and Applications in Engineering and Technology and Sciences
16.	Mr. R.K Kanhe	Editorial Board Member: International Journal of Computer Applications in Engineering and Technology and Sciences
17.	Dr. S.R. Patil	Reviewer of International Journal for Innovative Research in Science and Technology (IJIRST)
18.	Dr. A. Chatterjee	Editorial Board Member: International Journal of Nanomaterials and Nanostructures
19.	Dr. A. Chatterjee	Editorial Board Member: International Journal of Polymer Science and Engineering
20.	Dr. A. Chatterjee	Editorial Board Member: International Journal of Composite materials and Matrices
21.	Dr. A. Chatterjee	Reviewer of "Journal of Hazardous Materials"
22.	Dr. A. Chatterjee	Reviewer of "Material Letters"
23.	Dr. A. Chatterjee	Reviewer of "Applied Surface Science"

24.	Dr. A. Chatterjee	Reviewer of “RSC Advances”
25.	Dr. Subhendu Bhandari	Reviewer of “Colloids and Surfaces A”
26.	Dr. Subhendu Bhandari	Reviewer of “Journal of Applied Polymer Science”
27.	Dr. Subhendu Bhandari	Reviewer in “International Journal of Modern Trends in Engineering and Science (IJMTES)”
28.	Dr. Subhendu Bhandari	Reviewer in “The 2007 Global Conference on Polymer and Composite Materials (PCM 2017)”
29.	Ms. A. S. Dutta	Reviewer of chapter for book entitled “Biopolymers and Biomaterials”
30.	Ms. A. S. Dutta	Reviewer of “Materials Research Innovations”
31.	Dr. K. P. Babar	Reviewer of Journal of Food science and Technology
32.	Dr. P. M. Ambad	Reviewer of International Journal of Quality and Reliability Management
33.	Dr. P. M. Ambad	Reviewer of International Journal of Production Research
34.	Dr. P. M. Ambad	Reviewer of International Journal of Systems Assurance Engineering and Management
35.	Dr. P. M. Ambad	Reviewer of Benchmarking: An International Journal
36.	Dr. P. M. Ambad	Reviewer of International Journal for performability Engineering
37.	Mr. V. G. Jadhao	Advisory board Member of International Journal of Agril. Engg.
38.	Mr. V. G. Jadhao	Editorial board Member of International Journal of Advance scientific Research and Engg. Trends

Table 3.33 Details of Faculty on the organization committee of other Institutes

Sr. No.	Name of faculty	Title of conference	Role	Place of Conference
1.	Dr. S. P. Bhosle	International Conference on Manufacturing and Industrial Engineering (ICMIE- 2017)	Member of National Advisory Committee	Jawaharlal Nehru Engineering College, Aurangabad
2.	Dr. J. H. Godihal	International Conference on Manufacturing and Industrial Engineering (ICMIE- 2017)	Member of Technical Committee	Jawaharlal Nehru Engineering College, Aurangabad
3.	Dr. P. M. Ambad	International Conference on Manufacturing and Industrial Engineering (ICMIE- 2017)	Joint Organizing Secretary	Jawaharlal Nehru Engineering College, Aurangabad
4.	Dr. P. M. Ambad	National Conference “Changing Technology and Rural Development”	Member of Advisory Committee	Rajendra Mane College of Engineering & Technology, Ambav

3.5 Consultancy

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

- The institute is having Industry Institute Partnership Cell (IIPC). It meets regularly to enhance the industry participation in the research and academics.
- Industry experts are involved in curriculum development at university level. They are also invited as resource persons and evaluators for faculty and students programs.
- Many industry persons are appointed as University Practical/Oral Examiners.
- The institute plans visits of faculty and students to industry and interaction with industry personnel.
- Faculty and students are involved in industry sponsored projects.

- Industrial Visits are organized throughout the years to enhance the institute-industry interface of students as well as faculty members.
- M. Tech. and B. Tech. students are promoted to work on industrial problem as a part of academic project.
- Faculty members and concern group of project students working at industrial site to developing solution for industrial assignments.
- Electronics & communication department arranged an Industry-Institute summit.
- Our students are actively participating in some prominent project competitions organized by the Deutsche Gesellschaft fur Internationale Zusammenarbeit (GIZ) Germany and MASSIA (Medium and small scale industries association)
- Institute is also participating in organizing several project competitions in association with the affiliating university and local chamber of commerce etc.
- Guidance and counselling pertaining to entrepreneurship and employability enhancement is done through the expert talks delivered by eminent personalities from industries.
- The institute support faculty and students to undergo trainings at industries located in the country and even abroad.
- Prominent industrialists are key members of our governing body and their valuable suggestions are incorporated in the up gradation of the institutional activities at large.
- Formulation of micro enterprises has been initiated and one of its kinds has already been operational in the form of “MIT-CARS” and one more is in pipeline called “MCIP”
- Top IT Industry like Infosys has strong rapport with the institute through the campus connect program and our institute is recognized as “Partners in success” by Infosys.

Objectives of Industry Institute Partnership Cell

- To bridge gap between institute and industry.
- To utilize expertise available through faculty and highly sophisticated laboratories to train the industry persons.
- To keep liaison with industries and their R&D department.
- Faculty exchange with industry
- To arrange expert lecturers of eminent personalities from the industry.
- To enhance inherent skill of faculty by arranging visits to industry.
- To develop employability and soft skills amongst the students with the help of Industry.
- Knowledge sharing.
- To get acquainted with practical or real life problems

- To explore the talent among industry, student and faculty.
- To get acquainted with industry requirement, process and managerial skill.
- To review research activity carried out in the institute.
- To suggest advance training program for institute.
- To suggest resource persons for expert lectures, books, magazines.
- Periodic evaluation of staff members especially to evaluate the area of research and industrial training.
- To promote consultancy services.

Constitution of Industry Institute Partnership Cell –

In-charge, Members from each department

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

- The institute has Industry Institute Partnership Cell, which also assists to innovation, incubation and entrepreneurship development activity in the Institute.
- The institute has policy of sharing its faculty expertise, laboratory, centers of excellence and information resources for the benefit of society and industries.
- The institute has a policy of sharing the income generated through consultancy among the concerned staff.

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

The institute supports the staff and students to utilize their expertise in following manner:

- The institute have mechanism to identify the expertise of the staff. As per need, the Institute deputes the staff for skill development programs.
- Staff gets benefits in their annual appraisal.
- The institute organizes the programs on product development, design and research methodology which encourage the staff for consultancy.
- The institute provides facilities like duty leave, financial assistance, to carry out the consultancy. The institute deputes the staff for industrial training where they can find the potential for consultancy.

Available facilities in institute for consultancy:

- Multiple utility sophisticated instruments and machinery.
- State-of-Art infrastructure as per international norms.
- 24×7 electric supply with UPS/generator backup (Total 125 KVA)

- 24x7 Solar electric supply (Total 100 KVA)
- 24x7, 1 Gbps internet facility (leased line).

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

Table 3.34 Details of Revenue Generated through Consultancy

Name of the Department	Academic Year	Area of Consultancy	Revenue generated (in Lakhs of Rs.)
Agricultural Engineering	2012-13	Soil and water testing	2.02
	2013-14	Soil and water testing	8.51
	2014-15	Soil and water testing	3.27
	2015-16	Soil and water testing	18.08
Plastic and Polymer Engineering	2015-16	MIT-Shimadzu Analytical Testing Lab	0.92
		Polymer Testing Lab	0.11

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?

Policy of the institution for distribution of income generated in percentage (%):

Table 3.35 Institute Policy for Sharing Income Generated Through Consultancy (in %)

Type	Institute	Principal	HOD	Faculty I/C Staff	Lab/Tech Assist.	Peon	Office staff
I	60	10	5	20	3	-	2

3.6 Institutional Social Responsibility (ISR) and Extension Activities

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

NSS is a primary center which connects the institution with society. The unit at college level is the grass-root unit in NSS. The organisation keeps contact with the community, administration, student youth and teaching faculty through this unit only. Therefore, the organisation and management of NSS unit are of vital significance.

Programmes and Activities

The aim of the Regular and special Camping Programme is to bring youth face to face with the community and make efforts to improve their life. The NSS volunteers are to devote about 80 hours in regular activities for the development of the adopted village. Special Camping has been conceived as an opportunity to live with that community for 7 days, and experience the conditions and problems of the people. The NSS volunteers need to be inspired to take initiatives for the improvement of their condition. Although the focus of the Special Camps change periodically and regular programmes are organized in response to the community needs at the micro-level,

Regular Activities: NSS volunteers works with villages, slums and voluntary agencies to complete 120 hours of regular activities during an academic year. As per the fundamental principles of National Service Scheme, a volunteer is expected to remain in constant touch with the community. Hence, it is of vital importance that a particular village/slum is selected for implementation of NSS programmes. Various activities undertaken under are

- Tree Plantation
- Blood Donation camps
- Disaster management events
- Sanitation Awareness Programme
- Health check-up camps & awareness
- Special camp and Visits
- Community organization
- AIDS awareness
- Youth Organizations
- Village adopt scheme
- Literacy programme
- National Integration
- Voter awareness and many more

Special Camp: Special Camping forms an integral part of National Service Scheme. It has special appeal to the youth as it provides unique opportunities to the students for group living, collective experience sharing and constant interaction with community. Every year 50 percent of the volunteers of each NSS unit participate in special camps which is of seven days duration.

The primary objectives of NSS Special Camping programmes are:-

- Making education more relevant to the present situation to meet the felt needs of the communities and supplement the education of college students by bringing them face to face with the community situation.
- To provide opportunities to students to play their due roles in the implementation of various development programmes by planning and executing development projects, which not only help in creating durable community assets in rural areas and slums but also result in improvement of the condition of weaker sections of the communities.
- Encouraging the students to work along with the adults in rural areas, thereby developing their character, social consciousness and commitment, discipline and healthy and helpful attitudes towards the community.
- Emphasizing the dignity of labour and self-help and the need for combining physical work with intellectual pursuits, and
- Encouraging youth to participate enthusiastically in the process of national development, and promote national integration through democratic living and cooperative action.

Following activities are undertaken as a part of special camping

- Plantation of trees, their preservation and upkeep.
- Construction & maintenance of village streets, drains, etc. so as to keep the environment clean.
- Construction of sanitary latrines etc.
- Cleaning of village ponds and wells.
- Prevention of soil erosion, and work for soil conservation.
- Watershed management and wasteland development.
- Health, Family Welfare and Nutrition Programme.
- Health education, AIDS Awareness and preliminary health care.
- Programmes of educating people and making them aware of women's rights both constitutional and legal.
- Soil-testing, soil healthcare and soil conservation.
- Programmes of continuing education of school drop outs, remedial coaching of students from weaker sections.

- Participatory cultural and recreation programmes for the community including the use of mass media for instruction and recreation, programmes of community singing, dancing etc.
- Apart from these NSS activities some faculty members and students help the community by way of various activities as follows.
- Naturalami Group led by Mr. S. R. Kendre and students of Civil Engineering Department are involved on Rainwater harvesting awareness program and actual implementation in 144 bungalows and 15 apartments on no profit no loss basis.
- Jalkranti Group led by faculty member, Mr. P. R. Awsarmal and students of Civil Engineering Department are involved in doing the work of water conservation by public contribution in various villages of Maharashtra State. Near about 10,000 hectors of land got irrigated and 22 villages are now tanker-free i.e. drinking water problem got solved. The awareness about water literacy, water management and water use societies is made in 130 villages and distance of 70,000 kms covered till date without any financial assistance from any of the Government or Private Agencies.
- Faculty and students of Computer Science and Engineering Department are involved in computer literacy for school going children in various schools of Municipal Corporation and various schools in the rural area. More than 3500 students from various schools undergone information communication technology (ICT) education.
- Mr. T.P. Kulkarni, faculty member of Mechanical Engineering Department has developed a home compost unit which converts all the household kitchen and garden waste in to compost, this unit is suitable to use in bungalow and flat system. More than 100 units have been installed in Aurangabad city till dateon no profit no loss basis.

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

The Institution is associated with different social organisations like We The People, Civic Response Team, Aai Foundation (Sahara Anathashram), BhagvanbabaBalika Ashram and many more.

In-charge of each activity keeps track of students' involvement in that social activity which promotes citizenship role.

- NSS unit conducts the Civic Action Projects with We The People, which consist of 15 hours training focused on the Preamble to the Constitution of India. It has three components:
 - **Information** on our constitutional framework, Fundamental Rights, Duties, Structure and functions of the State and citizen tools like complaints, petitions and the RTI Act.
 - **Action** on issues that the participants want to engage with and act upon (Action part is carried out by citizens post 15 Hrs. programme and WTP extends its possible support to the action)
- **Reflection** on our beliefs and attitudes
- Civic Response Team, Aurangabad (CRT) is a social enterprise working on Solid Waste Management in the city. The institution works with CRT for creating awareness regarding about segregation of waste and non-littering at public places and collection and management of solid waste and Nirmalya from public places in festival session.

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

- Feedback is collected from stakeholders on regular basis.
- Students feedback is collected in the form of course end survey and Programme exit survey.
- Parents' feedback is obtained through parents meets.
- Every department have departmental advisory board which includes industry personnel.
- Alumni feedback is collected at the time of alumni meet and through a dedicated e-portal.
- Analysis of feedback is carried out to judge the quality of the institution.

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

The event SCI-Clone is organized by first year students of Maharashtra Institute of Technology as an activity conducted by Basic Sciences and Humanities Department on the occasion of National Science Day. The event is intercity competition wherein school students, first year engineering and polytechnic students participate. This event is organized

on 27th and 28th February of every year. The event comprises of School science exhibition, MITRA robotic academy, and eight engineering event namely Replicas (Model making), Make it art (poster presentation), Camtalks (video making), photogenic (photo clicking), Hunts arena (Treasures hunt), Battle field (LAN gaming), Botrace (Robot racing), Box Cricket are organized through various departmental activities.

NSS unit receives funds from University for regular activities and special camp which is utilized for Refreshment of volunteers, Transportation, honorarium to guest speakers, stationary etc.

Funds received from University for Regular activities: Rs. 22000/-

Rs. 220 per students for 100 students every year

Funds received from University for special camp: Rs. 22500/-

Rs. 450 per students for 50 students every year

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?

Institute has university approved unit of NSS. Students who participate in regular activities and special camps are awarded with NSS certificates. Detailed information about the NSS is provided in 3.6.1.

Institute promotes participation in NSS and National Cadet Corps (NCC) through regularly scheduled talks and experience sharing by the senior volunteers and cadets along with their faculty coordinators.

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?

Survey regarding solid waste generation in CIDCO Waluj Mahanagar with CRT. In this survey 50 students from NSS and Civil engineering department participated.

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 outcomes of the activities through NSS are as follows:

- The extension activities have imparted team spirit in students to work as a member of a team or a team leader.

- The extension activities exposed the students to the rural life, culture and their day-to-day problems and possible application of technology to make village life comfortable.
- The extension activities helps in development of the overall personality of the students. These in turn are useful for becoming a good citizen.
- The extension activities help the students to understand real life problems, students acquire problem solving skills which they can apply the knowledge to solve the community problems and thus enhances academic learning experience.

The participation of students in NSS, NCC and similar activities helps in building certain moral values like discipline, sincerity, punctuality, commitment, etc. and also adds to strengthen the life skills namely confidence building, communication skills, etc. amongst the students.

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 institute involves the members of grampanchayat and villagers for the seven day NSS camp. The students, faculty and villagers share their views and work for betterment of village.
- Faculty members and the students from the Institution provide guidance and motivation to the school children regarding their career development through the guest lecture and seminars
- Faculty members from the Institution provide computers literacy skills and computer education to the school students from rural area.
- Blood donation camp organized every year with the help of DattajiBhale Blood Bank and received awards for blood donation in big number.

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.

SPIC MACAY is a non-political nationwide voluntary movement that organises programmes of classical music and dance, folk arts, crafts, yoga, classic cinema screenings, heritage walks, in college campuses throughout the world to make students more aware about Indian and world heritage. Institution has student chapter of SPIC MACAY and the institution has hosted many programmes in coordination with other institutes of the locality because of which very rich cultural performances of top artists of the country could be organized for the

students and faculty of the institute. All the institutes in the locality contribute to the total expenditure incurred for all these programs.

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 institution has received award for “Best contribution in blood donation” for last three years from DattajiBhale Blood Bank Aurangabad.
- The institute has received certificate of appreciation from Dr. BabasahebAmbedkar Marathwada University, Aurangabad for best organization of Central Youth festival of the university in which around 1000 students from rural areas participated.
- Principal of the institute, Dr. Santosh Bhosle received “Dronacharya award” from the Lions club for valuable contribution in the field of technical education which according to him is the representation of the contribution by all the teaching and non-teaching staff and students of the institute in technical education and in various social activities leading to community development.

3.7 Collaborations

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.

The Training and Placement Cell maintains a cooperative relationship with industries, Students are promoted to complete their projects in the industrial problems and complete their IPT in Industry. As per request of students, they are sent to research laboratories of different research organizations.

MoUs with research institutes/ Centres and industries have resulted in collaborative research, and sharing of research facilities.

There is great collaboration amongst the institutes under our parent trust of G. S. Mandal for sharing of facilities and equipment.

Few examples

Following M. Tech. Students have completed and are completing their dissertation work on industrial problem etc.

Ms. Sneha K. Ubale [ID: MIT15-A-03-PG-MT-20439] Final Year of M. Tech working under the guidance of Mr. S.V. Lomte in TAL Manufacturing Solutions Ltd., Tata Motors Campus, Chinchawad, Dist. Pune – 411033, in the area of fixture design.

Mr. Kedar M. Panchal [ID: MIT16-A-03-PG-MT-22304] for First Year of M.Tech. working under the guidance of Mr. A.S. Kousal in Bhagyalaxmi Rolling Mill Pvt. Ltd., MIDC, Jalna, Dist. Jalna – 431203 in the area of improving the cutting life of tool design.

Following M. Tech Students have completed their works by availing facilities in research Centre like CIPET, and VNIT, Nagpur etc.

- Mr. Milind T. Bharne, Final Year of M. Tech students has completed his work, under the guidance of Dr. S.P. Bhosle, in the area of composite material by availing facilities in CIPET | Central Institute of Plastics Engineering & Technology, Aurangabad, Bhuvneshwar.
- Mr. Manoj Kumar MandalFinal Year of M. Tech students has completed his work ,under the guidance of Dr. S.P. Bhosle, in the area of composite material by availing facilities in CIPET | Central Institute of Plastics Engineering & Technology, Aurangabad.
- Mr. Sudhir G. AuteeFinal Year of M. Tech students has completed his work, under the guidance of Dr. A.J.Keche,in the area of Fuel and Combustion by availing facilities at IIT, Bombay.
- Mr. Ritesh L. WahaneFinal Year of M. Tech students has completed his work, under the guidance of Dr. P.M.Ambad ,in the area of Frictional Stir welding by availing facilities at VNIT, Nagpur.
- Mr. Sanjay B. Dhumal Final Year of M. Tech students has completed his work, under the guidance of Mr. V. R. Gosavi, in the area of embedded systems by availing facilities at Hertz Instruments Pvt. Ltd., Aurangabad.
- Mr. GangadharShinde, Final Year of M. Tech students has completed his work, under the guidance of Mr. V. R. Gosavi, in the area of electrical by availing facilities at Hertz Instruments Pvt. Ltd., Aurangabad.
- MOU with Jawaharlal Nehru Aluminium Research development and Design Centre, Nagpur India on 12/02/2015. This center engaged in R and D activities in the areas of Bauxite, Alumina, Aluminium, electrolysis and down steam processing.

Following staff members have worked in **Sanjeev Auto Parts Manufacturers Private Limited, Waluj Aurangabad** as a part of Consultancy work.

- Mr. P.J. Palkar, Assistant Professor
- Mr. S. N. Joshi, Assistant Professor
- Mr. S.B. Patil, Assistant Professor

Students of Electronics and Telecommunication Engineering have undertaken in-plant training in following research laboratories and research institutes.

Table 3.36 Student Details Undertaken In-plant Training in Research Laboratories and Research Institute

Sr. No.	Department	Name of Institute Collaborate	Name of Research Laboratory
1.	Electronics and Telecommunication Engineering	Defense Research & Development Organization, Govt. Of India	Centre for Artificial Intelligence and Robotics
2.	Electronics and Telecommunication Engineering	Indian Space Research Organization, Govt. Of India	Indian Space Research Organization, Govt. Of India
3.	Electronics and Telecommunication Engineering	Shri Guru Gobind Singhji Institute of Engineering and Technology (SGGSIE&T), Nanded	Centre of Excellence, Signal and Image Processing Lab

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.

MoUs with research institutes/ Centers and industries have resulted in collaborative research, staff exchange and sharing of research facilities.

MOU with Jawaharlal Nehru Aluminium Research development and Design Centre, Nagpur India on 12/02/2015. This center engaged in R and D activities in the areas of Bauxit, Alumina, Aluminium, electrolysis and down steam processing.

Table 3.37 Activities Carried out Through Association with Companies/ Organization

Sr. No.	Department	Name of company or organization	Activities carried out through this association.
1.	Computer Science and Engineering	Infosys Pvt. Ltd.	ICCP
2.	Computer Science and Engineering	Red Hat Pvt. Ltd	Certification Program
3.	Computer Science and Engineering	Cloudera Pvt. Ltd	Training and Certification Program
4.	Plastics and Polymer Engineering	Shimadzu	Research Laboratory Setup
5.	Electronics and Telecommunication Engineering	Indo German Tool Room, Aurangabad	Short Term Training Program: 1. PLC Programming 2. SCADA 3. VLSI 4. Embedded System 5. Integrated course in PLC, SCADA and Pneumatics 6. Integrated course in PLC, Embedded System and VLSI
6.	Electronics and Telecommunication Engineering	Maven Technologies Pvt. Ltd., Aurangabad	Maharashtra Institute of Technology, Aurangabad in association with Maven Technologies Pvt. Ltd., Aurangabad worked on a Project “Design and Development of Real Time Adaptive Traffic Signalling and Analysis using Image Processing”.
7.	Electronics and Telecommunication Engineering	Gill Instruments Pvt. Ltd., Bangalore	MSP430 Teaching Lab Setup in the area of Embedded System at Maharashtra Institute of Technology, Aurangabad

8.	Electronics and Telecommunication Engineering	CPLAP Treadlinks Pvt. Ltd., Nagpur	CPLAP Treadlinks Pvt. Ltd. will assist the college in organizing training programs for the students.
9.	Electronics and Telecommunication Engineering	Shri Guru Gobind Singhji Institute of Engineering and Technology (SGGSIE&T), Nanded	Availing the facilities of Centre of Excellence in Signal & Image Processing.

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.

Mechatronics and Automation laboratory has been established by the financial of support of **Siemens-Technik Academy, Germany in 2013** which not only improve infrastructure facilities of the institution but helps to improve teaching learning process.

. This lab is beneficial in following ways:

- To offer technical skill and Industry oriented training programs to the Students in Industrial Automation.
- To support Micro, Medium scale Industries in the region.
- To Provide Training to Industrial professionals.
- To promote skilled manpower to Industry.

Table 3.38 Details of industry- Institute Community interaction and activities undertaken

Sr. No.	Name of the industry- institution- community	Activities conducted	Contributed to		
			Establishment of facilities Infrastructure facilities	Students and staff support	Infrastructure facilities
1	Big data	Training on Hadoop and Big data	A lab is set up in the department to conduct training	All related staff and students participated	Hands on practice in the software

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.

Table 3.39 Eminent Scientist/ Participant Contributed to the Events

Sr. No	National /International conferences	Name of eminent scientists/participants	Description of Contribution to Event	Date/ Duration
1.	1st International Conference on Digital Signal & Image Processing (ICoSIP-2017)	Dr. Aditya Abhyankar Professor and Head, Department of Technology SPP University Pune – 41100	Key note Speaker	7 th and 8 th March, 2017
2.		Dr. Sumantra Dutta Roy Associate Professor, IIT Delhi, New Delhi	Key note Speaker	
3.		Prof. Luigi Troiano Professor, University of Sannio, Benevento, Italy	Chief Guest and Key note Speaker	
4.		Dr. R. K. Shevgaonkar Professor, Department of Electrical Engineering, IIT Bombay and Ex-Vice Chancellor, Pune University and Ex-Director, IIT Delhi	Key note Speaker	
5.		Dr. B. A. Chopde Vice Chancellor, Dr.BabasahebAmbedkar Marathwada University, Aurangabad	Chief Guest	
6.		Dr. A. A. Desai Professor, Department of Computer	Key note Speaker	

		Science and Engineering, VNSU University		
7.	National Conference on Materials for Advanced	Dr. Kasilingam, Rajkumar Director, IRMRA, Mumbai	Key note Speaker	20 th and 21 st September, 2016
8.	Technology and Application	Prof. Bhuvanesh Gupta, IIT Delhi	Key note Speaker	
9.		Prof. Rajeev Mehta Thapar University, Patiala, Punjab	Key note Speaker	
10.		Prof. D. R. Peshwe, Professor and Head, Department of Metallurgy and Materials, VNIT, Nagpur	Key note Speaker	
11.		Dr. S. V. Bhosale, CSIR-IICT, Hyderabad	Key note Speaker	
12.		Dr. D. M. Badgjar, HEMRLS, Pune	Key note Speaker	
13.		Dr. Ajit Datar, Shimadzu Analytical (India) Pvt. Ltd, Mumbai	Key note Speaker	
14.		Dr. Rajesh Bhosale, CSIR-IICT, Hyderabad	Key note Speaker	
15.		Dr. Anoop Anand, DRDO, Pune	Key note Speaker	
16.		Dr. Bhaskar B. Idage, NCL, Pune	Key note Speaker	
17.	National Symposium on Poly- Plast advance tech “Polyxplore-14”	Dr. S. Radhakrishnan, NCL, Pune	Key note Speaker	4 th and 5 th April, 2014
18.		Prof. N. C. Saha, IIP, Mumbai	Key note Speaker	

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.

- a) Curriculum development/enrichment
- b) Internship/ On-the-job training
- c) Summer placement
- d) Faculty exchange and professional development
- e) Research
- f) Consultancy
- g) Extension
- h) Publication
- i) Student Placement
- j) Twinning programmes
- k) Introduction of new courses
- l) Student exchange
- m) Any other

Table 3.40 List of Activities & Beneficiaries through MOU and Agreement

Sr. No.	Department	Name of MOU and Agreement	Activities	Beneficiaries
1.	Agricultural Engineering	ELICO Ltd. Hyderabad	Research	Students and Faculty members can use the research facilities available at the organization.
2.	Agricultural Engineering	ICAR- National Research Centre on Pomegranate	Research	Students and Faculty members can use the research facilities available at the organization.
3.	Electrical Engineering	MAHATRANSO(Maharashtra State Electricity Transmission Company Limited, Aurangabad)	Projects	Students will carry out the assigned projects.
4.	Electrical Engineering	MAHATRANSO(Maharashtra State Electricity	Projects	Students will carry out the assigned projects.

		Transmission Company Limited, Padghe-Mumbai		
5.	Computer Science and Engineering	REDHAT	Internship/ On-the-job training	Students are permitted for In-plant training and also training is provided in campus. One student, Mr. Chaitanya Mundhe of B. Tech. CSE visited Macau, through REDHAT Technology Exchange Programme with the sponsorship from our institute.
6.	Computer Science and Engineering	INFOSYS	Internship/ On-the-job training	Students are permitted for In-plant training and also training is provided in campus.
7.	Computer Science and Engineering	Cloudera	Curriculum development/enrichment	Students and Faculty from the Department
8.	Plastic and Polymer Engineering	All India Plastics Mfg. Association(AIP MA), MUMBAI	Placement	Students get an opportunity for employment.
9.	Plastic and Polymer Engineering	SHIMADZU ASIA PACIFIC PTE. LTD.	Curriculum enrichment/research	Students are permitted for In-plant training and also training is provided in campus. Students get exposure to the use of high end equipment through the practicals performed.

10.	Electronics and Telecommunication Engineering	Indo German Tool Room, Aurangabad	Internship/ On-job training Students permitted to do In-plant Training.	Students permitted for In-plant Training.
11.			Introduction of new courses	<p>MIT, Aurangabad and Indo German Tool Room, Aurangabad collaborated through training programme.</p> <p>The primary objective of the training programme is to upgrade the skills & Knowledge of the engineering students during their studies in the area of Embedded System, VLSI, PLC, SCADA, Pneumatics & Hydraulics areas.</p> <p>This programme will be executed impartially imparting quality education & conducting necessary examinations.</p> <p>Successful trainees will be awarded certificates.</p>
12.	Electronics and Telecommunication Engineering	Maven Technologies Pvt. Ltd., Aurangabad	Any other	<p>MIT, Aurangabad and Maven Technologies Pvt. Ltd., Aurangabad collaborated for,</p> <ul style="list-style-type: none"> a. Sponsoring student projects. b. Sponsoring eligible employees of Maven Technologies Pvt. Ltd., Aurangabad for doing M. Tech.

				c. Sponsoring R&D projects, which may be carried out wholly at MIT, Aurangabad or at premises of Maven Technologies Pvt. Ltd., Aurangabad or partly at MIT, Aurangabad and partly at Maven Technologies Pvt. Ltd., Aurangabad d. Training of Maven Technologies Pvt. Ltd., Aurangabad personnel through Continuing Education Programmes conducted by MIT, Aurangabad in areas of interest to Maven Technologies Pvt. Ltd., Aurangabad. Any other appropriate mode of interaction agreed upon between MIT, Aurangabad and Maven Technologies Pvt. Ltd., Aurangabad.
13.	Electronics and Telecommunication Engineering	Gill Instruments Pvt. Ltd., Bangalore	Any other	MIT, Aurangabad and Gill Instruments Pvt. Ltd., Bangalore collaborated with the purpose that, Gill Instruments will assist the Institute in organizing training programs on topics related to MSP430 for students.
14.	Electronics and Telecommunic	CPLAP Treadlinks Pvt. Ltd.	Any other	MIT, Aurangabad and CPLAP Treadlinks Pvt. Ltd., Nagpur collaborated such that, CPLAP

	ation Engineering			Treadlinks Pvt. Ltd. will assist the Institute in organizing training programs.
15.	Electronics and Telecommunic	Shri Guru Gobind Singhji Institute of Engineering and Technology (SGGSIE&T), Nanded	Faculty exchange and professional development	Faculty Exchange Program
16.	ation Engineering	Research	Availing the facility of Centre of Excellence (Signal and Image Processing)	
17.	Mechanical Engineering	Jawaharlal Nehru Aluminium Research development and Design Centre, Nagpur	Research	Availing the testing facilities at the center.

3.7.6 Detail on the systemic efforts of the institution in planning, establishing and implementing the initiatives of the linkages/collaborations.

- The institute encourages the students and faculty to undertake industry sponsored projects. The institute offers the labs, library and other facilities for development of linkages.
- Considering programs offered, faculty expertise and infrastructure available, Institute plans and develops the linkages and collaborations with industry and research organizations.
- It develops the liaison with the related industries and organizations through newsletters, visits, inviting the concerned persons for visits, arranging faculty visits.
- The Institute Industry Partnership Cell also gives advice for enhancing the collaboration/linkages.
- Eminent persons from reputed industries are invited to be on the Governing Body of the institutes, for example,
 - Mr. Anil Makhloga- CEO, Greaves Cotton Ltd., Aurangabad
 - Mr. Nandkishor Kagliwal- MD, Nath Group, Aurangabad

- Mr. Prasad Kokil, Owner, Sanjay Technoplast Pvt. Ltd., Aurangabad
- Industry persons are also invited to be members of departmental advisory board of every department in the institute and they also contribute to curriculum development by way of their suggestions.
- Institute is always keen to have MoUs with industries and other research organizations for establishing linkages and having collaborations.
- Institute also works in association with local chamber of commerce such as Chamber of Marathwada Industries and Agriculture, Marathwada Association of Small Scale Industries and Agriculture, Confederation of Indian Industries Aurangabad Chapter.

Criterion 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 institution believes that a healthy teaching-learning environment is one of its biggest assets. A well-equipped library and classrooms with modern teaching aids such as LCD projectors stand in testimony of this. Further every department is equipped with a separate well-furnished seminar hall. Our library has well demarcated space for book bank, reading section, reference section, and study section, offices for librarian and assistant librarian and e-learning facilities. The institution has class rooms with ultra-modern learning resources and common rooms for boys and girls students separately. Amenities and facilities such as ramp & lift facility, CCTV surveillance at all strategic locations, generator back-up, RO water purifier, canteen and mess, SBI bank with ATM facility, ICICI ATM are available.

4.1.2 Detail the facilities available for

- 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.

a) Curricular and co-curricular activities

- Instructional Area (Carpet Area) in m²- 11757.78

Details are given as below.

- i. e. Existing Programmes (UG+PG):

Table 4.1: Details of Instructional Area

Particulars	For Existing intake			
	Nos. as per AICTE		Area in sq. m.	
	Required	Available	Required	Available
Class Rooms	29	29	1914	1998.80
Tutorial Rooms	14	19	462	627
Laboratories	68	76	4488	6915.12
Drawing Hall	1	2	132	200
Workshop	1	1	200	200
Seminar Hall	4	7	528	1016.86
Computer Center	1	1	150	200
Library and Reading Room	1	1	400	600
Total	119	136	8274	11757.78

- Administrative Area (Carpet Area) in m²=614

Table 4.2: Details of Administrative Area

Particulars	For Existing intake			
	Nos. as per AICTE		Area in sq. m	
	Required	Available	Required	Available
Principal / Director office	1	1	30	73
Central Store	1	1	30	30
Maintenance	1	1	10	10
Security	1	1	10	10
Housekeeping	1	1	10	10
Exam Control Office	1	1	30	57
Training and Placement office	1	1	50	102
Office All inclusive	1	1	300	322
Total	8	8	470	614

- Amenities Area (Carpet Area) in m²- 1006.11

Table 4.3: Details of Amenities Area

Particulars	For Existing intake as per AICTE			
	Nos.		Area in sq. m	
	Required	Available	Required	Available
Toilets (Ladies & Gents)	Adequate	13	350	499.11
Boys common Room	Adequate	1	100	132
Girls Common Room	Adequate	1	100	105
Cafeteria	Adequate	1	150	250
Stationery Stores and Reprography	Adequate	1	10	10
First Aid Cum Sick Room	Adequate	1	10	10
Total			720	1006.11

- Other Facilities

Sr. No.	Parameter
1	Language laboratory
2	All Weather Approach Road
3	Pure water Supply
4	Electrical Generator
5	Digital Library
6	Parking Facilities
7	Medical Facilities
8	Insurance facilities
9	Reprographic facilities in the Institutions
10	Sewage Disposal
11	Telephone and Fax
12	General Notice Board and Departmental Notice Board
13	Medical and Counseling Facilities
14	First Aid Facility

15	Institution web Site
16	Internet Leased Line (1 GBPS bandwidth)
17	Wi-Fi Facility
18	Public Address System for common announcement in case of emergency.
19	Television for notification of various cocurricular and extracurricular activities.
20	Smart Class Rooms from Pearson.

- Built-up Area used for Engineering Programmes / Courses only (m^2) = 18120 Sqm.
 - Total Number of Classrooms (for Engineering Course only): Out of 29 class rooms 5 classrooms are smart classrooms.

Sr. No.	Facility for holding events in the college	Total Number	Seating Capacity
1	Auditorium	01	188
2	Seminar Halls	06	112 Each
3	Basket Ball Court	01	-

- The Institute has a provision of arranging local logistics of students through a contractual agreement with M/S Patil Transport.

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 Institute has big playground having size **36,421 Sq. m.**
For sports for playing outdoor games such as cricket, volleyball, basketball, running track and foot-ball.
- Similarly, the institute also has the facility for indoor games such as chess, table tennis and badminton. The institute has a well-equipped gymnasium.
- The Institute has NSS cell under which programmes such as tree plantation, blood donation camp; awareness on “*Swatcha Bharat Abhiyan*” are organized.
- The Institute has cultural committee which looks after cultural activities.

- The institute promotes Student Welfare through the schemes like Earn and Learn, teacher-guardian scheme, etc.
- The university curriculum has specifically prescribed Development of Skills as a regular course and further respective departments ensure offering special trainings pertaining to soft skill development in their regular academic calendar.
- In case of medical emergency, a resident doctor facility is available in the campus. The institute is privileged to have alliance with a hospital run by the parent trust i.e. G. S. Mandal which is located in the proximity.
- The Institution has provided RO systems for safe drinking water in the college premises as well as in boys and girls hostels.
- Canteen and mess facilities with proper hygiene are available for the students. Also zero food waste scheme is implemented in mess.

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 institute has sufficient number of class rooms and laboratories than prescribed as per Dr. Babasaheb Ambedkar Marathwada University, Aurangabad. In addition to this, the institute has also set up new laboratories and facilities as per industry need such as Mobile Soil Testing Lab, Center for Analytical Research and Studies (CARS), Shimadzu Lab, Mechatronics lab and G. H. Endress + Hauser process Automation Laboratory and MIT-Center for Industrial relevance in Polymer science and engineering (M-CIP) which is in progress of PPE Department.

Table 4.4: Investment on Equipment (Department wise)

Sr. No.	Department	Equipment Cost (in Rs.)
1.	Agricultural Engineering	3,42,22,000
2.	Civil Engineering	40,88,672
3.	Computer Science and Engineering	83,30,277
4.	Electronics & Telecommunication Engineering	1,02,70,702.42
5.	Electrical Engineering	28,70,122.19
6.	Mechanical Engineering	1,63,77,955
7.	Plastic and Polymer Engineering	86,00,983
8.	Basic Sciences and Humanities	21,07,524
9.	Workshop	22,55,330
10.	Library	94,81,118
11.	Computer Center	35,00,000
Total		10,21,04,683.61

4.1.4 How does the Institution ensure that the infrastructure facilities meet the requirements of students with physical disabilities?

As per directives of National Building Code and AICTE Building Norms, facilities required for differently abled persons are provided. This includes basic provision of entrance ramp, elevators and Wheel-Chair. Security guards keeping vigil inside the building have been instructed to render necessary physical help.

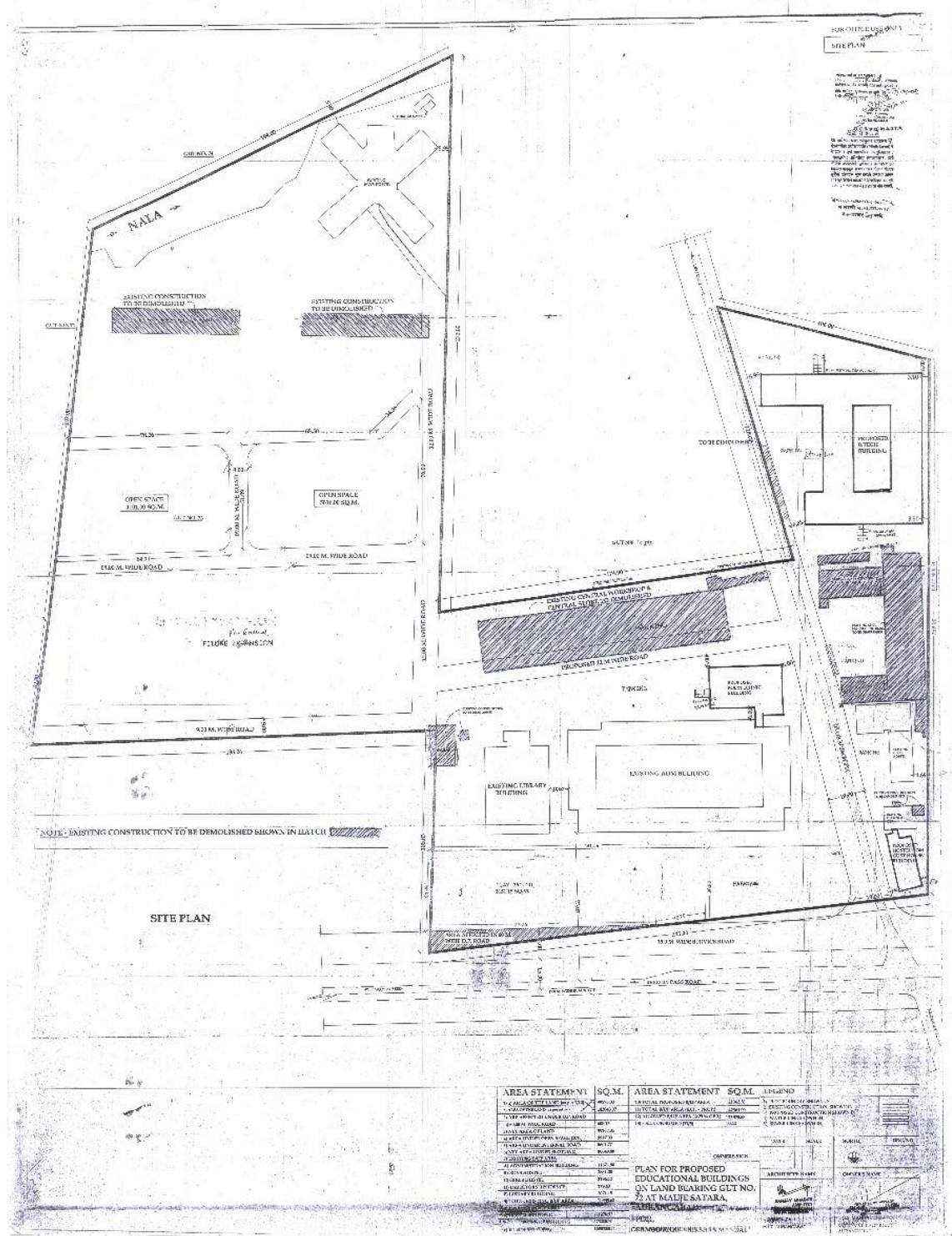


Figure 4.1 Layout of the Maharashtra Institute of Technology Building

4.1.5 Give details on the residential facility and various provisions available within them:

- Hostel Facility – Accommodation available
- Recreational facilities, gymnasium, yoga center, etc.
- Computer facility including access to internet in hostel
- Facilities for medical emergencies
- Library facility in the hostels
- Internet and Wi-Fi facility
- Recreational facility-common room with audio-visual equipments
- Available residential facility for the staff and constant supply of safe drinking water.

The institute has two hostels for boys accommodating 671 students, out of which at present 303 students are accommodated from this Institute; and two hostels for girls' students provides accommodation to 444 students, out of which 145 girl students are from our Institute. All hostels are equipped with audio-visual equipment and reading newspaper. Dining facility is provided through contractual agreement with an external agency. It is our pride that good food is being served at reasonable charges. At the same time, we are implementing zero waste food scheme. Facilities such as yoga classes are made available if demanded by reasonable number of students. The Wi-Fi facility is available whereby students can access internet through their laptop/PC/smart phones. The institute has provided 1 GBPS leased line internet connectivity.

The institute has health center at the entrance of the campus. In addition, in case of medical emergency, MIT Super-specialty Hospital which is in proximity from campus is also available. Apart from this one nursing institute is also being run in the campus itself, which renders its services as and when required. Further, a reading hall facility is made available in the hostels.

The institute has residential facility for the staff (staff quarters) with constant supply of safe drinking water. In addition to this, technical school following state board curriculum is being run in the institute campus. Further, the institute has provided RO system for safe drinking water in both the boys and girls hostels. The hostels are regulated through the Hostel Manager, rectors and wardens.

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?

- In case of medical emergency, a resident doctor is made available for minor health issues, Kamal Nayan Bajaj Hospital is adjacent to institute and also if necessary MIT Super-specialty Hospital is in proximity of the campus.

4.1.7 Give details of the Common Facilities available on the campus—spaces for special units like IQAC, Grievance Redressal unit, Womens' Cell, Counseling and Career Guidance, Placement Unit, Health Centre, Canteen, recreational spaces for staff and students, safe drinking water facility, auditorium, etc.

Table 4.4: Details of Common Facilities

Sr. No.	Name of facility	Availability	
1	IQAC	Y	Equipped with Phone, Computer, Fan etc.
2	Grievance Redressal Unit	Y	
3	Women's Cell	Y	
4	Placement Unit	Y	
5	Counseling and Career Guidance	Y	
6	Health Centre	Y	
7	Canteen	Y	
8	Recreational spaces for staff and students (gymnasium, Badminton, table tennis, Cricket, yoga etc.)	Y	
9	Safe drinking water facility (RO facility)	Y	
10	Auditorium	Y	

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 library has Library Advisory Committee (LAC):

Table 4.5: Details of LAC

Sr. No.	Faculty Name	Committee Designation	Department
1	Dr.Radhakrishna Naik	Chairman	Vice-Principal (Acad.)
2	Dr. A. J. Keche	Member	Head, Mech. Dept.
3	Prof. Kavita Bhosle	Member	Head, CSE Dept.
4	Shri A. R. Thorat	Member	Asst. Librarian

Significant Initiatives taken to make library student/ user friendly:

- E-books facility has been made available to be availed by the students and faculty.
- Giving due considerations to the students' request, library reading room timings have been extended during examination period 24×7. The students are allowed to carry their own books in the library for study.
- CCTV cameras are installed in the Central Library for security and safety purpose.
- Online library portal is made available through intranet within the campus to access the library electronic resources such as NPTEL videos and e-books.
- Library is equipped with OPAC (Online Public Access Catalogue) facility within the Campus.
- A Spacious study room with a seating capacity of 250 is created.

4.2.2 Provide details of the following:

- Total area of the library (in Sq. Mts.): 600 Sq.m.
- Total seating capacity: 250 Students and 10 faculty at a time
- Working hours (on working days, on holidays, before examination days, during examination days, during vacation):

On working Days: 10.00 am to 6:00 pm

On Holidays/Sunday: Only Study Room available

Before Examination, During Examination: 24 Hrs.

During Vacation: 10.00 am to 6:00 pm

- Layout of the library (individual reading carrels, lounge area for browsing and relaxed reading, IT zone for accessing e-resources)**

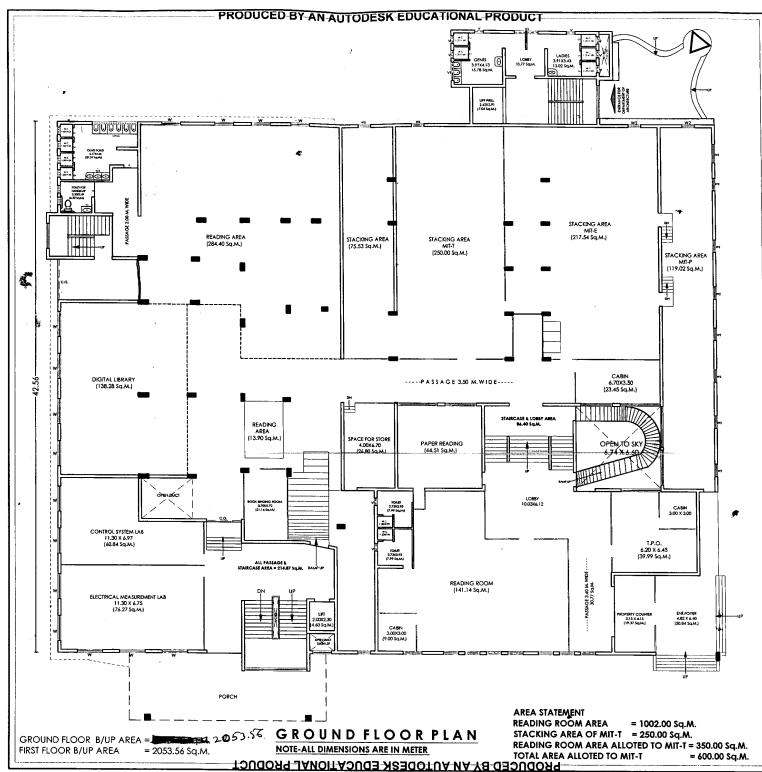
Table 4.6: Details of Library Facilities

Sr.No.	Particular	Availability
1	Total Area of Library	600 Sq. m.
2	Seating capacity of the library	250
3	Reprographic facility	Yes
4	Working hours of Library	10.00 am to 6:00 pm
5	Library Networking facility	Yes
6	Usage Data of the library (in terms of books issued to the faculty and students etc.)	Log book is maintained.
7	Annual library budget	Rs.25,00,000 (Average per year)

- The institution has subscribed to following **e-Journal** packages which covers comprehensively all disciplines: Science Direct (Elsevier), ASME, Springer, ASTM Digital Lib. J-Gate.
- The institution has remote access facility of the central library of Dr. Babasaheb Ambedkar Marathwada University, Aurangabad which includes Science Direct, Springer Journals and books, Taylor and Francis, EBSCO, Cambridge University Press, Emerald, IEEE Computer Society, Oxford Journals, Springer link, Scopus, Wiley Online Library, American Chemical Society, American Institute of Physics, American Physical Society.

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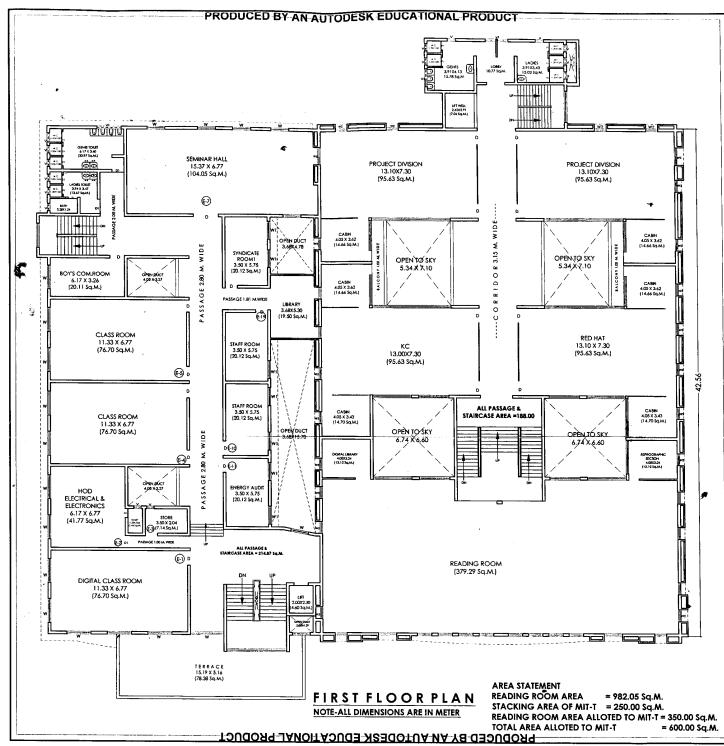


Figure 4.2 Plan view of Library

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.

- Concerned Teacher suggest the book that are to be purchased and Library Advisory Committee (LAC) decides which books are to be purchased. After finalizing, LAC gives recommendation for purchase of books through librarian for procurement of books.

Table 4.7: Details of Library Resources

Library Holding	Year 2012-13		Year 2013-14		Year 2014-15		Year 2015-16		Year 2016-17	
	No.	Total Cost (Rs.)	No.	Total Cost (Rs.)	No.	Total Cost (Rs.)	No.	Total Cost (Rs.)	No.	Total Cost (Rs.)
Text Books	284	99092	1293	430743	624	351844	2838	864559	943	2118970
Reference Books	45		323		155		709		235	
Journal/Periodical		1000	18	38960	06	8960	81	225430	5	5700
e-resources	6 Packages- Springer, ASME, Wiley- Blackwell Emerald Mgt, J-Gate, ASTMDigital Library	663629	5 Science Direct, ASME, Springer , ASTM, J-Gate	650000	5 Science Direct, ASME, Springer , ASTM, J-Gate	990486	5 Science Direct, ASME, Springer , ASTM, J-Gate	990527	5 Science Direct, ASME, Springer, ASTM, J-Gate	1112917
Any other (Specify) (News paper, General Books)	14 News Paper	17024	14 News Paper	19000	15 News Paper	19378	15 News Paper	22250	15 News Paper	23484

4.2.4 Provide details on the ICT and other tools deployed to provide maximum access to the library collection?

a) OPAC: An online public access catalog (often abbreviated as OPAC or simply library catalog) is an online database of materials held by the Central Library. It is a partially computerized library catalog available to the patrons. Users search a library catalog principally to locate books and other material physically located at a Central library. Library uses Library Management Software. The patron in the library can search the bibliographic database and find specific information. The search facility also apprises the user about the availability of each item for circulation, including current status of individual copies of a title and reserve status. It also shows titles on order displaying current status in acquisition.

b) Electronic Resource Management package for e-journals:

The Library has access to e-journals and databases as per AICTE norms.

- a. Science Direct (Elsevier)
- b. ASME
- c. Springer
- d. ASTM
- e. J-Gate

c) Federated searching tools to search articles in multiple databases: Not Available

d) Library portal: 172.16.0.10:3333

e) In-house /remote access to e-publications: Through internet, Wi-Fi and Library Portal

f) Library automation: Yes. All the work related to issue and return has been partially computerized. Many of books are bar-coded.

g) Total number of computers for public access: 11

h) Total number of printers for public access: All PCs are attached to copier machine for printing/photocopy.

i) Internet band width/ speed: 1 GBPS (BSNL leased line)

j) Institutional Repository: Institutional repositories are a development in managing digital objects for effective utilization. Institutional repository is an online archive for collecting, preserving, and disseminating digital copies of the intellectual output of an institution. An institutional repository might also include power points presentation, course notes, NPTEL learning objects, MCQ, Syllabus, Previous Question papers, College proceedings or research paper of faculties. Deposit of material in an institutional repository is sometimes mandated by

that institution. It is available through intranet link. Video lecture of some of the senior faculty members of MIT are available in library.

k) Content management system for e-learning: NPTEL

l) Participation in Resource sharing networks/consortia: Library Portal

4.2.5 Provide details on the following items:

a) Average number of walk-ins: 300-350 students

b) Average number of books issued/ returned: 150-200 books

c) Ratio of library books to students enrolled: 15:1

d) Average number of books added during last three years: On an average 1835 books were added per year.

e) Average number of login to OPAC: 100-125

f) Average number of login to e-resources: E-resources are made available through Institute's IP address.

g) Average number of e-resources downloaded/printed: Users number is very large so it is not recorded.

h) Number of information literacy trainings organized: - The library takes an active part in information literacy programme organized by the institute for the benefit of new students in the beginning of an academic year. They are taken around the library to familiarize them with various resources and services available for them. Training sessions are also organized whenever a new product or service is introduced.

i) Details of “weeding out” of books and other materials: - It is in process.

4.2.6 Give details of the specialized services provided by the library

Manuscripts: Not available.

Reference and Text Books: 35,035 reference and text books are available.

Reprography section: One copier machine and one scanner is available.

Inter Library Loan Service (ILL): It is linked with sister concerns viz. Marathwada Institute of Technology (Engineering), Marathwada Institute of Technology (Polytechnic) and Marathwada Institute of Technology (IT), CIDCO, Aurangabad.

Information deployment and notification: It is carried out through the Emails/ notices/ circulars sent to all departments.

Download: A facility is provided in digital library.

Printing: Available through LAN.

Reading list/ Bibliography compilation: Trade Catalogue is available.

In-house/remote access to e-resources: A facility is provided in digital library.

User Orientation and awareness: We organize orientation programme for students and teachers at the beginning of every academic year.

4.2.7 Enumerate on the support provided by the Library staff to the students and teachers of the college.

Library staff assists the students and teachers in case of difficulty in accessing the resources. Library provides timely intimation about the new arrival of books/ magazines/ journal, etc. Further a copy of revised syllabus is sent to all the respective heads of departments. In addition to this, different databases/websites for accessing and downloading the research papers, e-books are made available to students and staff.

4.2.8 What are the special facilities offered by the library to the visually/physically challenged persons? Give details:

- Reading room facility available at ground floor.
- Library staff helps the physically challenged persons for getting the books.

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. Library gets the feedback from the users. LAC analyzes the feedback sand recommends corrective measures, if any.

Special Features of library:

1. Book Bank scheme for all students
2. RO water
3. Earn and Learn scheme (EBC Students)

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=625
- Computer-student ratio: 1:4

- Standalone facility: LCD Projector, Pearson Digital Classrooms, wi-fi connectivity, Bio metric attendance system, CCTV, Printers, scanners etc.
- LAN facility: Yes
- Wi-Fi facility: Yes
- Licensed software: Yes
 1. Windows Operating System 150 Licenses
 2. Application Software: 112
- Number of nodes/ computers with Internet facility: 543
- Any other : CCTV surveillance 24x7
- Virtual Lab hosted on IIT-Bombay website

Table 4.8: Details of Computer Facilities

Sr. No.	Courses	PC / Laptop (UG+PG)
1	Mechanical Engineering	55
2	Computer Science and Engineering	202
3	Electronics and Telecommunications Engineering	116
4	Plastic and Polymer Engineering	35
5	Agricultural Engineering	19
6	Civil Engineering	34
7	MBA	05
8	Basic Sciences and Humanities	38
9	Electrical Engineering	01
10	Office	8 + 6 (laptop)
11	Principal Office	2
12	Computer Center	104
Total		625

Computing facilities (Dual core and above)

Sr. No.	System Configuration	Quantity
1	Dual Core, core i-3, Core i-5 500 Gb HDD, 2 GB RAM	625

4.3.2 Detail on the computer and internet facility made available to the faculty and students on the campus and off-campus?

The institute has provided 1 gbps leased line internet facility to the computers, Laptops of the faculty and students which is limited for on campus use only.

4.3.3 What are the institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities?

- All computer systems in the institute are upgraded with latest configurations.
- In the annual budget, adequate provision is made as per the requirements of the departments.
- As per the requirements of the departments, old systems are replaced by new systems.
- Very soon the entire campus of the institute will become wi-fi enabled campus and students and faculty members will be able to access it any time whenever they are on campus.

The Institute has comprehensive IT policies with regard to:

- **IT Service Management**

IT services are classified as follows:

Computing services: Computer Center

Communication services: LAN network, Wi-Fi connectivity and firewall is also available.

- **Information Security**

Most of the computers are equipped with antivirus software and also the use open source software like Linux/Ubuntu etc. is adhered to provide information security.

- **Network Security**

Juniper Router and Cyberoam is used to provide access and authority to users

- **Open Source Resources**

The institute uses the following open source software in the Institute and also encourages the use of open source softwares instead of using the licensed softwares wherever possible.

- Linux/Ubuntu/Fedora
- Libre Office/Latex
- **Green Computing:** The institute has replaced most of the monitors of computers with energy star TFT monitors.

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)

The institute provides separate budget for the following:

- a) Computer Center maintenance
- b) LAN maintenance
- c) Internet connectivity

The details have been shown in the following Table

Table 4.9: Details of Budget

Sr. No.	Year	Budget (Rs.)	Expenditure (Rs.)
1	2015-16	13474500	1028690
2	2014-15	5239200	3800094
3	2013-14	6349000	773310
4	2012-13	740000	5475329

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?

- Most of the class rooms including seminar, meeting and conference halls have the multi-media facility. One smart class room per department is available in the institute.
- In addition to the above, online lecture series of NPTEL for subjects of all disciplines through internet is made available. Khan Academy Notes, Lecture notes, e-books for different subjects are kept on a separate server.

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 placing the student at the centre of teaching-learning process and render the role of a facilitator for the teacher.

- **Access to on-line teaching-learning resources:** NPTEL and Khan Academy resources for subjects of all disciplines through internet are made available.
- **Independent learning:** Lecture notes, e-books for different subjects are kept on a separate server.
- **ICT enabled classrooms/learning spaces:** Smart classrooms from Pearson are being utilized by some of the faculty members for elective subjects.

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, the institution is availing National Knowledge Network connectivity through the Dr. Babasaheb Ambedkar Marathwada University, Aurangabad. The institution has remote access facility of the central library of Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.

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)?

- a. Building**
- b. Furniture**
- c. Equipment**
- d. Computers**
- e. Vehicles**
- f. Any other**

Following Table shows the budget allocated during last four years for maintenance and upkeep of above facilities.

Table 4.10: Details of Budget Allocation for Maintenance

Particulars/ Years	Building (Rs.)	Furniture (Rs.)	Equipment (Rs.)	Vehicles (Rs.)	Any other	
					Maintenance (Rs.)	Consumables (Rs.)
2012-13	300000	1000000	150000	0	0	0
2013-14	33000	1210000	231000	77000	132000	220000
2014-15	981000	279500	288000	80000	1122000	335000
2015-16	1500000	200000	300000	200000	850000	200000

4.4.2 What are the institutional mechanisms for maintenance and upkeep of the infrastructure, facilities and equipment of the college?

The institute has separate estate office headed by the Institute Engineer. The estate department takes care of maintenance of all buildings in the institute campus. The design and architecture of the building has taken care of and provided with beautiful physical ambience. The main building has ample open space and multiple options of staircases located all over

the building. The general maintenance of infrastructure is looked after by the estate section of the institute.

We have dedicated institute maintenance facility (IMF) which is outsourced. The IMF takes care from cleaning of water tank to general cleaning. Periodical, preventive and post-maintenance of equipment are done as per supplier's service manual. The equipment and services are maintained by the concerned departments with the help of their staff and technicians.

4.4.3 How and with what frequency does the institute take up calibration and other precision measures for the equipment/ instruments?

The frequency of calibration of the equipment/ instruments are done on -As and when needed basis. The calibrations of most of the instruments are done by the respective equipment suppliers or concerned company personnel. Institute is also trying for NABL accreditation for its high end laboratory called MIT – CARS which takes care of all the issues related to maintenance and calibration of these high end equipments.

4.4.4 What are the major steps taken for location, upkeep and maintenance of sensitive equipment (voltage fluctuations, constant supply of water etc.)?

- Silent Diesel Generator set 125 KVA is ready in case of emergency.
- A 315 KVA Delta –Star online tap changing transformer for constant supply.
- Provision of stabilizer for sensitive equipment.
- Trained faculty members are laboratory in-charges of laboratories having high end sophisticated and sensitive equipments and they take care of upkeep and maintenance of all these equipments with the help of laboratory assistance.
- Water tank with capacity of 1.5 Lac liters is completely filled by the water from Aurangabad Municipal Corporation and by regular water suppliers and water is supplied to the laboratories whenever continues water supply is required.

Criterion V : Students 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?

Yes, the institution publishes updated Prospectus/ handbook annually, which is given to the students along with the admission form, while students take admission to various courses.

Information provided

Vision, Mission statements and objective of MIT is mentioned in the prospectus.

It contains a lot of information regarding all UG and PG Programs offered by the Institute, eligibility criteria for admission. Details and glimpses of the various activities conducted, Institute credentials, facilities and amenities like gymnasium & sports, mess and canteen, transportation, open air theater ,medical store & clinic facility, infrastructural set up, learning resources provided to students, centralized computing center, campus-wide networking, NSS, NCC are included.

It accentuates about MoUs with various companies/organizations, prominent recruiters, alumni feedback about institute, feedback from various dignitaries, cultural activities, technical events, student council are provided along with the six months In-plant training and placement cell.

The information regarding Maharashtra prohibition of ragging act, anti-ragging policy, and preventive measures taken by the institute to avoid ragging, anti-ragging committee is included in it. The information regarding safety and discipline on campus, Women grievances redressed cell is mentioned in it.

All the information which is published in the prospectus is also made available on the website of the institute.

Commitment and accountability

Every year an induction program is organized by the institute for the students on the first day of joining to the course. During this program, the detailed Information regarding every Course is given by Head of the department. Also Other information like university examination pattern, examination schedule, information about student mentoring scheme,

class teachers, academic calendar, laboratories, anti ragging drive, women grievance cell and extra-curricular activities conducted are explained to students and parents. Also the departmental and campus visit tour is carried out for students and parents.

The faculties are committed to follow the academic calendar, rules and regulations laid by the institute to ensure its commitments. Periodically, academic audits are conducted and report is prepared and submitted to the management to ensure the accountabilities.

The committee for the central academic and administrative audit that takes care of all the commitments related with academics and general administration in the departments related with students , has the following faculty members-

1. Dr. G. S. Sable (HETCED) - Coordinator I
2. Dr. A. J. Keche (HMED) – Coordinator II
3. Mr. K. T. Mahamuni (HEED)
4. Prof. S. V. Lomte (MED)
5. Prof. Ms. Seema Choudhary (CSED)
6. Ms. R. Srinivasan (CED)
7. Dr. Ms. U.V. Uttarwar (BSHD)
8. Ms. S. J. Nandedkar (ETCED)
9. Mr. M. A, Ansari (PPED)
10. Ms. Divya Sharma (MBA)
11. Dr. V. S. Patil (AED)

It is ensured by this committee that whatever is mention in the prospectus and also in academic calendar is adhered to and everyone in the organization takes all the care to fulfill all the commitments given at the time of admissions and is accountable for the same.

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?

The state Govt. Of Maharashtra provides scholarship and free ship on the basis of parental annual income and based on reservation policies of the government and GATE scholarships. Students are notified all the details regarding scholarship through HOD.

The scholarship section makes sure that all students have filled the scholarship forms and scholarship amount is disbursed from time to time.

The institute provides 30 % concession in fees to the wards of G.S. Mandal's employees. Also there is provision of GSM scholarship to the students who are economically weak and cannot pay fees.

The number of students and amount received by them under this scheme are as shown in the table given below -

Table 5.1 GSM Scholarship Granted for Economically Weak Students

Sr. No	Year	No. of Students	Scholarship Amount (Rs.)
1	2016-17	9	498639
2	2015-16	8	911885
3	2014-15	4	218211

The institute offers 'Earn and Learn Scheme' to the students. During last four years more than 25 students were enrolled under this scheme. Students can work at soil and water testing lab and Library.

The number of students and amount received by them under this scheme are as shown in the table given below -

Table 5.2 No of Students benefited under Earn and Learn Scheme

Sr. No	Year	No. of Students	Amount Earned by Students (Rs)
1.	2016-17	15	58609
2.	2015-16	11	32197
3.	2014-15	03	30706
4.	2013-14	02	4140

5.1.3 What percentage of students receives financial assistance from state government, central government and other national agencies?

The institute has scholarship section for assistance to the students to receive financial assistance from state and central government. The details of UG and PG are given below-

Table 5.3 Financial Assistance from State and Central Govt.

Sr. No.	Year	Total No. of Students	State Government		Central Government	
			Number of students	%	Number of students	%
1.	2016-2017	2659	1871	70.40	71	2.67
2.	2015-2016	2480	1618	65.25	49	1.98
3.	2014-2015	2264	1412	62.40	41	1.82
4.	2013-2014	2240	1522	68.00	25	1.12
5.	2012-2013	2369	1376	58.10	24	1.01

5.1.4 What are the specific support services/facilities available for?

A. Students from SC/ST, OBC and economically weaker sections

- Fees reimbursement provision is given by government.
- Social Welfare Department of Govt. of Maharashtra, book bank scheme is provided to SC/ST students.
- SC and ST students receives 100% of tuition fees from Government of India
- OBC students receives 50% of tuition fees from Government of Maharashtra.
- EBC students receives 50% of tuition fees from DTE.

B. Students with physical disabilities

- Special care is taken at the time of admission.
- Rooms are provided at the ground floor in hostel.
- Provision of lift is made available in the main building.
- Ramp is provided in the campus.
- Extra time is given for the practicals and examinations.
- Administrative support to avail concessional travel to attend conferences, seminars, industrial visits etc. from state and central government agencies as per rules and regulations.
- Provided special guidance and support for the completion of in- plant training/seminar/ project work.

C. Overseas students

Institute does not have permission to admit overseas students.

D. Students to participate in various competitions/National and International

- Students are encouraged to participate in various competitions in India.
- Number of students have participated in state level/University/inter-college competitions.
- Won prizes and special awards at National and state levels in many events.
- Institute provides financial, technical support, Wi-Fi facility and library facility to students for the regularly arranged events at National level such as Robotics, SAE- BAJA and project competitions organized by local chamber of commerce.
- Faculty members guide and boost students for these events.

E. Medical assistance to students: health centre, health insurance etc.

- First aid boxes are made available at cabin of head of department, central workshop and laboratories and buses.
- College vehicle is made available 24 × 7 for emergency.
- Institute has own hospital in case of emergency to provide medical service (at. 6.0 KM from the campus.)
- One private hospital is also available just adjacent to the institute.
- Medical kit is made available at boys and girls hostel.

- Frequently blood donation camps are arranged (twice in the year and more than 2 blood banks participated)
- For minor health issues visiting doctor is available on campus for MIT students.

F. Organizing coaching classes for competitive exams

- The awareness is created for the civil Services, defense Services, and other competitive examinations to inculcate the interest of the students.
- The college faculty members encourage and provide guidance for the admission tests like GATE, Aptitude and other competitive examinations.
- Training and placement cell is organizing the classes for general aptitude and soft skills.

G. Skill development (spoken English, computer literacy, etc.)

- The institute is having well developed Language Lab equipped with 32 computers, head phones, projector, audio system and UPS. On every computer, “GOLS :British Language And Soft Skills Lab “ software is installed.
- The Institute is having central Computer Centre (CC Lab) with 100 computers having internet facility available for the students.
- The subject “Development of skills” is included in the curriculum, which includes communication, Group discussion etc. to improve the communication and soft skills of students.
- The Institute has MoU with Infosys which has soft skill program for students.
- Each department is having digital class rooms to improve teaching-learning process.

Soft Skill Development Cell details:

Prof. Ms. S. P. Kodgire (BSHD) : In-Charge

Mr. Narsing Gawali (BSHD)

Mr. A. B. Bagul (BSHD)

H. Support for slow learners

- Weak students are identified through the analysis of University examination and class tests, continuous assessment and during lectures.
- Counseling of weak students is done after identification in the middle of semester-I and II.
- Students can clear their doubts by discussing with faculty members during extra hours.
- Remedial classes for weak students generally having backlogs are arranged.
- Additional tests are conducted for these students to cover up.
- Through Teacher guardian scheme, students are encouraged and motivated.

I. Exposures of students to other institution of higher learning/ corporate/business house etc.

Students are motivated through various Seminar/conference participation, Expert talks, workshops on entrepreneur development and alumni meet are arranged by the Institute. Students are encouraged to participate in various competitions like BAJA -SAE etc.

Six months In-plant training is included in curriculum where students do their training at various industries located at Aurangabad, Pune, Mumbai, Delhi, Bangalore etc. Through six month In plant Training student get opportunity to express their skills to corporate world and to get the hands on experience about the current technology in the industries.

The institute arranges for industrial visits of the students to get first-hand information about the industries and their technologies. Students are also sent for in-plant training in institutions of higher learning like IITs and NITs. Institute is equity partner in Marathwada Auto Cluster (MAC) and also in Electronics Brown field manufacturing cluster proposed at Aurangabad, so that students can get exposure to industrial practices.

J. Publication of student magazines

Every Department has E-magazine look after by a Faculty advisor. Students and faculty write, select, edit articles, on general and specific issues. The purpose of the magazine is to facilitate students and faculty to express their thoughts and ideas freely and also to develop and sharpen their skills. Newsletters are periodically published by every department that

highlights the achievements of the students and faculty members and showcase the special activities conducted during the semester like Guest Lectures, Training Sessions etc.

5.1.5 Describe the efforts made by the institution to facilitate entrepreneurial skills, among the students and the impact of the efforts.

Institute has a separate committee for innovation, incubation and entrepreneurship. Institute has IGE (Interested Group of Entrepreneurs) cell for those students who are interested in entrepreneurship. Student member of this cell have regular meeting and conducts various activities under this cell.

To create the awareness among students about entrepreneurship, this committee of the Institute arranges various expert talks, industrial visits etc.

In plant training also helps for the development of entrepreneurial skills among the students as they become a member of any of the active working team. Thus, it gives them good platform to become the successful entrepreneur.

Members of Innovation, Incubation and Entrepreneurship Development Cell are as follows-

- Dr. P. M. Ambad (MED) : In-charge
- Dr. V.S. Patil(AED)
- Dr. B.G. Toksha (BSH)
- Mr. R.P. Agrawal (CED)
- Mr. Nihit Agrawal (CSED)
- Mr. Prashant Bharad (ETCED)
- Mr. Vikas Razak (EED)
- Mr.S.B. Patil(MED)
- Mr. V.R. Chaudhari (PPED)
- Ms. Divya Shanna (MBA)

Recently Mr. Adesh Gokhale (executive Director IBM) has conducted one day workshop on entrepreneurship development.

Department of agricultural engineering had organized BYST (Bhartiy Yuva shakti trust) programme for the students who wants to become an entrepreneur. List of students who attended the programme are

- Pravin Jadhav
- Ganesh Gurgulwad
- Suvarna Pagare
- Gaurav Kale
- Dhananjay Watpade
- Akshay Rodge
- Rameshwar Dhole
- Avinash Pande
- Neha Meshram
- Tushar Patil
- Vaibhav Solanke

BYST (Bhartiy Yuva Shakti Trust) has also trained some of the faculty members of the institute to become mentor for guiding the students for entrepreneurship.

Impact

Following is the list of few students who became entrepreneurs.

- Aakash Sisodiya (B.Tech Mech)
- Abhijit Aaglave (B.Tech Mech)
- Ajinkya Save(B.Tech Mech)
- Shashikumar Lahoti (B.Tech Mech)
- Ajinkya Patil (B.Tech Mech)
- Updhyay Rohit (B.Tech Mech)
- Vishwakarma (B.Tech Mech)
- Alex Rao (B.Tech Mech)
- Mangesh Shejul (B.Tech CSE)
- Maheshwari Deshmukh (B.Tech CSE)
- Shivani Sethi (B.Tech CSE)
- Yuvraj Shete (B.Tech CSE)

- Pathan Jawwad (B.Tech CSE)
- Manoj Jadhav, (B.Tech ETC)
- Anantkumar Najan (B.Tech - Agri)
- Sunil Jadhav (B.Tech- Agri)
- Amul Agraval (B.Tech- Agri)
- Swapnil Patil (B.Tech- Civil)
- Raunaka Laad (B.Tech- Civil)
- Nandkishor Chavan (B.Tech- Civil)
- Pagare (B.Tech- Civil)
- Jagadish pathak (B.Tech- Civil)
- Shrikant Bikkad(B.Tech- Civil)
- Prashant Joshi (B.Tech- Civil)
- Faisaluddin Kazi (B.Tech- Civil)
- Md. Asimuddin (B.Tech- Civil)
- Shripad Deshpande (MBA)
- Pankaj Singh (MBA)
- Shrikant Kshirsagar (MBA)
- Jitendra Kulkarni (MBA)
- Dhanjay Gattani (MBA)
- Jignesh Bhanushali (MBA)
- Swapnil Waghmare(MBA)

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}

Additional academic support, flexibility in examinations

Students are given Attendance exemption [Students actively participated in the sport with prior approval. Extra lectures are arranged. Remedial and make –up classes are taken by

faculties. Students can discuss with the faculty members during free hours /Library hours. Additional test at end of the semester is conducted for these students if required.

Students are also encouraged to participate in various sports, quiz competitions, debate and discussions, cultural competitions etc.

Also through Various NSS activities students participate in social and extracurricular activities.

Awareness lectures on importance and role of extracurricular activities in career building and scope for it are organized.

Special dietary requirements, sports uniform and materials ,any other

- Institute provides uniform, required kits/material and daily allowance to students participating in sports activities.
- Students are encouraged to participate in sports at University/State/National level.
- Special training/practice is carried out under the supervision of sport teacher.
- In the second art of academic year ,the sport competitions are organized and winners/winning team are honored with certificate and trophies.
- Institute also supports financially to extra ordinary players to participate in sports activities at national international .Mr. Siddharth Kadam of this institute represented India in gymnastics and aerobics in various countries and MIT has given sponsorship to him. He has won Silver medal in gymnastics at Thailand in 2006, 9th position in 2009 at Vietnam, 5th position in 2012 at Indonesia and participated in the event held at Sopia. He has also received prestigious shivchatrapati award which is the highest award in sports category given by Govt of Maharashtra
- Following Faculties are in sports committee :
 - Mr. B.S. Sonawane (CSED) : In-Charge
 - Mr. S.G. Hiwale (BSHD)
 - Mr. M. A. Ansari(PPED)
 - Mr. Amer Sohel (PPED)

For Cultural Activities ,The Institute organizes social annual gathering “kalavihangam” every year which provides platform to students to show their talents in singing ,dancing etc. Also students of MIT have formed the Club MITRA (MIT Rangabhumi Aristocrats) to promote Drama and Aroha to promote Music.

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.

The Institute organizes various training programs, seminars, expert talks to create awareness among students about competitive exams such as Civil Services Examinations, GATE, GRE and other such competitive examinations and to clear all the queries they have.

All the required study materials are available in the Library (departmental and Central Library). Various forms of coaching like communication skills, on-line materials, multimedia based learning, and solved question bank with keys etc. are provided by the faculty.

Table 5.4 No. of students qualified in various competitive Examinations.

Sr. No	Year	Gate	GRE	CAT	CMAT	PG CET	Irrigation Dept	ZP	Total
1	2012-13	9	-	-	-	7	1	4	21
2	2013-14	10	6	4	-	2	-	-	22
3	2014-15	7	3	3	2	-	-	-	15
4	2015-16	7	2	2	-	-	-	-	11
5	2016-17	3	3	-	-	-	2	-	8

5.1.8 What type of counseling services are made available to the students (academic, personal, career, psycho-social etc.)

Mentoring scheme “Teacher -Guardian” is implemented by the institute in which a mentor (Faculty) is allotted to a group of students from first year to final year. Monthly

meetings are conducted by the teacher guardian with students and the discussion with the students regarding their academic performance and progress, career guidance, motivates students to participate in various activities. Apart from this the teacher guardian also addresses personal and social issues. Records of the progress are also kept by the mentor.

A . Academics

A special attention is given to the students who lag in the academics during tutorials and practicals. Through teacher guardian system, they are motivated to improve.

B. Personal

A free environment is provided to the students for sharing their problems comfortably. This information is maintained in a secret manner and corrective steps are taken in consultation with senior staff and authority.

C. Career

The students, at the time of the admission, are guided by the faculty in choosing appropriate branch. They are informed about the scope and nature of the various subjects that form the syllabus. Personalized counseling and parental care is made possible by tutor, mentor schemes practiced in the institute. The institute also encourages the students towards taking Higher Education by arranging in-house special training for Competitive Exams, Soft Skills, and Aptitude Tests etc.

D. Psycho-Social

If some social issues or problems like pressure, fear, anxieties, depression, sadness, family problems etc.. Student is facing which may leads him to inferiority complex, Faculty mentor along with HOD and Principal counseling can help him to overcome from it. Teacher Guardian is always in touch with all students allotted to him under Teacher guardian scheme so that he can detect a student having such problems and report to HOD. Corrective measures can be taken accordingly. They are counseled to become better human beings and advised to stand tall for the social cause.

Institute has also appointed a professional counselor (Mr. Sandeep Shisode) who guides the students regarding the psycho-social issue related with students. Guidance sessions are also arranged by the institute particularly for hostel girls.

The committee members of Teacher guardian scheme-

Ms. Rashmita Srinivasan (CED): In-Charge

Dr. Shubhendu Bhandari (PPED)

Ms. S. B. Dabhade (AED)

Ms. P. B. Patil(CED)

Ms. S. B. Bangar (CSED)

Mr. R. P. Naik (EED)

Mr. S.Irfan (MED)

Ms. Neeta Gadekar (BSHD)

Ms. Deepmala Biradar (MBA)

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).

Yes, the institute has a structured mechanism for career guidance for its students. Various sessions are conducted to provide career guidance Specially for third year and final year students with the help of training and placement officer in coordination with Departmental Training and Placement coordinators.

Training and Placement facility

- A dedicated Training and Placement Cell working round the year to provide efficient, effective training and employment opportunities for all students.
- The T&P Cell maintains the database of all the students containing academic record from FY to B.Tech final year.
- Regular mental ability improvement test and technical tests are conducted to strive hard in the competitive world.
- Alumni Interactions with the students are carried out at frequent intervals.
- Soft skill development programmes are conducted to made aware of importance of communication and soft skill in the corporate world.
- Technical improvement programmes are conducted in house at regular intervals.

- Also departmental TPO coordinators conduct, prepare students for the group discussions, personal interviews.
- Institute also try for the placement of students through inplant training and students are encouraged to do the in-plant training seriously so that they get absorbed in the same organization.

The percentage of students selected during campus interviews by different employers are as follows in Table 5.4.

Table 5.5: Details of Students Selected during Campus Interviews

Sr. No.	Name of Department	2016-17		2015-16		2014-15		2013-14		2012-13	
		No.	%	No.	%	No.	%	No.	%	No.	%
1	Agricultural Engineering	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	10	52.63
2	Civil Engineering	11	14.1	21	37.5	20	41.66	22	21.36	12	21.05
3	Computer Science and Engineering	04	5.97	11	19.64	9	14.28	2	2.53	9	13.63
4	Electronics and Telecommunication Engineering	1	4.5	13	9.35	14	10.93	16	25	4	5.88
5	Electrical Engineering	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6	Mechanical Engineering	02	0.99	35	24.48	20	15.15	08	8.99	12	15.79
7	PPE	01	1.51	34	51	13	37	6	10	10	28
8	MBA	Nil	Nil	06	19.35	10	34.48	10	32.26	04	7.14

NA-Not Applicable

Table 5.6 List of industries as employers where our students are placed

Sr. No.	Company	Sr. No.	Company	Sr. No.	Company
1	Infosys	22	Time Technoplast, Mumbai	43	Mphasis
2	Amazon	23	Varroc Elastomers	44	Capgemini India Pvt Limited, Pune
3	Reliance Industries, Mumbai	24	ABS Electrplasters, Pune	45	Videocon-Ltd--Mobile Division, Aurangabad
4	Redhat	25	L &T	46	Kelvolt Pvt Ltd,Mumbai
5	Gharda Chemicals ,Mumbai	26	GetLogic	47	syntel
6	Samruddhi Plastics	27	TechMahindra	48	Flash Electronics India Pvt Ltd
7	Varroc-India	28	Persistent System	49	Goodyear Tyres
8	ValueD	29	Tata communications Ltd	50	Sanjeev Auto
9	Tata Consultancy Services	30	Aurangabad Electrical	51	Ashoka Buildcon
10	Force Motors	31	Jai Developers	52	Balkrishna Tyres,Bhuj
11	Reliance Industries	32	Gharda Chemicals	53	Balkrishna Tyres, Aurangabad
12	GNI Infrastructure Ltd	33	IRB Construction	54	Newtek Electricals/Hertz Instrument Aurangabad

13	NLMK,Daman	34	Nath Seeds, Aurangabad	55	Jain Irrigation Systems ltd., Jalgaon
14	Country Club	35	Decathlon	56	IDBI Federal
15	Writer Corporation	36	Alembic Pharmaceuticals	57	ICICI Prudential
16	Lai Televenture	37	ICICI Prudential	58	3D Power
17	Yeshwant Industries	38	Marathwada Auto Cluster	59	Loyal Infotech Services Pvt Ltd
18	HiField Ag Chem	39	BNY Mellon	60	Grind Master Machines
19	Impulse	40	HDFC Bank	61	Cherry Corporation
20	Pepsico	41	IDBI Federal	62	Ticket Utils India Pvt Ltd.
21	Axis Bank	42	Just Dial	63	Cognizant

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.

The college has a grievance redressal which actively interacts with the students to help them to sort out their grievances. The institute keeps suggestion boxes at various places within the institute so that comments, suggestions, and requests can be given without directly meeting to the authorities. Suggestions or complaints or feedback given on plain paper provides greater opportunity. Corrective measures are taken in all such cases by the committee along with the Principal to solve issues like solves issues related to inadequate facilities, recess timings, sanitation, etc.

The committee comprised of following members-

Prof. V. M. Chidri (MED) : In-charge

Mr. R. K. Kanhe (ETCED)

Prof. Ms. Seema Choudhary (CSED)

5.1.11 what are the institutional provisions for resolving issues pertaining to sexual harassment?

Institute has Internal Complaint Committee/ CASH (Committee against Sexual Harassment) to take all the necessary measures to ensure safety and the dignity of the female students as well as faculties. The institution takes necessary steps if incidents pertaining to sexual harassment require the intervention of the law. Continuous vigilance of college authority and strict punishment provisions prevent sexual harassment incidences. Till date, no such case of sexual harassment has been reported in the college.

Following are the details of the committee-

Ms. S R Choudhary (CSED)-InCharge

Ms. Rashmita Srinivasan

Ms. K. V. Bhosle (HCSED)

Ms, B. P. Chaudhary (CSED)

Dr. Sandip Shisode

Dr. Sirnita Doibale

Ms. Rashrni Suryawanshi (BSHD)

Ms. Geeta Awankar (MED)

Ms. Rupali palwe (ET'CED)

Ms. Surekha Dabhade (AED)

Ms. Pallavi Shindikar (PPED)

Ms. Divya Sharma (MBA)

Ms. Nalini Jadhav (Principal Office)

Mr. V. G. Jadhao (AED)

Mr. A. R. Thorat (Library)

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 Institute has set up an anti-ragging committee. The committee is formed as per Anti Ragging norms laid down by the Government and Hon'ble Supreme Court of India. Ant ragging schedule for visit to hostels at night is prepared and all the faculties visit to hostel to

ensure that no ragging happens. Till date, no incident of ragging of any kind has been reported in the institute.

Following are the details of Anti-Ragging Committee-

Prof. J.M. Kshirsagar In-Charge

Mr. Amol Patil (Boys' Hostel)

Dr. L.V. Uttarwar (Rector, Girl's Hostel)

Mr. S.G. Hiwale (BSH)

5.1.13 Enumerate the welfare schemes made available to students by the institution.

Earn & Learn Scheme:

Earn and learn scheme is being implemented in the institution. Students are given technical work, official work, and library work, under supervision of the concerned staff. The students have shown keen interest in the work along with their academics. The Institute is having Soil and water testing Lab in which students work and can earn. Also students can work in library under this earn and learn scheme.

List of few Students benefited by earn and learn scheme-

1. Mr. Sandeep S. Nalwade (Agri)

2. Vaibhav Khadse (Agri)

3. Khwajja sayyad (Agri)

4. Girish Wajape (Agri)

5. Kuldip Dhok (Agri)

6. Bhavesh Kabra (Agri)

7. Shivaji Aware (Agri)

8. Vismaya Pattari (Agri)

9. Neha Meshram(Agri)

10. Mukund Bansode (Agri)

11. Snehal Bhagat (ETC)

12. Deepali Dusane (Agri)

13. Ratnamala Chavade (Agri)

14. Ravikiran Pandit (Mechanical)

15. Prashant Giri (Agri)
16. Aditya (Civil)
17. Shivraj Rothe (ETC)
18. Subodh Sahare (Mechanical)
19. Saraswati Gingine (ETC)
20. Mayuri Chandre (Mechanical)
21. Chandansing Meher (Civil)
22. Somnath Gavane (Mechanical)
23. Ramesh Chavan (M. Tech.)
24. Poonam Narwade (ETC)
25. Shivraj Aware (Agri)
26. Khwaja Sayyed (Agri)
27. Nagorav Vaidya (Agri)
28. Madhuri Choudhari (ETC)
29. Sangita Jadhav (Mechanical)
30. Prashant Giri (Mechanical)
31. Rajesh Savndkar (Civil)
32. Nihalraje Patil (Agri)
33. Shailesh Ghuge
34. Ganesh Tekane
35. Priyanka Salunke
36. Topaji Chavan
37. Prathamesh Tripathi

Book Bank Scheme

It is available for the reserved category students. Under this scheme, the books are issued as per the requirement of students. No Library fees is charged to them. Total number of books under this scheme are 6045.

Teaching Assistant

PG students are given chance to work as teaching assistants and they are given remuneration for the same.

List of Students benefited under Teaching Assistant scheme.

1. Mr. Ramesh Fulchand Chavhan (Agri)
2. Ms. Manjusha Khadse (Agri)
3. Ms. Arti Munde (Agri)
4. Ms. Aparna Chavan (CSE)
5. Ms. Sheetal Lohare (CSE)
6. Ms. Fatima Huzaifa(CSE)

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, Institute is having alumni association AAMIT (Alumni Association of MIT) with registration No: Maha/398/04 which was registered in year 2004.

The motive of the association is to bring together all the alumni to share their experiences and ideas for the development of curriculum. Also to extend their helping hand and provide guidance to the budding engineers of the institute. All the passed out students of the college are active members of the Alumni Association. The Alumni members are spread around the globe and support the college in various activities. Alumni meet is held at our College every year.

An alumnus contributes to the development of the college in the following ways:

- Provide feedback on infrastructure development and other academic related matters of the college.
- Alumni members residing in various parts of India and abroad share their experiences with staff and students whenever they visit the institution.
- An alumnus supports placement activities as well as in-plant training activities of the students.
- One of the alumni Gagneet Singh 2001 year batch, has donated 5 circuits of raspberry pi to ETC, CSE and MCA department.

5.2 Student Progression

5.2.1 Providing the percentage of students progressing to higher education or employment (for the last four batches) highlights the trends observed.

Student progression	Branch	2012-13	2013-14	2014-15	2015-16
		Student progression (%)			
UG to PG	Agri	15.78	7.69	NIL	NIL
	Civil	24.56	5.52	4.17	3.57
	CSE	10.66	12.65	7.93	3.57
	EE	NA	NA	NA	NA
	ETC	2.94	1.56	0.78	1.44
	Mech	11.84	10.11	9.85	4.20
	PPE	36	6.5	13.8	0.03
PG to Ph. D.	Agri	NIL	NIL	NIL	NIL
	Civil	NIL	NIL	NIL	NIL
	CSE	1.51	NIL	Nil	Nil
	EE	NA	NA	NA	NA
	ETC	NIL	NIL	NIL	NIL
	Mech	NIL	NIL	NIL	NIL
	PPE	NIL	NIL	NIL	NIL
Employed Campus selection	Agri	52.63	NIL	NIL	NIL
	Civil	21.05	21.36	41.66	37.5
	CSE	13.63	2.53	14.2	19.64
	EE	NA	NA	NA	NA
	ETC	5.88	25	10.93	9.35
	Mech	15.79	8.99	15.15	24.48
	PPE	28	10	37	51
Employed	Agri	15.78	46.15	66.66	26.66

Other than campus recruitment	Civil	36.84	63.10	45.83	42.85
	CSE	50	40.5	41.2	25
	EE	*NA	NA	NA	NA
	ETC	1.47	1.56	4.68	3.59
	Mech	18.42	31.46	18.94	9.09
	PPE	28	23	42	34

NA - Not Applicable

Master of Business Administration

Student progression	Branch	2012-13	2013-14	2014-15	2015-16
		Student progression (%)			
PG to Ph.D.	MBA	NIL	NIL	NIL	NIL
Employed Campus selection	MBA	7.14	32.26	34.48	19.35
Employed Other than campus recruitment	MBA	17.86	2.58	13.79	Nil

Trends observed: The figures observed do not indicate rising or decreasing trend in all categories, i.e. progression of students to higher education, employment through campus selection, employed other than campus recruitment.

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.

Table: Details of the programme wise pass percentage and completion rate for the last four years

UG:

Sr. No.	Branch	Year	No. of students appeared	No. of students Passed (final year)	percentage
1	Agri	2012-13	19	19	100
		2013-14	14	13	92.85
		2014-15	06	06	100
		2015-16	15	15	100
2	Civil(First Shift)	2012-13	57	52	91.23
		2013-14	103	50	48.55
		2014-15	48	47	97.91
		2015-16	56	49	87.5
3	CSE	2012-13	66	66	100
		2013-14	72	69	95.83
		2014-15	63	61	96.83
		2015-16	55	55	100
4	Electrical Engg.	2012-13	NA	NA	NA
		2013-14	NA	NA	NA
		2014-15	NA	NA	NA
		2015-16	NA	NA	NA
5	ETC	2012-13	73	51	69.76
		2013-14	72	57	79.17
		2014-15	182	125	69.23
		2015-16	155	114	73.55
6	Mechanical (First Shift)	2012-13	76	64	84.21
		2013-14	89	75	84.27
		2014-15	65	63	96.92
		2015-16	75	63	84.00
7	Mechanical (Second Shift)	2012-13	NA	NA	NA
		2013-14	NA	NA	NA
		2014-15	67	65	97.01
		2015-16	68	53	77.94
8	PPE	2012-13	41	39	95.12
		2013-14	65	62	95.38
		2014-15	35	35	100
		2015-16	59	51	86.44
9	MBA	2012-13	44	37	84.09
		2013-14	51	40	78.43
		2014-15	27	11	42.30
		2015-16	21	10	47.62

5.2.3 How does the institution facilitate student progression to higher level of education and/or towards employment?

Student Progression:

In-Plant training

Training and Placement Cell helps in providing In-plant training to all the students in various industries based on their area of interest. It enables the students to get practical experience for the theory subjects that they have learned in their curriculum. Their performance during IPT is monitored and evaluated by the faculty members of respective departments. This is a unique feature of this institute which no other institute in this region has.

Career Guidance / Expert Lectures:

Experts from various fields are invited to deliver talks to make them industry ready and also make them aware about the availability of various options for higher level of education in the country and abroad.

Soft Skills training

The training and placement cell organizes soft skills training for the students and also they are trained in the language lab as per the curriculum of Development of Skills subject.

Aptitude test

Aptitude test is conducted at department level. Whee box employment aptitude test is conducted for testing the employability of the students.

Group Discussion and mock interviews

Group Discussion and mock interviews are conducted at the Department level which will help the students in recruitment process.

Counseling for Higher Education

Departments counsel students to opt for higher studies also. Students are promoted for GATE/GRE/TOEFL and other competitive examinations, facilitating their progression to higher studies and enhancing their employment opportunities.

5.2.4 Enumerate the special support provided to students who are at risk of failure and drop out?

Special care is taken by all the Departments for the students who are at risk of failure and drop out. The subject teacher identifies the students who are at risk of failure through the

class tests and end semester examination of the University. Extra classes and remedial classes are conducted for these students. The teacher guardian counsels the students on regular basis. Additional class test is conducted for these students if required. Notes and solved question papers are given for the reference and also personal care is provided to the students by the subject teachers.

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 encourages the students to participate in various indoor and outdoor games at Inter Collegiate University Level Tournament, Inter University Tournament and Invitational Tournament organised by Bits college, Goa, MIT Summit, Pune etc

Game and achievement of Players Participated 2015-16						
Sr.	Game	Men	Women	Achievement	IUT	National
1	Swimming	2	0	Winner	One Selected in University Team	0
2	Lawn Tennis	3	0	Participated	One Selected in University Team	0
3	Chess	5	-	Runner	-	-
3	Kabaddi	12	0	Participated	-	0
4	Volleyball	12	12	Participated	-	12
5	Fencing	1	0	Participated	-	0

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6	Cricket	16	0	Participated	-	16
7	Basketball	12	12	Participated	-	0
8	Football	16	0	Participated	-	0
9	Judo	1	0	Participated	-	0
10	Taekwondo	3	0	2 Bronze	-	0
11	Softball	12	0	Participated	-	0
12	Badminton	5	5	Participated	-	-
13	Boxing	2	-	1 Silver	-	-
	Gymnastics		1	1 Gold	One Selected in University Team	-
14	Weight Lifting	1	-	-	-	-
	Total	103	30	-	-	-

Game and achievement of Players Participated 2014-15						
Sr.	Game	Men	Women	Achievement	IUT	National
1	Swimming	1	0	Winner	Selected in University Team	0
2	Lawn Tennis	1	0	Participated	Selected in	0

					University Team	
3	Kabaddi	12	0	Participated	-	0
4	Volleyball	12	12	Participated	-	12
5	Fencing	1	0	Participated	-	0
6	Cricket	16	0	Participated	-	16
7	Basketball	12	12	Participated	Three Girls selected in University Team	0
8	Football	16	0	Participated	-	0
9	Judo	2	0	2 Gold	Two Boys selected in University Team	0
10	Taekwondo	2	0	1 Silver 1 Bronze	-	0
11	Softball	12	0	Participated	-	0
12	Badminton	5	5	Participated	-	-
13	Boxing	2	-	1 Silver	-	-
	Total	94	29	-	-	-

Game and achievement of Players Participated 2013-14			
Sr. no.	Name of Game	No. of Players Participated	Achievement
1	Cricket	16	Lost in Ist Round
2	Football	16	Runner
3	Volleyball	12	Winner
4	Athletics	-	-
	400 mtrs	2	Participated
	800 mtrs	3	Participated
	Jawling	2	Runner
	Shotput	2	Third
5	Basketball	12	Reached Semifinals
6	Kabaddi	12	Winner
7	Table Tennis	5	Reached Semifinals
8	Badminton	5	Runner
9	Chess	5	Lost in Second Round
10	Carom	5	Lost in first Round
	Total	97	-

Game and achievement of Players Participated 2012-13					
Sr. no.	Name of Game	Achievement			
		ICT/State	IUT	National	International
1	Chess	5	0	5	0
2	Badminton	10	0	0	0
3	Boxing	2	0	1	0
4	Power Lifting	2	1	0	0
5	Archery	2	0	0	0
6	Judo	2	2	0	0
7	Athletics	1	0	0	0
8	Taekwondo	3	1	0	0
9	Cricket	15	0	15	0
10	Kho- Kho	1	1	0	0
	Total	43	5	21	0

2) The institution encourages the students to participate in the various cultural competitions and events. The institution hosted the Central Youth festival "Yuvarang" in year 2012.

MITRA (MIT's Rangabhumi Aristocrats) is a student organisation which promotes students to participate in drama and Aroha is a music club which promotes musical activities among students.

Sr. No.	Cultural Event	Activity	Date	Place	No of students	Remark
1	Dr BAMU Central Youth Festival	Solo Classical, Tribal Dance, Rangoli, Painting, Sculpture, Classical instrument, Debate, Bharud	19-22 Sept 2016	Shri Tuljabhavani College of Engineering, Tuljapur-413601	22	-
2	Purushottam Karandak	Drama	Nov 2014	Jalgaon	18	Best prize of Actress to Madhavi Kulkarni
3	Shahu Modak Natya spardha	Drama	2015	Ahamadnagar	7	-
4	Loksatta Lokankika	Drama	2015	Aurangabad	12	-

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.

Year: 2015-16

Sr. No	No of students	Name of the event	Department	Place	Level	Achievement
1	24	SUPRA SAEINDIA 2016 Competition	Department of Mechanical Engineering	Buddha International circuit, Noida (U.P)	National	DRONACHARY A AWARD
2	2	MASSIA Industry project Assignments	Department of Mechanical Engineering	Aurangabad	State	Second Prize
3	2	MASSIA Industry project Assignments	Department of Mechanical Engineering	Aurangabad	State	First Prize

Year : 2014-15

Sr. No	No of students	Name of the event	Department	Place	Level	Achievement
1	25	SUPRA SAEINDIA 2015 Competition	Department of Mechanical Engineering	Madras Motors sports Club,Chennai	National	Team cleared quaififying round
2		Wings 2015	Department of Electronics and	Governement college of	State	Team was ranked 4th in robowars

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			Telecommunication Engineering	Engineering, Aurangabad		competition.
3	Techkshtra 2015	Department of Electronics and Telecommunication Engineering	Maharashtra Institute of Technology, Aurangabad.	Zonal	The team also won 2nd prize in robosoccer. Team also participated in roborate.	
4	Robosoccer	Department of Electronics and Telecommunication Engineering	Jawaharlal Nehru Engineering College, Aurangabad.	Zonal	Team won 1st prize in robosoccer	
5	Ambiora 2015	Department of Electronics and Telecommunication Engineering	Mukesh Patel School of Technology Management & Engineering, Shirpur.	Zonal	Team won 3rd prize in robowars.	
6	Plasticon Plast India 2015	Department of Plastic and polymer	Gandhinagar	National	Best performing student GOLD medel	

Year : 2013-14

Sr. No	No of students	Name of the event	Department	Place	Level	Achievement
1	23	SUPRA SAEINDIA	Department of Mechanical	Madras Motors sports	National	Second prize in cost evaluation

		2014 Competition	Engineering	Club,Chennai		event
2		Wings 2014	Department of Electronics and Telecommunication Engineering	Governement college of Engineering, Aurangabad	State	Team was ranked 4th in robowars competition.
3		Mindspark 2014	Department of Electronics and Telecommunication Engineering	College of engineering Pune	National	The team won 1st, 2nd prize in aqualympics and 3rd prize in robowars. Team's 2 robots were in top 16 in robosumo.
4		Perception 2014	Department of Electronics and Telecommunication Engineering	Vishwakarma Institute of information Technology, Pune in the month of December 2014.	National	Team won 2nd prize in robowars competition.

Year : 2012-13

Sr. No	No of students	Name of the event	Department	Place	Level	Achievement
1	60	Mindspark	Department of Electronics and Telecommunication	college of engineering pune	National	Team won 3rd prize in aqualympics.

			Engineering			
2		Perception 2013	Department of Electronics and Telecommunication Engineering	Vishwakarma Institute of information Technology, Pune	National	Team was ranked 4th in robowars competition.

Year : 2011-12

Sr. No	No of students	Name of the event	Department	Place	Level	Achievement
1	16	SUPRA SAEINDIA 2012 Competition	Department of Mechanical Engineering	Buddha International circuit, Noida (U.P)	National	

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 institution all provisions?

Student Feedback:
1) Course wise feedback at the end of semester
2) Graduate exit survey
Employers Feedback:
Training and placement office collects the employers feedback on regular basis
Alumni Feedback:
1) Alumni feedback is collected in every alumni meet
2) Alumni feedback is collected through e-portal

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.

Semester wise magazine published by all departments from the year 2012 to 2016.

Sr. No.	Year	Name of the Department	Magazine Name
1	Since 2015-16	Department of Mechanical Engineering	Mechzine
2	Since 2015-16	Basic Sciences and Humanities	e-Prathama
3	Since 2013-14	Department of Electronics and Telecommunication	e-Reves
4	Since 2016-17	Department of Plastics and Polymer Engineering	APPES-emagzine
5	Since 2016-17	Department of Computer Science and Engineering	Whats UP

5.3.5 Does the college have a Student Council or any similar body? Give details on its selection, constitution, activities and funding.

Student Council Constitution
Principal
General Secretary
NSS Program Officer
Cultural Secretary
Sports Secretary
NSS Coordinator
NCC Coordinator
Principal nominates two Ladies Representatives
Principal nominated faculty
Academic Toppers (B.Tech Final Year, TY,SY and FY)
Selection process
Applications are invited for various posts from the toppers for the post of General Secretary, elections are conducted for GS post where all the students from council members votes
Activities
Conduction of annual social gathering, various cultural, sports and technical events is the responsibility of student council
Funding
Necessary funding is provided by institution

5.3.6 Give details of various academic and administrative bodies that have student representatives on them

Various academic and administrative bodies

Students Council
Internal Quality Assurance Cell
Departmental Advisory Board
Anti-ragging Committee
NSS (National Service Scheme)
Departmental Students Associations of each Department
Cultural Committee
Canteen/Food committee
Discipline Committee
SPIC MACAY
MITRA(MIT's Rangabhumi Aristocrats)
Aroha (Music Club)
Students Chapter : Indian Institution of Industrial Engineering, Indian green building council, Indian Plastic Institute, Institution of Electronics and Telecom Engineers

The names of Departmental associations are enlisted below:

Department	Association	Details
Department of Civil Engineering	CESSA	Civil Engineering Student and Staff Association
Department of Mechanical Engineering	MESA	Mechanical Engineering Students Association
Department of Electronics and Telecommunication Engineering	TESA	Tele-Communication Engineering Students Association
Department of Computer Science and	ACTS	Association of Computer Technology

Engineering		Students
Department of Plastic and Polymer Engineering	APPES	Association of Plastic and polymer Engineering Students

5.3.7 How does the institution network and collaborate with the Alumni and former faculty of the Institution. Any other relevant information regarding Student Support and Progression which the college would like to include.

Network with the Alumni:

Every year alumni meet is organised to connect with alumni, in which alumnus provides feedback, suggestions and advice for the progress of institution

Network with the Former Faculty Members:

The Institution maintains good rapport with the former faculty members and they are invited to all the important functions of the college. They respond favourably to the academic activities to which they are invited. The department invites the former senior faculty to deliver guest lectures and also to extend their expertise in Research and Development.

CRITERION VI: GOVERNANCE, LEADERSHIP & 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

MIT aspires to be a leader in Techno-Managerial education at national level by developing students as technologically superior and ethically strong multidimensional personalities with a global mindset.

Mission

We are committed to provide wholesome education in Technology and Management to enable aspiring students to utilize their fullest potential and become professionally competent and ethically strong by providing.

- Well qualified, experienced and professionally trained faculty.
- State-of-the-art infrastructural facilities and learning environment.
- Conducive environment for research and development.
- Delight to all stakeholders.

Late Shri. Anandraoji Deshmukh, a great freedom fighter from Marathwada region, observed that youth in the region lacks the skill-set required to be employable. With objective of providing technical education and training opportunities to youth, in 1975 he founded Gramaudyogik Shikshan Mandal (GSM).

Gramaudyogik Shikshan Mandal (GSM), Aurangabad, Maharashtra, India is the parent Trust established under Bombay Public Trust Act and also registered under Society Registration Act. GSM through its premier technical institute- Maharashtra Institute of Technology (MIT) offers variety of programs in Engineering and Technology based on an informed perception of national and global needs.

Institutes' Vision-Mission coupled with "Quest for Excellence" has always been the guiding as well as driving force at each step. MIT aims to provide a student-centric collaborative, mutually beneficial learning environment through its qualified staff and state of art infrastructure facilities, specialized laboratories and Microenterprises like-

MIT- Shimadzu Analytical Testing Laboratory, Big Data Lab, Center for Automation, Soil Testing Laboratory, Center for Analytical and Research Studies (CARs), MIT Centre for Industry Relevance in Polymer Science and Engineering (M- CIP), Asian Centre for Development Engineering – Startup by MIT, MIT-Grindmaster Robotic Centre for Excellence, Virtual Nodal Centre with IIT, Mumbai, MIT Centre for Nondestructive Testing etc. and many more to come in future.

Institute has been pioneer in creating collaborative environment for knowledge exchange by developing linkages with Industry and other organizations and has successfully established triangular partnership among academic institutions, industry and government organizations. MIT not only strives to train students to acquire practical and professional knowledge to become excellent technocrats, thinkers and leaders but also imbibe social responsibilities and ethical principles so they can realize improvement in life of people thus serving society and nation.

Institute has Vision and Mission which are futuristic in nature. They satisfy the needs of society by providing quality education through leading-edge technology.

- Received 73rd all India rank in the survey of Outlook magazine in July,2016. The survey was conducted to find out India's top 100 Engineering colleges which includes premier institutes like IIT's and NIT's. MIT featured in this list for three consecutive years.
- Institute has a strong collaboration with Infosys Pvt. Ltd, Pune through the Campus Connect Program of Infosys since 2008.
- Infosys has duly awarded five faculty members with Silver and Bronze medal for their contributions in the campus connect program.
- The Institute is also duly recognized by Infosys as their advance partner in success every year since 2013.
- The Institute also has a successful collaboration with Cloudera Pvt. Ltd. USA, and the institute happens to be the only of its kind offering training related to Big Data and Big Data Analytics.
- Institute is also having a unique collaboration with Red Hat Pvt. Ltd. Mumbai since 2005 and is one of the most active Institute's, in the region.
- The Institute has a unique facilities viz. Mobile Soil Testing and Centre for Analytical Research and Studies (CARs) offering consultancy services to

government, farmers, industry and private institutes.

- The Institute also has unique laboratory setup in alliance with Endress & Hauser
- The Institute is also having alliance with Siemens through the laboratories of Mechatronics and Automation.
- The Institute is also equipped with a unique laboratory viz. MIT-Shimadzu Analytical Testing Laboratory offering consultancy and testing services to the various industries in and around the city.

6.1.2 What is the role of top management, Principal and Faculty in design and implementation of its quality policy and plans?

The top management of the Institute comprises of Executive Council(EC) and Governing Body(GB). The top management plays significant role in the evolutionary process of transformational initiatives directed towards positioning the Institute in the realm of top ranking institutes in the country. The roles are as follows:

Executive Committee (EC)

- To execute the resolutions adopted by General body meetings
- To look after the routine and regular work of the society
- To confirm membership or to cancel membership of the society
- To receive subscription, donations, grant, deposits, loans etc
- To maintain the accounts of society. To get them audited and to present the same in the General Body for its approval
- To prepare budget of society and present it in the General Body meeting for its approval.
- To appoint employees, to grant leaves, to terminate services of employees etc.
- To take care of the assets of the society and to use it properly with the approval of the General Body
- To open branches of the Society and to use it properly with the approval of General Body
- To frame rules for the internal activities, to form committees etc
- To resolve appropriately to spread education towards grant of scholarship, loan scholarship etc.

Governing Body (GB)

- GB is the apex body of the Institute, which is constituted by the parent trust Gramaudyogik Shikshan Mandal, Aurangabad.
- The GB provides guidelines and strategic direction for aligning the programs, policies and processes of the Institute with the changing environmental contexts and demands of business world.
- The GB meetings are conducted regularly to provide insights on priorities and focus areas for the Institute, which are executed in the Institute through the Principal of the Institute. The GB thus guides the Institute authorities on all policy matters including quality policy of the Institute and for execution of these policies.

Principal

- Is an active member in deciding the quality policy and making the action plans.
- Leads the faculty, while the action plan is being implemented within the Institute and provides directions to the faculty and coordinates them wherever necessary.
- Communicates the opinions of the top Management to the faculty and staff regarding the responsibilities and duties assigned to each component of the Institute, during the implementation of the quality policy.
- Intends to develop and ensure effective conduction of educational programs and promotes the improvement of teaching learning in the Institute.
- Strives to create an environment which fosters development of the students and faculty.
- Constitutes various committees for executing activities in accordance with quality policy.
- Difficulties faced by faculty members during the execution are sorted out in the meetings with the Principal or the Top Management.
- Contributes to develop the means and tools for measuring the quality.
- Takes initiatives to develop the liaison with the eminent academicians, scientists, industries, professional bodies and renowned institutes which directly or indirectly helps in planning and implementing the quality policy.
- Keeps himself updated about the Indian and global education scenario, research in education, industry and stake-holders expectations.

- Gives relevant feedback to the faculty and the students, motivates them to implement the quality policy of the Institute and to achieve quality in their fields.
- Along with faculty initiates orientation and other programs for quality improvement.
- Proposes new initiatives to Top Management to strengthen the quality policy.

Faculty

- Faculty Members are the key to success of implementation of quality policy and other quality initiatives of the Institute.
- Course planning and delivery to the students by using innovative teaching pedagogy.
- Research in their field of interest.
- Play diverse roles at various levels in the entire value chain of academic and allied processes and in turn in the execution of quality policy.
- Are actively engaged in a wide range of academic and allied functions and processes and in turn the execution of quality policy.
- Are responsible for
 - Achieving course objectives by mapping learning outcomes of their courses and aligning them with the program level goals
- Periodical review of curriculum and pedagogy.
- Contributing towards achieving excellence in teaching, research and training
- Have active involvement and participation in academic administration, Institutional development and student development initiatives.

6.1.3 What is the involvement of the leadership in ensuring: The policy statements and action plans for fulfillment of the stated mission?

The highest body for taking decisions in the institute is the Governing Body comprising of General Secretary as Chairman, Principal, Faculty members and other nominated members. The GB ensures that every decision is aligned to the mission of organization. The management and Principal make all provision for smooth execution of policies and plans. To know the success of existing policies and take inputs for further action plans following few systematic practices are periodically done at department and institute level:

- Interaction of Principal-HOD-Faculty
- Academic Audits

- Teacher-guardian meets
- Parents Meet
- Alumni Meet
- Student council formation and meetings with Principal-Management
- Parents Communication- attendance, class test performance
- Feedbacks- Students, Parents, Alumni, Industry

The leadership of the institute plays a vital role in formulation of action plans for all operations and incorporation of the same into the institutional strategic plan for fulfillment of the stated mission as given below:

Academic Planning and Execution

Institute level academic calendar is prepared for forthcoming semester and furnished to each department. The departments prepare and adhere-by the detailed department level calendar scheduling all the planned events, industry visits, audits, etc. Monthly academic audits are carried to ensure academic plan compliance.

Financial Planning

Planning and execution of – purchase of new equipment, software, building new facility, modernizing and maintenance of existing, is proposed by respective department which are then centrally approved with appropriate budget and timeliness.

Financial provisions are also made for college level events, alumni meetings, and social gathering.

Interaction with stakeholders

Periodic meetings amongst different sections of the stakeholders serve the purpose of active interaction for betterment of the institution. Few of the meetings organized at Institute are:

- Governing Body meeting
- Parents Meet
- Alumni Meet
- Industry Meet
- HOD- Principal Meetings
- Department-faculty meetings
- Teacher-Guardian Meetings

Apart from above- Industry experts are called for expert guidance, adjunct lectures.

Programs for social cause- blood donation, yoga day, helmet awareness, etc are organized to serve society.

Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders

Each Department in collaboration with various committees-formed centrally, performs systematic execution and evaluation of institute policies and planning with pursuit of harvesting best in institutes every undertaking.

- Academic Audits are done for academic rigor.
- Semester-end Exam Result analysis is done to act as per need to students
- Class Test result analysis helps to coup-up with current difficulty of students
- To discover the prospects for improvement in teaching learning methodology systematic feedback from students are taken at the end of semester.
- Inputs from industry experts are taken for setting syllabus, introducing new courses in curriculum, to coup-up with need to industry.

Reinforcing the culture of excellence

- All the central committees are formed with intent of pulling-out maximum potential from institute's resources and thrive for excellence in every venture that organization undertakes.
- To cope up with recent trends and industry know-how faculties and students are encouraged and supported, in terms of duty-leave/financial aid, for attending/ organizing STTP, FDP and FTP at industry as well
- MIT appreciates faculty- student efforts by felicitating for their professional progress.

Champion organizational change

- Organization leadership and governance supports and works on inputs from its stakeholders, which paves way to achieve Institute vision and serve society and nation through the institute's mission.
- Promote Entrepreneurship quality
- Active learning
- Use of solar power
- Go-Green
- Helmet Drives

- Earn and Learn scheme for UG & PG students
- Provide co-curricular courses on campus like Red-hat, Cloudera, etc.
- Promote extra-curricular activities for overall development of students.

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?

Whenever any new plan/policy is undertaken for the institution, it is first discussed at steering committee level &HOD meeting. Progress in execution of the plans is monitored time to time and discussed in the meetings of these Administrative bodies.

In case of crucial and vital decisions, approval from the affiliating University of Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, is sought.

Various Committees have been endowed with the duty of supervising respective areas of activities in the college, namely:

- Steering Committee
- IQAC
- AICTE, DTE, Joint DTE Correspondence
- University Correspondence and affiliation
- Shikshan Shulka Samiti now called as Fees Regulating Authority
- Admissions Committee
- Infrastructure Maintenance
- Database Management and Digitization
- Training and Placement, In-Plant Training
- Student Council
- Rector- Girl's and Boy's hostel
- Anti-Ragging Committee
- Internal Complaint Committee
- Alumni Association
- Public Relations Officer
- Time Table Committee
- Central M. Tech Coordinator
- Examination Control Cell
- Environment Science Teaching/ Examination
- Budget Committee

- Curriculum Revision Recommendation
 - Teacher Guardian
 - Library Committee
 - Industry Institute Partnership Cell
 - Innovation, Incubation and entrepreneurship development cell
 - Professional body activities
 - Research & Development Cell
 - Energy management cell
 - Green building initiative
 - Rainwater harvesting
 - N.S.S
 - SPIC MACAY Chapter
 - Sports
 - Central Bus Facility
 - Soft Skill Development cell
 - Cultural Committee
 - NPTEL and Massive Open On-line Course
 - Employee Grievance Cell
 - Student Grievance Cell
 - Robotics Club
- ❖ All these committees are required to submit quarterly report to the Principal about the progress of work related to their portfolios and review is taken about the same in IQAC meetings and correction/ improvement are suggested to all the concerns.
- ❖ Apart from that quarterly feedback from all committee incharges, the institution has a committee for academic and administrative audit of all the department. Reports of audit are submitted to IQAC. These audit recommendations and suggestions are implemented during subsequent functioning of the departments.
- ❖ Also the HODs are required to give monthly presentation in presence of Principal and all other HODs about the progress of their department and this helps in sharing the best practices.

6.1.5 Give details of the academic leadership provided to the faculty by the top management?

The Principal provides academic leadership on behalf of the top management; he is a representative of the institute. The Principal guides all the councils and committees of the institute. All decisions regarding implementation of all policies of the institute is done under the leadership of Principal and is periodically reported to the management. Vice-Principal Academics and Vice- Principal Administration are responsible for taking decisions in academic and administrative matters respectively in consultation of Principal.

The Management along with Principal's office encourages faculty members in ensuring a positive academic environment. Good proposals from the various departments/ committees or students are screened and forwarded to the concerned authorities for approval and necessary action. Various proposals for seminars and workshops in the college, guest lectures, Tech-Fest, research initiatives are fully supported by the Management and Department with financial-aid in few cases.

Principal along with respective Vice-Principals assigns and rotates responsibilities of different cells among faculty of the institute; every faculty member is involved in various academic, administrative and other committees. Regular training programs are provided to the faculty to take up responsibilities.

Teacher-Guardian concept is introduced in all the departments and it is effectively monitored by the Principal and the Vice-Principal.

Institute has systematic scheme for training newly-joined faculty, the top management also encourages the existing faculty for qualification improvement- by attending STTPS. FDPs and pursue Ph. D as well. HODs are empowered to take the decision pertaining to academics of the respective department and faculty members are trained and supported for all the academic activities inside the institute and also for their personal progress and development.

6.1.6 How does the college groom leadership at various levels?

The Principals, as the Head of the Institution, provides all required assistance to groom leadership quality among the students and teachers.

Grooming at student level

Sincere efforts are made at department as well as institute level to inculcate leadership quality in the students through various student-centered activities including NSS, Professional Body activities, Technical-Fest, Cultural fest, departmental seminars, etc. Good

performers are encouraged as well as felicitated by the college in front of others so that others get inspired and become ready to take up the challenges.

Apart from courses on communication and soft skill development subscribed in the curriculum, students are provided with opportunities to attend other such programs at the institute and outside as well.

Grooming at Faculty/ Staff level

The College management prioritizes in ensuring the quality level of faculty members during appointment, Training Programs for the faculty members are conducted for grooming them.

Management supports and encourages faculty participation in various Workshops, STTPs and FDPs on Management Skills, Teaching and learning methodology, Soft-Skill, and communicative skills etc.

Every faculty member is involved in various academic, administrative and other department level committees. The college committees are lead by senior faculty members and supported by the second-line leaders among the faculty which gives practical exposure to the junior faculty members.

Lab-Staff is also promoted to attend STTPs and skill development programs outside. Performers are facilitated at Department as well as Institute Levels

Grooming at Administrative Level

Special training program on “Emotional Intelligence” (Gurukul for Gurus) for Principal, Vice Principal, Head of department and few senior faculty members was organized to groom them.

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?

Institute follows decentralization, decentralized governance is ensured in the Institute having separate committees for each activity. Few levels of decentralization are listed under:

Top Management

(Board of Governance, Director General) provide directions and guidelines to work in alignment with the vision and mission of the institution

Principal

The Top Management delegates the authority and gives ample freedom and flexibility to the Principal together with various academic committees to lead all the academic activities of the college. Regular meetings are held between them to take necessary steps for formulation

and implementation of strategic plans.

Head of the department

Authority is delegated by Principal to all the HOD's for functioning of the departments. HODs are responsible for planning and monitoring the academic activities of their respective department. HODs timely report the Principal/ Vice-Principal related to their academic progress. They have freedom of taking necessary action for overall control and monitoring of the department.

In-charge of various central committees

Faculty members are involved with various academic and administrative committees at central level. These committees are headed by senior faculty members who have freedom of taking necessary action in consultation with the Principal for overall controlling and monitoring of their committees work.

Faculty

Faculties have ample of freedom on expressing their ideas related to academic excellence and innovations. Ideas are promoted at higher level by the respective HODs through proper channel. There are various departmental committees who have freedom to organize events under department professional bodies or otherwise.

Students

Class representative get opportunities to represent their classes. Cultural secretary, General Secretary and sports secretary are selected from among students. Each department has students association and organizes various events. They are authorized to take the minor decisions in relation to the activity assigned to them in consultation with the faculty advisor assigned for that activity. Thus, it can be clearly seen that there is an unbroken chain of authority coupled with sense of responsibility right from top management to faculty members and even students.

6.1.8 Does the college promote a culture of participative management? If, yes, indicate the levels of participative management.

Yes. The Institute promotes a culture of participative management. The committees of implementation of predefined plan include active participation of faculties as well as students.

The level of participation includes-

- Top Management
- Governing Body

- Principal
- IQAC
- Steering Committee
- In charges of various committees
- HOD
- Faculty
- Student/ council
- Students association

At Governing Body level

- In Governing Body there is presence of top management, Principal, two representatives of faculty, representatives of AICTE, DTE and University and few industry persons. G.B takes the policy decisions by taking suggestions from all its members.
- Decisions of GB are implemented by principal with the help of both V.Ps and all HODs by participative management through HOD meetings where the plan of action for implementing these policies are decided.

IQAC

IQAC is another committee where all the quality related issues are discussed and decisions are taken for achieving excellence in all the activities of the institute by participation of all the members of IQAC.

Steering Committee

Steering committee is the committee which is responsible for execution of all these decisions inside the institution.

Apart from all these committees there are many other central committees and department level committees in which participative decision making and implementation is promoted at all levels

6.2 Strategy Development and Deployment

6.2.1 Does the college have a formally stated quality policy? How is it designed, driven, deployed and reviewed?

Yes, MIT has a formally stated quality policy which is as follows:

“To strive for global standards of excellence in all our endeavors such as teaching-learning, consultancy, R&D etc., through the process of self evaluation and continuous

improvement”.

Quality policy is derived and aligned with respect to the vision and mission of the institution stated above. Quality policy clearly states the objectives of the institution, their process of progress towards the achievement of objectives and its contribution to the society. All these strategies are monitored by the IQAC.

Quality Document defines institute Policies on all the issues for quality assurance. They shall be implemented scrupulously encouraging improvement and innovation at various levels and developing the institute into a Centre of Excellence thus increasing the stakeholder's value and providing quality service to the society.

How it is designed:

In light of the challenges posed through Liberalization, Privatization and Globalization, competency development among humans is identified as the only solution. Based on this conclusion, the quality policy of the institute is developed and adequate awareness is created in all stakeholders through website and various publications of the institute.

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 developed a perspective plan for its academic and administrative growth and is being implemented. Salient features are mentioned below:

The institute has following **long term objectives** that are addressed through an ever evolving plan of action which is realigning with changing ground reality.

Objectives :

1. Enhancing employability of students
2. Encouraging entrepreneurship amongst students and faculty
3. Socially and industrially relevant research and development
4. Faculty development
5. Other Objectives

Plan :

The above objectives are being achieved through an action plan, which is also being recalibrated from time to time.

The over view of plan to achieve these objectives is given below:

1. Enhancing Employability of Students

- **Integrating skill development with academic activities** – The idea is to impart

necessary skills which are currently not covered in academic curriculum for students of all branches.

- **Introducing industry relevant content** - Add new and upcoming topics through adjunct faculty to ensure that the faculty and student are current in their domain
- To set up few micro enterprises on campus so as to provide opportunity to students to learn the things practically those have current relevance in industry.

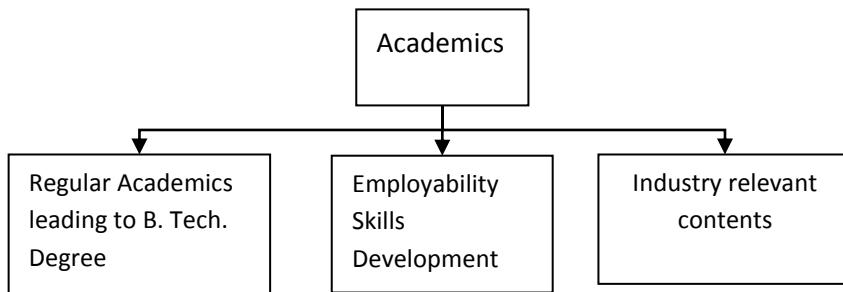


Figure 6.1 Academic Objectives

2. Encouraging entrepreneurship amongst students and faculty

MIT is planning to set up a big innovation & Incubation center for inculcating the culture of innovation and entrepreneurship amongst the students and faculty members of the institute.

3. Social and Industrially relevant research and development

Students and faculty members will be encouraged to take up the R&D projects that are socially and industrially relevant so as to have contribution to the national development.

4. Faculty development

Participation in International and National Conferences, Workshops and Seminars Foreign Collaborations with industries and Universities for Training and Research Training, Tie-Ups and Exchange programs with international Universities and industries Increasing copyrights and patents.

5. Other Objectives

- To attain academic autonomy in 2020.
- Promote extensive use of ICT in all academic and administrative processes.
- Creating awareness among students and staff for zero waste campus, e-waste management, paper saving, energy audits, safety audits, preventing food wastage, etc.
- Adopting villages through National Service Scheme (NSS)

- Providing technical solutions to rural problems through Unnat Maharashtra Abhiyan.

The Institute is building an ecosystem to attain the above stated objective

Solutions Ecosystem

- R&D services that are industry demand driven as well as community demand driven
- Analytical Labs services such as :
 - Center for Analytical Research and Studies (CARS) , is already functioning.
 - MIT Center for Industry Relevance In Polymer Science and Engineering (M-CIP), will be completely operational in MIT very soon.
- Skill development services like Analytical Lab training, Siemens Automation & Mechatronics training, training on Plastic Molding , training in Advanced Manufacturing, training in the area of CAD-CAM
- Incubation and Innovation Services through new incubation center are in plan.

Structure:

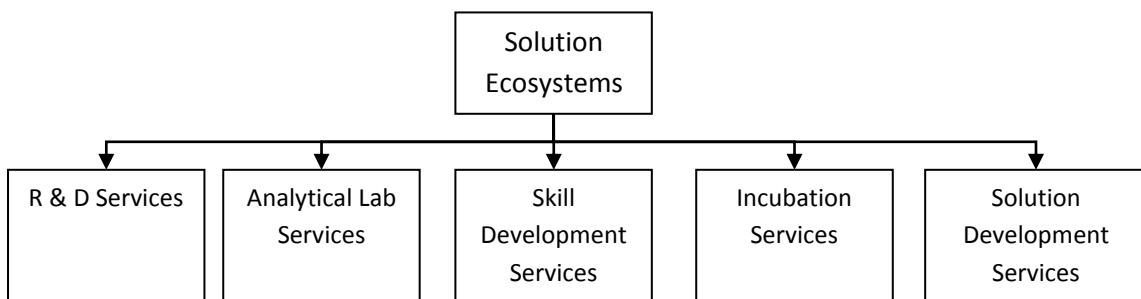


Figure 6.2 Solutions Ecosystem

The Academic and Employability skill development work under a single authority for effective administration. This ecosystem will be implemented on top priority.

In view of all above activities planned by the institute for next five years, the broad perspective plan with time-line is prepared and is as follows:

Table 6.1 Broad Perspective Plan

Year	Proposed Plan
2016	To start few Micro-enterprises for practical exposure to students of MIT to understand the industrial practices.
2017	<ul style="list-style-type: none"> • To Get NAAC Accreditation • To acquire permanent affiliation
2018	<ul style="list-style-type: none"> • To set-up Incubation & Innovation Center • To acquire NBA Accreditation

2019	<ul style="list-style-type: none">• To start PG courses in Civil Engineering, Plastic and Polymer Engineering and Electrical Engineering.• To establish few more research centers
2020	To become an autonomous institute

6.2.3 Describe the internal organizational structure and decision making processes.

The quality initiatives and decision making of the Institute are executed through a well planned organizational structure given below:

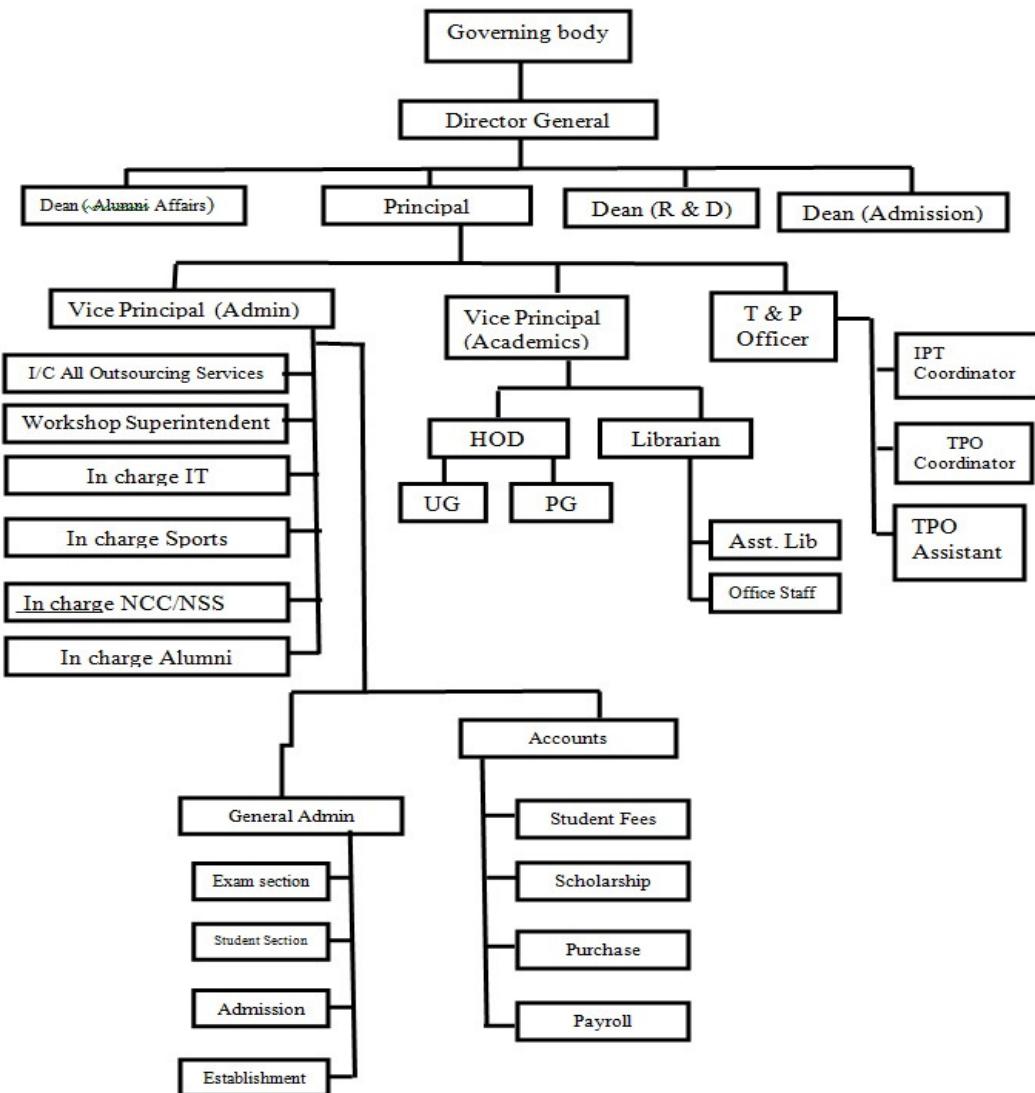


Figure 6.3 Organization Structure

The roles of Director General who is representing top management and some of the top authorities, who are responsible for implementation of all the quality initiatives, are given below:

Top Management: - (Chairperson, Board of Directors, Director General) ensures the effective institutions working under the umbrella of G.S. Mandal and General Secretary of G. S. Mandal.

The Chairperson takes up all measures to enhance the smooth functioning of the institutions. The top management is involved in framing directive principles and policies and amends and approves policies from time to time. Sets objectives in consonance with the quality policies and shares its vision through periodic Executive Committee (EC), Governing Body (GB).

Role of Director General:-

- Mobilize internal & external resources to strengthen the institute.
- Plan & provide necessary facilities/equipment for development.
- Instill confidence & devotion in every member of the institute
- Hires competent, dedicated individuals to implement teaching-learning process effectively to realize the vision and mission of the institute
- Creates an atmosphere that is fair, transparent, motivating and conducive to faculty and staff to realize their potential
- Makes financial provision to provide infrastructure and facilities suitable for effective services and to cater to further requirements as per growing needs

Role of Principal:-

The Principal as an administrative and academic head of the Institute shall be responsible for

- Academic growth of the institute
- Participation in the teaching work, research and training program of the institute
- Planning and assisting in planning and implementation of academic program such as orientation courses, seminar, in service and other training program organized by the university and / or recognized institute for the academic competence of the faculty members.
- Admission of students and maintenance of discipline of the institution.
- Receipt, payments and proper maintenance of account
- Management of the institute libraries , laboratories and hostel
- Correspondence relating to the administration of the institute
- Administration and supervision of curricular, co-curricular, extracurricular activities of the institute and maintenance record
- Observance of the act, statutes, ordinances, the university account code, regulations, rules and other order issued by the university , state government and

governing body their under from time to time.

- Supervision and conduct of institute and university examination including internal assessment and such other work pertaining to the examination as assigned.
- Assessing reports of teacher and maintenance of service book of employees of the institute.
- Any other work relating to the institute and university as may be assigned to him by the GB of the university from time to time.

Role of HOD:-

The Head of the department shall be responsible for

- Academic growth of the department
- Participation in the teaching work, research and training program of the department
- Planning and assisting in planning and implementation of academic program such as orientation courses, seminar, in service and other training program organized by the university for the academic year of the faculty members
- Admission of students and maintenance of discipline of the department.
- Receipt, expenditure and proper maintenance of account
- Management of the department libraries , laboratories
- Correspondence relating to the administration of the department
- Administration and supervision of curricular, co-curricular, extracurricular annual activities of the department and maintenance record
- Observance of the act, statutes, ordinances, regulations, rules and other order issued by the university from time to time
- Observance of provision of account code
- Assessing reports of teacher and the confidential report of other employees in the department
- Any other work relating to the department and the university as may be assigned to him/her by the Vice Chancellor

Role of Dean R&D:-

Dean (R&D) has the crucial role of promoting research and scholarship within the Institute. He helps raise awareness of funding opportunities to support faculty research, and oversees systems and processes related to externally funded sponsored/consultancy projects. He also oversees conference travel funding for faculty and research scholars, and facilitates

conferences and workshops held at the Institute

Role of Dean (Admission) :-

Dean is involved centrally in including strategic planning, budget, curriculum, facilities. Develops and implements marketing and recruitment strategies to achieve enrolment goals for undergraduate and post graduate students.

- Develop collaborative relationships with internal and external constituents
- High level planning to achieve enrolment goals
- Responsible for expanding catchment, and ensuring steady enrolment goals, while maintaining outstanding academic standards
- Responsible in preparing and distributing the college catalogue and other admissions literature
- Works closely with the student financial aid and student affairs to assure complete service to newly admitted students
- Provides welcoming services to potential students and families who wish to learn more about the campus.

Vice-Principal (Administration):-

- Employee recruitment and development
- Purchase process
- Resource provision
- Preparing Budget
- Office administration
- Compliance with AICTE, DTE, University, FRA, etc.
- Admissions
- Alumni Interactions
- Public relations

Vice-Principal (Academics):-

- Prepare and execute academic calendar
- Oversee the teaching-learning process
- Carry out result analysis and suggest corrective measures to Principal
- Initiate supplementary teaching measures
- Establish effective feedback system

Role of Training and Placement Officer:-

- To look after the training and placement activities of students.
- To have close liaison with industry for placement of students
- To work in consultation with Coordinator Industry-Institute Interaction for organizing lectures from the professionals from industries.
- To collect feedback from the companies coming for placement.
- Arrange Training programmes for soft skills and for interview facing skills for the students using institutional and external expertise.
- To organize the entrepreneurship workshops.
- Liaison with industry Identify & provide for training needs of students
- Arrange campus interviews

Role of In-Plant Training Coordinator:-

IPT coordinator in consultation with TPO schedules in-plant training interviews and monitors the progress of students during training period.

Role of Librarian:-

The Librarian is responsible for planning and developing of the library of the Institute and provide the necessary library services to the students and faculties of the institute.

Librarian is accountable for all matters concern with the library.

- General Administration of library
- Books / Periodicals selection and acquisition
- Planning and development the library.
- Supervising of cataloguing
- Repairing and maintenance of library

Regular academic related decisions are taken by Principal in coordination with Vice Principal (Academics) and HODs and administrative related decision with the help of Vice Principal (Administrative). Quality related decisions are finalized in IQAC. Steering committee provides additional help to Principal in execution.

6.2.4 Give abroad 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

- Implementation of outcome based teaching and learning methodology.
- Recruitment of well qualified and experienced staff as per AICTE norms.
- Sponsorship to faculty for higher studies and faculty development programmes.
- Use of modern teaching aids like LCD projectors and interactive boards in the class rooms.
- Continuous evaluation system for students.
- Introduction of various professional programs in collaboration with global institutions of repute.
- Emphasis on imparting skills through laboratory experiments and industrial visits/training/ tours and various skill development programmes.

Research & Development

- To strengthen the culture of research and development by encouraging faculty members to pursue research by providing them the facilities like individual system, Wi-Fi connection, digital library, equipment and laboratory.
- To promote production of intellectual property in terms of research output, publications, applied research and transfer of knowledge.
- To encourage students to undertake industry sponsored projects.
- To encourage students to produce technical papers and contribute for research activities.
- To encourage faculty members to submit research proposals to various funding Agencies.
- MOUs with industries for undertaking R&D and consultancy work.

Community engagement

- Institute conducts community programs like blood donation camps, Tree plantation, Clean India Campaign interacts with community. The students and faculty undertake community awareness programmes. Its National Social Service (NSS) program organizes various social events for community engagement along with camp.
- To inculcate strong ethics and human values with continuous counseling and

interaction with parents.

Human resource management

- Institute has mechanism of notification of regular posts and conduct interviews. The institution recruits faculty members and staff based on the guidelines provided by the Affiliating University.
- Adequate number of qualified teaching and supporting staff are appointed through the procedure of open advertisement & interview by Expert committee.
- Apart from this whenever deserving candidate approaches the Institute, it conducts interviews and offers suitable position.
- For the candidates in other states the interviews are also conducted through ‘Skype’, for their convenience.
- The recruited faculty are deputed to undergo faculty development program to enhance the Teaching Learning Process.

Industry interaction

- To introduce industry relevant programmes in association with leading industries through tie-ups.
- To encourage students to take up industry sponsored projects.
- Involvement of industry experts in academic activities in the form of expert lectures
- Providing consultancy to the industries.
- Experience industry person are appointed as adjunct faculty members.
- Participation in industrial exhibition at National level
- Being equity partners in various industry clusters such as Marathwada Auto Cluster (MAC), Electronics Brown Field Manufacturing Cluster

Institute adheres by the above stated quality strategies.

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?

Annual report of the Institute is prepared for consideration of GB with inputs from

- Monthly reports of all departments are sent to the Principal regarding the different activities conducted by the department.
- Monthly meeting of HODs to review various activities.

- At the mid of each semester online feedback from the students taken and suggestions from the students are used to improve academic and infrastructure facilities.
- Monitoring, review and evaluation of functioning of all committees.

The Principal discusses the day to day functioning of the Institute with the management. Any improvements or modifications will be decided by the management. Based on that, necessary circular is taken out and circulated. Also an annual report is sent to the management by the Principal in the month of March every year in the format prescribed by management. All the activities carried out are hosted on institute website for information to all other stakeholders.

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 management is always encouraging and supporting the involvement of faculty and staff in improving the Institutional process by

- Delegating the authority by appointing the HODs, Section in-charges, coordinators and members of committees.
- Deputing faculty to attend seminars, workshops, conferences, guest lecturers either as participants or resource persons.
- Organizing seminars, workshops, and conferences, guest lectures, etc.
- Higher level faculty members likewise Principal, HOD and other senior faculty members are trained with the help of professional for best HR practices- ‘Emotional Intelligence’(Gurukul for Gurus program) for developing leadership qualities of such senior person. This improves effectiveness and efficiency of institutional processes through active involvement of faculty.

6.2.7 Enumerate the resolutions made by the Management Council in the last year and the status of implementation of such resolutions.

The resolution made by Management Council (Executive Council) and Governing Body (GB) in last year and status of implementation is as follows:

Table 6.2 Executive Committee Resolutions

Sr. No	Meeting Date	Resolution	Implementation
Meeting of Executive Council (EC)			
01.	27 th March 2016	<p>Item No. 1 :Approve the revised Budget of G.S. Mandal, Aurangabad for the year 2016- 17.</p> <p>Item No. 2 : To appoint a Chartered Accountant for the purpose of audit for the year 2015-16.</p> <p>Item No. 3: progress of all Institutes of G.S. Mandal, Aurangabad.</p> <p>Item No.4 : To submit a proposal to the -SERC, DST, New Delhi for getting grants to organize two days conference on the topic “Materials for Advanced Technology & Applications” in the Department of Plastic and Polymer Engineering, MIT (T), Aurangabad. 27th March, 2016.</p>	<p>Approved & Implemented.</p> <p>Appointed</p> <p>Reviewed.</p> <p>Proposal submitted.</p>
02.	26 th June 2016	<p>Item No.1 : read and confirm the Minutes of the last Executive Committee Meeting held on 27th March, 2016.</p> <p>Item No.2 : To take a review of the progress of NBA at MIT (E/T/P).</p> <p>Item No. 3: To discuss the admission policies for the year 2016-17.</p> <p>Item No. 4: To review and discuss the infrastructural facilities at MIT, Aurangabad campus.</p>	<p>Minutes confirmed.</p> <p>Reviewed</p> <p>Admission policies discussed & implemented.</p> <p>Discussed the facilities available in MIT</p>

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03.	18 th September 2016	<p>Item No. 1 :</p> <p>To take a review of Results of all Academic Institutions run by G.S. Mandal, Aurangabad.</p> <p>Item No. 2.:</p> <p>To take a review of the admissions in various institutions under the control of this Trust during the year 2016-17.</p> <p>Item No. 3 :</p> <p>To authorize the Principal, Maharashtra Institute of Technology, Aurangabad to sign all Necessary papers for getting financial assistance from the SERB to organize “International Conference on Digital Signal and Image Processing- 2017” in MIT.</p>	<p>A review of Results was taken. Expressed satisfaction.</p> <p>Reviewed the admission status.</p> <p>Authorized the Principal accordingly to get financial assistance</p>
04.	25 th December 2016	<p>Item No. 1:</p> <p>To discuss the issue of ‘faculty recruitment’ of University approved Institutions as per the U.G.C. Norms.</p> <p>Item No. 2 :</p> <p>To review technical education scenario in Maharashtra with reference to BATU, Lonere.</p> <p>Item No. 3 :</p> <p>To discuss about the ‘DEC’, an initiative of MIT for inter - disciplinary and innovative work.</p>	<p>Discussed the issue and taken necessary steps.</p> <p>Discussed this issue.</p> <p>The DEC of MIT was discussed.</p>

Self Study Report

05	10 th March 2016	<p>Item No 1:</p> <p>To take the review of the activities of the institute after last Governing Body meeting</p> <p>Item No 2:</p> <p>To standardize all internal Communications and to emphasize on paperless communication, to reply emails within 12 hours of receiving the same</p> <p>Item No 3:</p> <p>To discuss and approve the budget of the Institute for the financial year 2016-17.</p> <p>Item No 4:</p> <p>Implementation and Effect of Outcome Based Education (OBE) in the Academic Year 2016-17.</p> <p>Item No 5:</p> <p>To present Budget for Research and Development for financial year 2016-17</p> <p>Item No 6:</p> <p>To discuss about setting Centre for Analytical Research Centre and Studies (CARS)</p>	<p>Reviewed the activities</p> <p>Discussed the issue and action were taken</p> <p>Budget was sanctioned</p> <p>Necessary work on OBE were done. Software related to OBE had been developed</p> <p>R&D Budget was sanctioned</p> <p>Discussed and agreed to set up the Centre</p>
6	26 th August,20 16	<p>Item No. 1 :</p> <p>To take a review of Academics of all classes of the institute</p>	<p>A review of Academics was taken and expressed satisfaction as students started attending classes from the very first day</p>

	<p>Item No. 2: To take a review of Implementation and Effect of Outcome Based Education (OBE) in the Academic Year 2016-17.</p> <p>Item No. 3 : To take review of Centre for Analytical Research Centre and Studies (CARS)</p> <p>Item No. 4: To discuss about setting MIT Centre for Industry Relevance in Polymer Science and Engineering (MCIP)</p>	<p>Members expressed their satisfaction about the development and use of OBE software, by faculty members</p> <p>Review Taken</p>
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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,

The affiliating university has a provision to accord status of autonomy to an affiliated institution. Institute has a plan to get permanently affiliated by Dr. Babasaheb Ambedkar Marathwada University, Aurangabad by fulfilling all the conditions necessary to get permanent affiliation. The institute has already taken steps in the direction by publishing advertisement in news paper for getting UGC approval to various faculty positions. Also institute is applying to NAAC for getting accreditation status so that very soon institute can apply for permanent affiliation.

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?

Yes,

The institute has constituted a Grievance Redressal committee which takes care of handling of grievances from both students and faculty members. The constitution of the committee is as given below:

Table 6.3 Grievances Redressal Committee

Sr.	Name of Member	Post	Designation
1	Dr. Santosh Bhosle	Principal	Chairman
2	Prof. V.M. Chidri	Dean(Alumni)	Coordinator
3	Dr. J.G. Muley	Asso. Prof. CED	Member
4	Prof. R.K. Kanhe	Asso. Prof. ETC	Member
5	Prof. S.R. Chaudhary	Asso. Prof. CSED	Member
6	Ms. B.P. Chaudhari	Asst. Prof	Member

- Mentorship scheme is implemented for promoting better stakeholder relationship by the Institute.
- Mentor takes complaints/suggestions in one of the regular meetings with the Mentees in written form.
- These complaints are first resolved by mentor at its level in case of inability the complaints are forwarded to In-charge.
- Mentor In-charge and H.O.D. sort the complaints according to its scope viz. Department level, Institute level and Hostel level.
- Then root-cause analysis is done and necessary corrective and preventive actions are taken to resolve complaint.
- Once the complaint is resolved then its action is circulated to all concerned for information.

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?

There have been no instances of court cases filed by and against institute in the last four years

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 an effort?

Yes.

- It has computerized (online) mechanism for analyzing student feedback.
- Student will be provided the names of faculty and subjects taught by the faculty and certain questionnaire will be there.
- Student will record his/her response to questionnaire by clicking on one of the options buttons viz. Excellent, Good, Satisfactory and Poor.

- According to the response given by student faculty will score some mark.
- The score as well as improvement required (if any) in any particular area by the faculty will be communicated to him/her by HOD.
- Entire online feedback process is confidential i.e. student and his/her feedback is not exposed at any stage.
- In some cases this feedback is also taken off-line.

6.3 Faculty Empowerment Strategies

The process of planning human resources including recruitment, performance appraisal and planning professional development programmes and seeking appropriate feedback, analysis of responses and ensure that they form the basis for planning. Efforts are made to upgrade the professional competence of the staff. There are mechanisms evolved for regular performance appraisal of staff by permitting them to attend the national and international conferences, STTPs, FDPs, MDPs, etc. They are free to experiment their within the given framework.

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 supports the teaching and non-teaching staff to enhance their professional Development

- Encouraging faculty members to associate with state, national and international professional bodies like CSI, IEEE, ISTE, IIM, IIIE, etc..
- Encouraging the faculty to interact with the outside world under Industry Institute Interaction Cell.
- Motivating faculty to organize state level, national level and international level conferences/seminars/workshops.
- Encouraging participation of faculty in FDPs, seminars, workshops and conferences.
- Motivating the faculty and staff for arranging industrial training programs and visits.
- Allowing the teaching and non-teaching staff to attend skill development and training programs.
- Allowing them to attend courses to improve their educational qualification.
- Organizing training programs for non-teaching staff on office automation, use of

open source software etc.

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?

Strategies adopted by the institution for faculty empowerment through training, retraining and motivating the employees for the roles and responsibility they perform include:

- Administrative skill development of faculty: for this Institute organizes corporate training programs like Gurukul for Gurus.
- Personality development, teaching skill development and social and technical up gradation: Institute organizes special training programs.
- The Institute deputes the faculty for training organized by other organizations. For example, FDPs, STTPs, Workshops, Seminars, Conferences, etc.
- Institute invites resource persons such as industrialists, researchers and academicians for interactions with the faculty.
- Institute encourages the expert faculty to motivate the less experienced faculty by giving essential inputs, providing training on delivery of lectures, laboratory work and seminar/project guidance.
- They are fully empowered for giving assignments and assessment of term work and class test without any interference.
- They can arrange industry visit for their subjects for better understanding by the students.
- They are also allowed to visit industry and other institutes for their personal development.
- They can meet any higher authority freely in case of any grievances.

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 performance appraisal system consists of self-appraisal and appraisal by reviewing officer. Performance appraisal system of the faculty

- Annual self-assessment for the performance based appraisal system is in place.
- It is ensured that information on multiple activities is appropriately captured through

a well designed appraisal form.

The information includes

- General information and academic background, courses/STTP attended during the year.
- Academic performance information- Teaching, learning and evaluation related activities, co-curricular, extension, professional, development related activities. Research publications and academic contributions.
- Appraisal is reviewed and based on the performance of the concerned faculty in that year.
- Performance appraisal system of the non-teaching staff is also in place.
- Annual assessment for the performance based appraisal system is adopted as per guidelines of Government of Maharashtra.
- Hence it is ensured that information on multiple activities is appropriately captured.

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?

Vigilant scrutiny of appraisal reports helps in analyzing the performance of the faculty/staff. **Outcome:** The best part of the Appraisal System is that each faculty becomes aware of the areas of improvements.

Decision: The score/category obtained in the Performance Based Appraisal System (PBAS) contributes to the decision about faculty appreciation.

- Promotions are given to the faculty and staff based on their performances.
 - Heads of various committees at Institute level are identified.
 - Faculty with low score is personally counseled by the Principal and HOD
- Communication with stakeholders: Performance Based Appraisal System(PBAS) score of faculty is available to stakeholders as per their requirement/ request.

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?

Welfare schemes available for teaching and non-teaching staff are stated below:

- Provident Fund as per government norms
- Promotions as per experience and qualification
- Study Leave, Special Leave and other leaves

- Higher study sponsorship
- Immediate loans up to 2 lakhs available at Gramaudyogik Shikshan Mandals Cooperative Credit Society.
- Gratuity as per government norms
- Group Insurance of each employee with family cover uptoRs.200000
- Research incentive for publication of research paper, article, and case study in reputed journals.
- Sponsorship for STTP, FDP, etc.

6.3.6 What are the measures taken by the Institution for attracting and retaining eminent faculty?

Following strategies are adopted for attracting and retaining eminent faculty members-

- To pursue research and apply for research projects.
- Faculty is encouraged to attend/present research work in seminars, conferences and workshops.
- Due recognition is given to the faculty for research publication in reputed journals.
- Facilities to enhance the qualification and due support is extended wherever required
- Infrastructural Support
- Enriched library with latest books, journals and e-journals, etc. are available to all faculty members
- Free internet facility to everyone
- Well-equipped laboratories with high end equipments for research work are available.
- Study leave for higher studies is also provided
- Maternity leave is given to lady faculty members as per government norms
- Welfare schemes like Provident fund, Gratuity are extended to eligible candidates
- Faculty members are supported for trainings within country and abroad

Other Support

- Appropriate Trainings are offered to the faculty.

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?

Budget Approval: -

- The Institute follows a proper budgeting system, with adequate resources for non-recurring expenses, recurring expenses (e.g. salary, faculty development, maintenance etc.), new recruitment, learning resources (e.g. books, journals and online journals), Infrastructure development (e.g. addition of new equipment and materials) and expansion plan.
- Every year, all Department/Section, in consultation with the other faculty members and staff, prepare annual budget proposal and submit it to the Head of Institute on/before 31st March through HODs and section incharges.
- The budget of the institute is prepared and gets approved in the Governing Body meeting held in March, every year.
- Following the approval, additional justification if necessary, is provided by the respective department, after which a standard operative procedure is followed for procuring and purchasing.

Material Procurement:

Department gets approval of principal for its requirements.

- Department Purchase Committee call quotations and prepare comparative statement with the permission of Principal.
- Though, lowest quotation is normally recommended, the Committee may recommend other than this supported by their justification

- The Principal-Office will prepare the Purchase Orders for the approved equipments and put these before the Competent Authority/DG for approval.
- Purchase order is issued to supplier after getting all these with one copy to Department, one copy to A/C Section, and one copy for Principal's Office

Financial Empowerment:

As per policy of parent trust, G. S. Mandal (GSM)

- Principal is empowered to sanction bills like TA bills, maintenance bills, services, etc., up to Rs. 5000 at a time limited to Rs.20000 per month.
- HOD/Section I/C are empowered to pass the local purchase bills up to Rs 500 at a time limited to Rs 1000 per subject per month.
- The Governing Body of the Institute and General Secretary, G.S. Mandal powered to sanction bill up to Rs. 5 lakhs.
- If amount exceeds Rs. 5 lakhs, then Governing Body recommend it to GSM, Executive Committee

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.

- The institution is having qualified practicing chartered accountant as internal and external auditors who audit the accounts annually. After the audit the report is sent to the management for review.

Table 6.4 Details of Audits

Internal/ External Audit	Last Audit Date	Details of Compliance
Internal Auditor: Ms. Mamta Raut Chartered Accountant	30 th September,2016	No Audit Objection
External Auditor: Mr. N.V. Sharma Chartered Accountant Sharma N.V. & Company, Aurangabad	17 th October, 2016	There is no adverse remark on the accounts of institute

- The college is filing income tax return every year within the stipulated time.

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 source of institutional receipts/funding is Tuition Fees. Other income sources are gradually increasing from new ventures like Microenterprises and Centers of Excellence. Audited income and expenditure statement of academic and administrative activities of the previous four years are available. Deficit, if any is taken care by the Management through corpus fund.

Table 6.5 Audited Statement of income and Expenditure

Sr. No.	Particulars	2015-16	2014-15	2013-14	2012-13
1	Total Income(Rs.)	164,591,878	139,446,372	146,592,239	136,317,400
2	Total Expenditure(Rs.)	208,651,918	149,709,869	131,661,329	112,498,327
3	Surplus Amount(Rs.)	--	--	14,930,910	23,819,073
4	Deficit Amount (Rs.)	44,060,040	10,263,497		

For the year of 2016-17, income and expenditure statement of academic and administrative activities till December, 2016 is available and mentioned below.

Table 6.6 Income - Expenditure Statement

Sr. No.	Particulars	2016-17 Till December 2016
1	Total Income(Rs.)	154,254,268
2	Total Expenditure(Rs.)	117,854,016
3	Surplus Amount(Rs.)	36,400,252

6.4.4 Give details on the efforts made by the institution in securing additional funding and the utilization of the same (if any).

For acquiring additional funding, the institute generates revenue through

- Testing and consultancy
- Certificate Courses (Red Hat, Cloudera, FTIR, IGTR etc)

- Funds received from Govt. Agencies (DST, University, Social Welfare Dept.etc) for
 - Mobile Soil Testing Van
 - NSS
 - Purchase of Books
 - Seminar and Workshop and many more.

Table 6.7 Funds received and Utilized During Last Four Years

Sr.no	Particulars	2015-16	2014-15	2013-14	2012-13
Income (Rs)					
1	R&D (Testing and consultancy)	442,457	140,090	136,651	---
2	Mobile Soil Testing Van	5,488,000	-	-	-
3	NSS	52,820	5,871	34,736	6,958
4	Social Welfare Department	999,500	-	-	-
Expenditure (Rs)					
1	R&D (Testing and consultancy)	---	412,960	-	-
2	Mobile Soil Testing Van	7,756,217	-	-	-
3	NSS	11,200	--	44,467	-
4	Social Welfare Department	999,500	-	-	-

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 institute has a well defined quality policy which is stated as “To strive for global standards of excellence in all our endeavors such as teaching-learning, consultancy, R&D etc., through the process of self evaluation and continuous improvement”.

The Internal Quality Assurance Cell (IQAC) is formed in the Institute. The cell is working effectively for the overall quality improvement of the activities of the institute. The institute has well defined policy for the quality assurances which is ensured by the effective participation from all the stakeholders.

Quality assurance is a by-product of ongoing efforts to achieve the objectives of an institution, and to specify the checks and balances to evaluate the degree to which each of the tasks is fulfilled. Hence devotion and commitment to improvement rather than mere institutional control is the basis for devising procedures and instruments for assuring quality. The right balance between the health and growth of an institution needs to be struck. The IQAC has to ensure that whatever is done in the institution for “education” is done efficiently and effectively with high standards. In order to do this, the IQAC will have to first establish procedures and modalities to collect data and information on various aspects of institutional functioning.

The work of the IQAC is the first step towards internalization and institutionalization of quality enhancement initiatives. Its success depends upon the sense of belongingness and participation it can inculcate in all the constituents of the institution. It will not be yet another hierarchical structure or a record-keeping exercise in the institution. It will be a facilitative and participative voluntary system/unit/organ of the institution. It has the potential to become a vehicle for ushering in quality enhancement by working out planned interventionist strategies to remove deficiencies and enhance quality like the “Quality Circles” in industries.

Table 6.8 The Composition of the IQAC

Sr .No	Name of Members	Designation
1.	Dr. S. P. Bhosle	Chairman
2.	Prof. B. M. Deshmukh	Management Representative
3.	Mr. Amol Thakur	Industry Representative
4.	Dr. R. B. Naik	Member
5.	Ms. S. Mandal	Member
6.	Dr. P. M. Ambad	Coordinator
7.	Dr. H. P. Bobade	Member
8.	Dr. A. G. Dahake	Member
9.	Ms. K. V. Bhosle	Member
10.	Mr. K. T. Mahamuni	Member
11.	Dr. G. S. Sable	Member
12.	Dr. A. J. Keche	Member
13.	Dr. A. Chatterjee	Member
14.	Ms. S. P. Kodgire	Member
15.	Mr. S. V. Lomte	Member

16.	Ms. Sayali Chobe	Student Member
17.	Ms. Maithilee Deshmukh	Student Member
18.	Mr. Pranav Srivastav	Alumni Representative
19.	Mr. Manoj Thakur	Alumni Representative

b. How many decisions of the IQAC have been approved by the management/authorities for implementation and how many of them were actually implemented?

The IQAC Cell has been formulated off late and its functioning has just been started.

c. Does the IQAC have external members on its committee? If so, mention any significant contribution made by them.

Yes

IQAC includes committee members other than the main stakeholders of the system. One member of the committee is from the local body, one member is from the industry and two members are representing Alumni.

The inputs received from the external members are taken into consideration and implemented effectively for quality improvements, to name a few are as given below:

- The industrial requirements are understood and implemented by organizing faculty development programs like workshops, seminars given by the experts from industry.
- Special training programs for students to improve communication skills, leadership qualities are organized along with regular academics.

d. How do students and alumni contribute to the effective functioning of the IQAC?

- Software based student's feedback system gives input for the improvement in teaching learning process.
- Mentor activity to cater the needs of the students based on their requirements. Known to the mentor due close interaction.
- Dedicated alumni cell, invites alumina for lecture talk for guiding current students
- Feedback from alumni community, regarding the current trends in the industry helps the institute for making necessary in curriculum. Value added courses etc.

e. How does the IQAC communicate and engage staff from different constituents of the institution?

The decisions and policies fixed by the IQAC are communicated to staff members from different constituents of institution through the Principal of the Institute through the notices; circulars issued through Principal's office and are circulated for information of all the faculty/staff by the respective HOD. As far as possible soft copy are sent through emails to everyone, so as to save the paper.

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

Integrated framework for quality assurance of the academic and administrative activities is available in the form of Academic and Administrative Audit conducted by Academic and Administrative Audit committee of the institute.

Operationalization of the framework:

- Academic and Administrative Audit committee takes audit of all faculty members.
- Audit Report send to Principal and respective HOD.
- Corrective measures are suggested and discussed in consultation with HOD and Principal.
- Corrective actions are taken by HOD

6.5.3 Does the institution provide training to its staff or effective implementation of the Quality assurance procedures? If 'yes', give details enumerating its impact.

Yes

- Conduction of Faculty development programs enhancing the quality of teaching learning processes.
- Encourage the Faculty members to attend STTP, Workshops and Conferences.
- Dedicated Institute Industry Interaction cell for practical on-site training and development of the students and faculty.
- Training is also provided to senior faculty members for enhancing administrative skills.

6.5.4 Does the institution undertake Academic Auditor other external review of the academic provisions? If 'yes', how are the outcomes used to improve the institutional activities?

Yes

Internal Audit

Audit of all the departmental processes including course file, practical file, Departmental Portfolios, Laboratory Manuals, etc. is conducted through internal auditors as appointed through the Academic and Administrative Audit Committee.

Outcome

- Faculty is given suggestion for improvement based of the discrepancies found during audit.
- Provision for extra lectures for the lagging syllabus of particular faculty.
- Dedicated Departmental library books and up-gradation as per the requirement.

6.5.5 How is the internal quality assurance mechanisms aligned with the requirements of the relevant external quality assurance agencies/regulatory authorities?

- IQAC is aligned with requirements of external quality assurance agencies in terms of quality of teaching-learning process.
- Teaching quality is monitored by concerned HODs and Vice Principal Academics. Based on above the corrective and preventive actions are implemented.
- The IQAC and other internal quality assurance mechanism works in line with the quality expectations of all the regulatory authorities like AICTE, DTE, University etc.

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?

Teaching learning process structure is reviewed through institutional mechanism

Structure for Review of teaching learning process

- Principal, Vice Principal (Academics), HODs, academic and administrative committee, student representative s forms the structure to review teaching-learning process. HOD meetings conducted by the principal help in review of the Working of the college. HOD's conduct monthly departmental meetings in order to

review the progress and performance of the department. Minor issue are discussed and solved at department level, whereas major points are discussed and necessary changes are suggested at Head of the Institute level.

- Also Vice-Principal (Academics) takes the feedback from students in presence of HOD about the teaching learning process and suggestions are given to concerned faculty members.
- Academic and administrative audit conducted in each semester also provides the necessary information for taking corrective actions for the improvement in teaching-learning process.

Methodology

The review of teaching learning is done in the following manner:

- Preparation of academic calendar at beginning of every semester.
- Taking subject choices from faculty.
- Departmental time table preparation of classroom, laboratory session on the basis of choices given.
- Teaching plan and practical plan preparation by faculties based on academic calendar and personal time table at the beginning of semester.
- Innovative, digital teaching-learning and working environment in college.
- Implementation of Teacher Guardian Scheme (TGS) for improvement of teacher - student interaction.
- An academic and administrative audit of each department is done by academic and administrative audit Committee.
- Feedback from students is taken at the department level as well as Vice Principal (Academics).
- Feedback received from students and from academic and administrative audit committee is utilized for further improvement.
- Result analysis at the end of each examination and corrective actions are taken based on the findings of result analysis.
- Student Feedback in each semester at the end of semester in the form of course end survey.

Outcome

- Academic calendar plans the smooth schedule for the complete semester for effective teaching-learning process.

- The Teaching Plan and practical plan helps the teachers in organizing their time leading to timely completion of curriculum and conducting examinations as planned. This has led to improvement of results.
- Based on the students feedback and academic and administrative audit necessary actions are suggested to concerned faculties and implemented timely.
- Use of smart teaching aids to improve the visualization quality of the students
- TGS scheme helps students to discuss and attain the personal traits in the learning through individual discussion with Mentors.

6.5.7 How does the institution communicate its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders?

- Parent Meets: Institute organizes parent meet on regular basis, once in a semester
- Alumni Meets: Institute organizes Alumni meet on regular basis.
- Mentor Meetings: Monthly Mentor meetings are arranged for the Students for feedback, review of Teaching Learning process, Communication of Policies to Students
- Display of vision, mission and quality policy on the website of the Institute, as well as on boards at prominent places on campus.
- Vision, Mission and quality assurance mechanisms are included in the information brochure and institute website.
- All stakeholders are informed of quality assurance and outcomes during induction programs, students mentor meetings, parent meetings, alumni meets, as well as all other appropriate forums by the Head of the Institute or concerned HODs.
- Any other relevant information regarding Governance Leadership and Management which the college would like to include.

The Institute is a pioneering and leading Institute in the Marathwada Region of Maharashtra state. It has maintained a high reputation in quality of teaching learning process. Recently in the year 2016 Institute is ranked first in the region and the 73rd in the country at the Survey done by Outlook for best professional colleges in the country. The survey also includes all prestigious institutes of the country IITs, NITs etc. It is matter of pride for all of us in this region that our institute is featured in this list consecutively 3rd time with consistent improvement in its ranking from 78th to 75th to 73rd and for being the only institute from this region to be in this list.

CRITERION VII: INNOVATION AND BEST PRACTICES

7.1 Environment Consciousness

7.1.1 Does the Institute conduct a Green Audit of its Campus and Facilities.

Environment consciousness is enshrined in the mission of the institute and tree plantation is the major concern of the management to maintain the pristine purity and beauty of the college to provide a congenial atmosphere for the academic and non-academic pursuits. Green audit of the campus is carried out by the staff under NSS periodically by supervising the maintenance of the existing trees and locating places for planting new trees.

- Tree Plantation is done every year through NSS
- The college has nurtured number of trees of different variety at different locations.
- Most of the work is paperless as college has been utilizing ERP software.
- Special contract is given to outside agency to keep campus neat and clean.

7.1.2 What are the initiatives taken by the College to make the campus Eco friendly?

Energy Conservation

- Minimal consumption of energy is the saving factor of energy conservation in the campus. Appropriate displays help in creating awareness about power saving and safety.
- The use of LED and CFL lamps reduced energy consumption.
- The faculty, staff and students are taking care to switch off power supply whenever it is not required.
- Solar water heaters are installed in boys and girls hostel on the campus for daily use of students.
- Institute has installed the biggest roof top solar system for production of electricity which generates 100kwh power that is used for the regular functioning of the institute.
- Students are asked to write on both sides of journal papers thereby saving the paper and in turn cutting of trees.

Plantation

- Different types of trees are planted in campus
- NSS unit is also carrying out tree plantation as regular activity in campus and nearby villages during NSS camps.

Rain Water-Harvesting

- The rain water harvesting set up is effectively set up at the campus. Further the guidance about the same has been extended to 144 individual bungalows and 15 apartments by MIT students under the guidance of faculty member Prof. S. R. Kendre.
- Monsoon run of roof top water is collected and used for garden irrigation.
- For water harvesting, survey has been carried out and underground storage tanks are constructed near hostels.
- Reuse of waste water for gardening is in the plan (developing stage).
- Markers & sensors are installed at roof top water tanks to avoid overflows.
- Every year NSS volunteers are involved in watershed related projects.
- Students also created awareness about qualitative & quantitative ground water depletion in Satara village.
- Students created awareness about water scarcity issues and to promote water conservation methods through street plays.
- We consider ourselves responsible stewards for water and teach our students continuously that communities are responsible for climate change and resultant scarcity of water supplies and cycles.
- MIT's efforts about awareness program of Water Conservation have been well acknowledged and publicized by all newspapers.
- The cycle rally of students created awareness about water & plantation
- Jalkranti is an initiative by MIT faculty Prof P. R. Awasarmal to create awareness about water conservation & rain water harvesting.
- Awareness about environmental issues is created amongst the students through lecture talk by the faculty expert available in the institute. i. e. Prof. Jagdish Godihal who is doctorate in environmental science from IIT Mumbai and also invited by other institute for delivering the talks for creating environmental awareness.

7.2 Innovations

7.2.1 Provide details of innovations introduced during the last five years which have created a positive impact on the functioning of the College.

Innovations in Teaching Learning Practices and Learning Resources and Evaluation

1. Academic Calendar at college level and Department level its execution.
2. Remedial classes
3. Soft Skill Training by professionals
4. Tutorials
5. Course file with innovative contents
6. Smart Class Rooms by Pearson.
7. Teacher Guardian Scheme
8. NPTEL Online Courses for Students and Faculty
9. Specialized training on emotional intelligence (viz. "Gurukul for Gurus") to senior faculty members
10. Content Beyond the syllabus with the help of adjunct faculty members who are experts from industry.
11. Guest lectures by Alumni
12. Learning through webinars by industries.
13. Online class tests are conducted, which provides immediate evolution thereby saving the evaluation time and students can get timely result of the test.
14. Students are encouraged to do innovative projects.
15. Student's projects are more focused towards actual industrial problems.
16. Wired internet leased line of 1 GBPS and proposed Wi-fi campus which is highest in the region. Sport facility like basket ball court available.
17. NPTEL Videos available online as well as offline.
18. Seminar hall for every department equipped with LCD projector and good public address system.
19. Portable LED projection system.
20. State of the art Language lab.

7.3 Best Practices

7.3.1 Give details of any two best practices which have contributed to better academic and administrative functioning of the college.

Best Practice – 1

Title of the practice: Online Learning

1. Goal:

Along with the traditional teaching methodologies, Massive Open Online Course platforms are promoted in the institute. MOOC platform like NPTEL helps student to learn subject of their choice irrespective of the student's branch. With this platform student, can directly learn from the faculties of various IIT's and NIT's.

2. Context:

As our institute comes in affiliated system. Hence have fixed structure of subjects and their number of hours to teach. MOOC helps students to learn and practice the subject beyond that structure and teaching hours. MOOC includes online videos, quizzes, and assignments projects. These exercises do not have any credit/marks in the main curriculum. Some MOOCs are free while some are paid. Continuous counseling had to be done to explain the importance of these platforms in their academic and professional life. Students started learning from various MOOC platforms.

3. Practice

Moving forward towards the goal, institute collaborated with NPTEL and started NPTEL local chapter at the institute. Various courses in different disciplines are offered by NPTEL. These courses are of 4/8/12 week duration. At the start of semester, the courses aligned to our curriculum are finalized for each discipline, along with the faculty mentors, who will be guiding students through the course run. The selected courses and the faculty mentors are communicated to the students. Students can opt for either selected courses with faculty mentors or from the remaining courses offered by NPTEL. Even faculties can also enroll in these courses. Enrolled participant needs to go through all the contents upload in the course. Like lecture videos, online quizzes, assignments, and projects.

4. Evidence of success

At the end of the course, the participant needs to give online certification examination and only successful participant is awarded with the certificate. It has been evident that participants have good learning experience and becomes more confident. This helps them broadening their perspective towards MOOC and helps them in getting placements, and in higher studies.

5. Problem Encountered and Recourses Required

MOOC is not the part of university guidelines, in starting students were reluctant toward these activities as they do not have any credit/marks. Continuous counseling had to be done to explain the importance of MOOC in their academic and professional life.

Best Practice – 2

Title of the practice: Industry Exposure to Faculty and Students for Employability and Entrepreneurship Enhancement.

1. Goal :

To enhance the entrepreneurship skill and the employability of the students

2. The Context:

- a. The institute has an exceptionally strong association with the industrial clusters viz. MAC (Marathwada Auto Cluster), Brownfield Electronic Manufacturing Cluster (proposed).
- b. The Institute is having a unique feature of In-Plant Training (IPT) in the curriculum itself. A separate faculty with a cadre of associate professor is administrating the IPT Cell along with one separate faculty coordinator from each of the departments. More than 500 students are placed every year to undergo 20 weeks industrial training at approximately 350 different industries located across the country.

3. Practices

- a. Our students are actively participating in some prominent project competitions organized by the Deutsche Gesellschaft fur Internationale Zusammenarbeit (GIZ) Germany and MASSIA (Medium and small scale industries association)
- b. Institute is also participating in organizing several project competitions in association with the affiliating university and local chamber of commerce etc.
- c. Guidance and counseling pertaining to entrepreneurship and employability

enhancement is done through the expert talks delivered by eminent personalities from industries.

- d. The institute support faculty and students to undergo trainings at industries located in the country and even abroad.
- e. Prominent industrialists are key members of our governing body and their valuable suggestions are incorporated in the up gradation of the institutional activities at large.
- f. Formulation of micro enterprises has been initiated and one of its kinds has already been operational in the form of “MIT-CARS” and one more is in pipeline called “MCIP”
- g. Top IT Industry like Infosys has strong rapport with the institute through the campus connect program and our institute is recognized as “Partners in success” by Infosys.
- h. Institute regularly participate in various national level exhibition like, Technology meet 2016,Advantage Maharashtra Expo, Defexpo india 2016 at Goa, IMTEX 2016 at Bangalore and was also awarded (for its research projects exhibited in such exhibitions along with IITs.

4. Evidence of Success

- a. Institute has typed with more than 35 industries for placing the students for In-Plant Training.
- b. More than 500 students are placed in industries every year for in-plant training.
- c. Institutes of the national repute (viz. IITs and National Research Organization (viz. DRDO, ISRO, etc.. are showing keen interest in permitting our students for the IPT.
- d. Students are winner in project challenges.
- e. MIT got third prize at IMTEX exhibition Bangalore along with IITs.

5. Problem Encountered and Resources Required

- a. Training and placement office and training and placement officer.
- b. Separate IPT In-Charge with department IPT coordinators.
- c. Extensive efforts by these people.
- d. There was a great problem initially till these contacts with industry were not established.

Best Practice- 3

Teacher Guardian Scheme

1. Goal

- a. To understand the personal and academic challenges of the students and provide the necessary guidance and counseling.
- b. To monitor overall progress of students during his/her graduation.

2. The Context

- a. Along with the adaptation of good teaching learning process, which enhances the technical knowledge of students, Institute has designed innovative methods for the overall personality development of the students.
- b. The objective of Institute to implement mentorship scheme is to provide training and guidance to undergraduate students in all disciplines, increase the participation of all undergraduate students from F.Y to B. Tech. in the different activities conducted by the Institute, which will be useful to them in their life after graduation. Institute seeks to foster and support students in achieving their personal and professional goals as undergraduates and prepare them for their future challenges.
- c. Faculty who serve as mentors make a valuable contribution to the education and training of undergraduate students interested in hands-on experience in different activities. Students judge the experiences primarily by their interaction with their mentors. Thus, the role of faculty member in scheme is crucial to the program's success.

3. Practice

- a. In the Teacher guardian scheme a Teacher (mentor) is allocated with group of approximately fifteen students (mentees).
- b. Mentor has to keep the academic record of the mentees allotted to him in terms of their monthly attendance, academic results, co-curricular participation within and outside campus etc. and inform the same to the parents during the parent meetings.
- c. Mentor has to understand the challenges faced by the mentees related to academics and also the personal challenges and counsel and guide the students wherever required.

4. Evidence of success

- a. The evidence of success of mentorship system is reflected through the overall personality development of students.
- b. Those students who had lack of confidence, weak in communication, poor presentation skills, were observed having marginal improvement in the lacked areas when they came to final year.
- c. Parents were happy to have a system where, the overall progress of their ward is monitored and informed to them timely right from the first year till the candidate completes his/her engineering.
- d. There is a marginal increment in the number of students participating in various events held within and outside the college, since the implementation of Mentorship Scheme.

5. Problem Encountered and Resources required

- a. To mould the students' mentality towards improvement in their personality without hampering academics was a difficult task.
- b. Resources required are mainly the human capital in the form of mentors and there is valuable time to be spent for the noble cause of overall development of the students of the institute.

Evaluative Report

Department of Agricultural Engineering

1. Name of the department : Agricultural Engineering

2. Year of Establishment : 2001

3. Names of Programmes / Courses offered

(UG, PG, M. Phil., Ph. D., and Integrated

Masters; Integrated Ph. D., etc.):

Bachelor of Technology (Agricultural Engineering)

Master of Technology (Food Processing Technology)

4. Names of Interdisciplinary courses and the departments/units involved:

Sr. No.	Year	Semester	Course Code	Course	Department
1	FY	I	BSH101	Engineering Mathematics-I	Basic Sciences and Humanities
2			BSH102/103	Engineering Physics/Chemistry	
3			BSH104	Basic Electrical Engineering	Electrical Engineering
4			BSH105	Engineering Drawing	Mechanical Engineering
5			BSH106	Computer Fundamentals and Programming	Computer Science and Engineering
6			BSH107	Basic Civil Engineering	Civil Engineering
1			BSH151	Engineering Mathematics-II	Basic Sciences and Humanities
2	FY	II	BSH103/102	Engineering Chemistry/Physics	
3			BSH 126	Workshop Practice-I	Mechanical Engineering
4			BSH152	Basic Electronics	Electronics and Telecommunication Engineering
5			BSH153	Engineering Mechanics	Mechanical
6			BSH154	Basic Mechanical Engineering	Mechanical Engineering
7			BSH155	Environment and Ecology	Civil Engineering
1	SY	III	BSH201	Engineering Mathematics-III	Basic Sciences and Humanities
2			BSH251	Engineering Mathematics-IV	
1	TY	V	AED304	Kinematics of Machine	Mechanical Engineering

5. Annual/ semester/choice based credit system (programme wise):

UG: Choice based Credit system

PG: Choice based Credit system

6. Participation of the department in the courses offered by other departments: Nil

7. Courses in collaboration with other universities, industries, foreign institutions etc.: Nil

8. Details of course/programs discontinued (if any) with reasons: Nil

9. Number of teaching posts:-

Post	Sanctioned	Filled
Professor	01	00
Associate Professor	03	00
Assistant Professor	08	9+1*
Lecturer	-	01

* Faculty from Basic Sciences and Humanities

10. Faculty profile with name, qualification, designation, specialization:

Sr. No.	Name of faculty	Qualification	Designation	Specialization	Experience (Years)	No. of Ph.D. Students Guided
1	Mr. V.G. Jadhao	M. Tech	Assistant Professor	Soil and Water Conservation Engineering	12	Nil
2	Mr. D.T. Bornare	M. E.	Assistant Professor	Water Resource Engineering	11	Nil
3	Dr. H.P. Bobade	Ph.D.	Assistant Professor	Food Technology	04	Nil
4	Dr. K.P. Babar	Ph.D.	Assistant	Food Technology	04	Nil
5	Dr. V.S. Patil	Ph.D.	Assistant Professor	Post Harvest Process and Food Engineering	04	Nil
6	Dr. V.B. Shinde	Ph.D.	Assistant Professor	Renewable Energy	1.7	Nil
7	Mr. S.A. Rather	M. Tech	Assistant Professor	Farm Machinery and Power Engineering	10.3	Nil
8	Mr. S.B. Dabhade	M. Tech	Assistant Professor	Agriculture System Management	03	Nil
9	Mr. S.R. Patil	M. Tech	Assistant Professor	Farm machinery and Power Engineering	03	Nil
10	Mr. S.S. Nalwade	M.E. (Pur.)	Lecturer	Water resources Engineering	04	Nil
11	Ms. V. S. Patil	M. Sc.	Assistant Professor	Mathematics	2.5	Nil

Adjunct Faculty						
12	Dr. M. C. Sonanis	Ph. D.	Adjunct Faculty	Organic Chemistry	29	Nil
13	Mr. A. K. Jadhao	M. Tech.	Adjunct Faculty		13	Nil
14	Mr. A. P. Mohite	M. Sc.	Adjunct		20	Nil

12. Percentage of lectures delivered and practical classes handled by temporary faculty: Nil

13. Student -Teacher Ratio (Programme wise)

UG –12:1

PG- 12:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Post Name	Available
Laboratory Assistant	02
Research Assistant	01
Office Assistant	01
Peon	01

15. Qualifications of teaching faculty with D. Sc. / D. Litt. / Ph.D. / M. Phil. / PG:

Ph. D. : 4+1*

ME/M. Tech. : 6+2*

B. Tech. : 1

*indicates adjunct faculty

16. Number of faculty with completed/ongoing projects from (a) National and (b) International

Funding agencies and grants received: Nil

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received:

Sr. No.	Duration Year From To	Name of PI	Title of the project	Name of The funding agency	Grant Received (Rs. Lakhs)
5	2014-2015	Mr. D. T. Bornare	Development of Mobile soil and water Testing Laboratory	Government of India	54.88

18. Research Centre /facility recognized by the University: Nil

19. Publications and Patents by faculty:

a) Publications

Sr. No.	Name of Faculty	Total number of publications	
		National	International
1	Mr. V. G. Jadhao	3	10
2	Mr. D. T. Bornare	5	4
3	Dr. H.P. Bobade	5	3
4	Dr. K.P. Babar	2	4
5	Dr. V.S. Patil	3	2
6	Dr. V.B. Shinde	4	5
7	Mr. S.R. Patil	1	1

- Number of papers published in peer reviewed journals (National / International) by faculty and students: 41
- Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.): 01
- Monographs: Nil

Chapter in Books: 02 (Mr. V. G. Jadhao and Dr. H. P. Bobade)

Sr. No.	Name of faculty	Name of Book	Publication year
1	Mr. V.G. Jadhao	Handbook on hydrology and watershed management	2005
2	Dr. H.P. Bobade	Functional Food and Nutraceuticals: Sources and Developmental Techniques	2014

* Books Edited: Nil

* Books with ISBN/ISSN numbers with details of publishers:

Sr. No.	Name of Faculty	Title	ISBN/ISSN	Complete reference book
1	Dr. V. S. Patil	Moisture Dependent Engineering Properties of Bean (Definition and Procedure)	978-3659-1396-2	LAP Lambert Academic Publishing

* Citation Index (Google scholar): 67

* SNIP: 1.552

* SJR: 0.991

* Impact factor range / average: Nil

* **h-index range:** 3

b) Patents: Nil

20. Areas of consultancy and income generated:

The major areas of consultancy carried out in Agricultural Engineering Department

Name of Laboratory	Year	Income Generated (Rs. in Lakhs)
Soil Testing Laboratory	2010-12	4.70
	2010-12	2.05
	2013-14	8.06
	2014-15	2.68
	2015-16	18.12

21. Faculty as members in a) National committees b) International Committees c) Editorial Boards

a) National Committees: Nil

b) International Committees: Nil

c) Editorial Boards:

Sr. No.	Department	Name of Faculty	Editorial Boards
1	Agricultural Engineering	Prof. V. G. Jadhao	Advisory board Member of International Journal of Agril. Engg.
2	Agricultural Engineering	Prof. V. G. Jadhao	Editorial board Member of International Journal of Advance scientific Research and Engg. Trends.

22. Student projects:

a) Percentage of students who have done in-house projects including inter departmental programme

UG:

Sr. No.	Academic Year	In-house project (%)	
		Departmental	Inter-departmental
1	2015-16	100	0
2	2014-15	100	0
3	2013-14	100	0
4	2012-13	100	0

PG:

Sr. No.	Academic Year	In-house project (%)	
		Departmental	Inter-departmental
1	2015-16	77.78	0
2	2014-15	100	0
3	2013-14	100	0
4	2012-13	100	0

b) Percentage of students placed for projects in organization outside the institution (Research Laboratory/Organization/Industry)

UG: Nil

PG:

Sr. No.	Academic Year	Outside project (%)
1	2015-16	22.22
2	2014-15	Nil
3	2013-14	Nil
4	2012-13	Nil

➤ **Details of Student projects sponsored by Industry/ company:** Nil

23. Awards / Recognitions received by faculty and students

a. Faculty Awards:

Sr. No.	Name of Faculty	Award/Recognition	Organization	Year
1	Dr. V. B. Shinde	Mahatma Jyotirao Phule National Teacher Award	MJP, Shikshan Parishad, Maharashtra	2017
2	Dr. H. P. Bobade	Young Scientist Award	International Science Congress Association	2014
3	Dr. V. B. Shinde	First prize for oral presentation in 2 nd Agricultural Graduate Student Conference	Tamil Nadu Agricultural University	2014
4	Dr. H. P. Bobade	National First Rank (SRF)	Indian Council of Agricultural Research	2013
5	Dr. K. P. Babar	First prize for oral	Shivaji University,	2012

		presentation	Kolhapur	
6	Dr. V. B. Shinde	Rajiv Gandhi National Fellowship	University Grants Commission	2011
7	Dr. V. S. Patil	DBT Fellowship	Department of Biotechnology	2010

b. List of awards won in the inter institute sports events (students)

Sr. No.	Title	Name of Student	Level	Organized by	Achievement
1	NCC	Mr. Vinayak Katakar	National	NCC	Awarded with very good conduct
2	NCC	Mr. Vinayak Katakar	National	NCC	Passed the certificate with B
3	NCC	Mr. Vinayak Katakar	National	NCC	Participated

24. List of eminent academicians and scientists / Visited to the Department:

Sr. No.	Date	Name of Speaker	Purpose
1	15/03/2017	Mr. A. L. Kaluse Distt. Quality Control Inspector Dept. Agril. Government of Maharashtra	Inspection of Soil Testing Laboratory
2	07/03/2017	Dr. W. A. Khan Head, Deptt. Food Processing and Post Harvest Technology, TC College,	Guest Lecture on Entrepreneurship development
3	24/02/2017	Dr. Awakash Kumar CEO, SAGE, Mumbai, India	Guest Lecture on Air quality testing
4	16/01/2017	Mr. D. V. Aute Director, Sant Eknath Cooperative Sugar Mill, Paitan, Aurangabad	Visit to Soil and Water Testing Laboratory
5	06/01/2017	Mr. SV Gund, Vice President, ZP, Osmanabad Mr. AA Rayate, IAS CEO, ZP, Osmanabad	Visit to Mobile Soil Testing Laboratory
6	07/10/2016	Dr. M. Talib UDCT, North Maharashtra University, Jalgaon	Guest Lecture on Probiotic Food

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7	12/09/2016	Mr. S. P. Baldava Mayor, Gangapur, Distt. Aurangabad	Visit to Soil and Water Testing Laboratory
8	25/08/2016	Mr. Prasad Chiplunkar Progressive farmer,	Workshop on Land Fertility
9	05/07/2016	Dr. Ashish Pande Professor, IIT, Roorkee	Interaction with departmental faculty
10	10/05/2016	Mr. Deepak Khoche District Judge, Nagpur	Visit to soil and water testing laboratory
11	14&15/03/2016	Dr. J. S. Dhekale, Assistant professor, Dept. of Agriculture economics, Dr. BSKK, Vidyapith, Dapoli, Dist: Ratnagiri	Resource Person Statistical Data Analysis
12	16/09/2015	Mr. Rajesh Chavan Founder, Jeevan Sanjeevani NGO Shirala, Distt. Satara	Guest Lecture on Skill Development
13	May, 2015	Mr. Jayant Deshmukh Agril. Commissioner Government of Maharashtra	Visit to soil and water testing laboratory
14	02/05/2015	Hon. Pankajatai Mundhe Water Resource Minister, Government of Maharashtra	Inauguration of Mobile Soil Testing Laboratory
15	24/08/2015	Mr. Parag Pande and Mr. Shirish Joshi	Guest Lecture on Class room To Corporate
16	17&18/03/2015	Mr. Sanjay Indani Head,-Food safety safe foodz solutions Mumbai	Internal auditor Training on food safety management system
17	05/04/2014	Prof. N. C. Saha (Director, IIP, Mumbai)	Guest Lecture on Packaging
18	24/09/2012	Hon. Divakar Rawate, MLA Hon. Satish Chavan, MLC Maharashtra	Member of VNMAU Local Inspection Committee

19	31/01/2012	Dr. Govind Garg Director Bioproject & Regional affairs Krishidhan Seeds	Interaction with students and staff
20	04/08/2010	Dr. Suresh Dhumal Director HTC, Pune	Guest Lecture on Hydroponics
21	04/02/2010	Dr. Endress Endress + Hauser Germany	Interaction with faculty

25. Seminars/ Conferences/Workshops organized & the source of funding:-

➤ **National**

Sr. No.	Title of Workshop	Conference/ Workshop	Duration	Source of Funding
1	Statistical Data Analysis	Workshop	14&15March 2016	Self financed
2	Internal auditor Training on food safety management system	Workshop	17&18 March 2015	Self financed

➤ **International:** - Nil

26. Student profile programme/course wise:

B. Tech. (Agril. Engg.)

Name of the Course/ programme: B. Tech. (Agril. Engg.)	Applications Received	Selected	Enrolled		Pass percentage
Year			*M	*F	
2012-16	Centralized Admission Procedure	16+3	14+1	2+2	100
2011-15		12+2	11+2	1+0	100
2010-14		11+3	10+3	1+0	92.85
2009-13		32+8	22+7	10+1	100

*M = Male * F = Female

M. Tech. (Food Processing Technology)

Name of the Course/programme: M. Tech. (Food Processing Technology)	Applications Received	Selected	Enrolled		Pass percentage
			*M	*F	
2016-18	Centralized Admission Procedure	17	10	07	NA
2015-17		21	15	6	NA
2014-16		22	10	12	45.45
2013-15		24	11	13	62.50

*M = Male * F = Female

27. Diversity of Students:-

- **UG:**

Year of Admission	Name of the course	% of students from the same state	% of students from other States	% of students from abroad
2016-17	B. Tech (Agricultural Engineering)	100	Nil	NA
2015-16		90.48	9.52	NA
2014-15		84.62	15.38	NA
2013-14		100	Nil	NA
2012-13		93.75	6.25	NA

- **PG:**

Year of Admission	Name of the course	% of students from the same state	% of students from other States	% of students from abroad
2016-17	M. Tech (Food Processing Technology)	100	Nil	NA
2015-16		95.24	4.76	NA
2014-15		100	Nil	NA
2013-14		100	Nil	NA

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc.?

Year	GATE/NET	Civil (Banking) services
2013-2014	Nil	4
2014-2015	Nil	Nil
2015-2016	01	Nil

29. Student progression

Student Progression %	Against% enrolled			
	2012-13	2013-14	2014-15	2015-16
UG to PG	15.78	9.09	-	-
PG to M. Phil	-	-	-	-
PG to Ph. D.	-	-	-	4.16
Ph. D. to Post-Doctoral	-	-	-	-
Employed - Campus Selection	52.63	Nil	Nil	Nil
- Other than Campus Recruitment	42.10	54.54	66.66	33.33
Entrepreneurship / Self-employment	Nil	9.09	16.66	Nil

30. Details of Infrastructural facilities (Programme specific):

Sr. No.	Infrastructural facility	Details of Item	Number
1	Departmental Library	Title	67
		Volumes	68
		Total Books available	68
2	Internet laboratory facility for staff and students	Computers	19
3	Classrooms	with ICT facility	1
		Drawing hall	0
4	Seminar Hall	with ICT facility	1
5	Laboratories	UG (Major equip.)	7
		Post Graduate	1
		Research	1
6	Tutorial Room	UG	1
		PG	1

Details of Laboratories:

Sr. No.	Name of Laboratory	Area in Sqm.	Total cost of the Laboratory (Rs. in Lakhs)
01	Farm Machinery and power engineering	70.62	4.42
02	Soil and water conservation engineering	75.24	67.09
03	Agricultural process engineering	70.62	2.60
04	PG Research LAB	105.6	114.30
05	Soil and water testing laboratory	105.6	124.44
06	Meteorology laboratory	71.76	17.34
07	Food engineering laboratory	75.2	9.30
08	Dairy Technology	70.62	0.94
09	Irrigation and Drainage Engineering Laboratory	108.00	1.79
Total		753.26	342.22

31. Number of students receiving financial assistance from college, university, Government or other agencies

Sr. No.	Details of Financial Assistance	Academic year/ No. of students		
		2014-15	2015-16	2016-17
1	OBC Freeship and GOI	12	13	16
2	SC Freeship and GOI	09	10	14
3	SBC Freeship and GOI	00	00	00
4	ST Freeship and GOI	00	00	02
5	VJ/NT Freeship and GOI	06	08	07
6	TFWS	05	04	04
7	Earn and Learn	00	05	01

32. Details on student enrichment programmes (special lectures / workshops /Seminar) with external experts:

Sr. No.	Date	Name of External Speaker	Topic
1	08/03/2017	Dr. Ajay G. Dahake	Principal stresses and strains
2	07/03/2017	Dr. W. A. Khan	Entrepreneurship development

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3	24/02/2017	Dr. Awkash kumar	Air quality testing
4	17/02/2017	Dr. J. H. Godihal	Environment awareness and energy conservation
5	07/10/2016	Dr. M. Talib	Probiotic Food
6	25/08/2016	Mr. Prasad Chiplunkar	Land Fertility
7	14&15/03/ 2016	Dr. J. S. Dhekale, Assistant professor, Dept. of Agril. Econ., Dr. BSKKV, Dapoli, Dist: Ratnagiri	Statistical Data Analysis
8	03/09/2015	Col. M.S. Virdee	Discipline & Confidence Building
9	24/08/2015	Mr. Parag Pande and Mr. Shirish Joshi	Class room To Corporate
10	17 &18/03/ 2015	Mr. Sanjay Indani Head,-Food safety safe foodz solutions Mumbai	Internal auditor Training on food safety management system
11	05/04/2014	Prof. N. C. Saha (Director, IIP, Mumbai)	Packaging

- Various skill development programs are conducted in the department by the experts from Industries for the students to enhance their technical knowledge and personal development

Sr. No.	Course	No. of Students	Duration	Faculty and Name of Institute	Date
1	Class room To Corporate	15	02 hrs	Mr. Parag Pande	24/08/2015
2	Discipline & Confidence Building	112	02 hrs	Col. M.S. Virdee Maharashtra Institute of Technology, Aurangabad	03/09/2015
3	Statistical data analysis	103	48 hrs	Dr. J. S. Dhekale Dr. BSKKV, Dapoli	14 & 15/03/2016

33. Teaching methods adopted to improve student learning

1. Group Discussion
2. Power point presentations
3. Industrial visits
4. Field Visits
5. Tutorial classes
6. Practical classes

34. Participation in Institutional Social Responsibility (ISR) and Extension activities: Nil

35. SWOC analysis of the department and Future plans

Strengths

- Excellent infrastructural facilities
- Access to advanced and modern equipment
- Highly qualified faculty with diverse specializations
- Collaborations with reputed industries and research institutes
- Good revenue generation through departmental activities

Weaknesses

- Responsiveness of students
- Students preparedness in national entrance examinations
- Students' campus placement

Opportunities

- Ever increasing agriculture and food sector
- Professional recognition to agriculture sector by government
- Increased demand of automation and revolution in agriculture and food
- Augmented focus on research in agriculture and food

Challenges

- Awareness about agricultural engineering course
- Undergraduate student enrollment
- Awareness about employment opportunities for fresh graduates

Future Plans

- To attract the research grants from various agencies like UGC, DST, DBT and others
- To strengthen the culture of R&D by promoting production of intellectual property in terms of research output, publications, applied research and transfer of knowledge
- To take up consultancy work in thrust area with industry-research institute-NGO-government organization tie ups
- Establish R& D centre for starting Ph. D. programme in the department
- To get NABL accreditation for the high end laboratory viz. Centre for Analytical and Research Studies.

Evaluative Report

Department of Civil Engineering

1. Name of the department : Civil Engineering

2. Year of Establishment : 2001

3. Names of Programmes / Courses offered

(UG, PG, M. Phil., Ph.D., and Integrated

Masters; Integrated Ph. D. etc.) : Bachelor of Technology (Civil Engineering)

4. Names of Interdisciplinary courses and the departments/units involved:

Sr. No.	Year	Semester	Course Code	Course	Department
1	FY	I	BSH101	Engineering Mathematics-I	Basic Sciences and Humanities
2			BSH102/ BSH 103	Engineering Physics / Engineering Chemistry	
3			BSH104	Basic Electrical Engineering	Electrical Engineering
4			BSH105	Engineering Drawing	Mechanical Engineering
5			BSH106	Computer Fundamentals and Programming	Computer Science and Engineering
1			BSH151	Engineering Mathematics-II	Basic Sciences and Humanities
2			BSH102 / BSH103	Engineering Physics / Engineering Chemistry	
3	FY	II	BSH152	Basic Electronics	Electronics and Telecommunication Engineering
4			BSH154	Basic Mechanical Engineering	Mechanical Engineering
5			BSH155	Environment and Ecology	Basic Sciences and Humanities
6			BSH174	Development of Skills-I	
1	SY	III	BSH201	Engineering Mathematics-III	Basic Sciences and Humanities
2			BSH221	Development of Skills-II	
1	SY	IV	BSH251	Engineering Mathematics-IV	Computer Science and Engineering
2			CED275	Technical Report Writing	

5. Annual/ semester/choice based credit system (programme wise):-

UG: Choice based credit system

6. Participation of the department in the courses offered by other departments:-

Sr. No.	Year	Semester	Course Code	Course	Name of other Department
1	FY	I	BSH107	Basic Civil Engineering	Basic Sciences and Humanities
2	FY	II	BSH153	Engineering Mechanics	

7. Courses in collaboration with other universities, industries, foreign institutions etc.: Nil

8. Details of courses/programmes discontinued (if any) with reasons: Nil

9. Number of teaching posts:-

Post	Sanctioned	Filled
Professor	02	02
Associate Professor	06	02
Assistant Professor	20	20
Lecturer	-	01

10. Faculty profile with name, qualification, designation, specialization:-

Sr. No.	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students Guided for the last 4 Years
1.	Prof. B. M. Deshmukh	M. E.	Professor	Valuation and Costing	18.0	-
2.	Prof. Dr. J. H. Godihal	Ph. D.	Professor	Environmental Engineering	27.0	-
3.	Dr. A. G. Dahake	Ph. D.	Associate Professor	Structural Engineering	18.0	-

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4.	Dr. J. G. Mulay	Ph. D.	Associate Professor	Engineering Geology	30.0	-
5.	Ms. N. G. Deshingkar	M. E.	Assistant Professor	Structural Engineering	16.0	-
6.	Ms. Rashmita Srinivasan	M. Tech.	Assistant Professor	Construction Management	13.0	-
7.	Mr. S. R. Kendre	M. Tech.	Assistant Professor	Water Resources Engineering	11.0	-
8.	Mr. P. R. Awasarmal	M. E.	Assistant Professor	Structural Engineering	13.0	-
9.	Ms. K. R. Londhe	M. E.	Assistant Professor	Water Resources Engineering	3.0	-
10.	Ms. P. B. Patil	M. E.	Assistant Professor	Structural Engineering	4.0	-
11.	Ms. S. D. Mankar	B.E.	Lecturer	Structural Engineering	12.0	-
12.	Mr. R. P. Agrawal	M. E.	Assistant Professor	Water Resources Engineering	1.5	-
13.	Mr. U. Y. Vazurkar	M. E.	Assistant Professor	Structural Engineering	0.5	-
14.	Mr. S. A. Lodhi	M. E.	Assistant Professor	Structural Engineering	2.5	-
15.	Ms. G. J. Pande	M. E.	Assistant Professor	Water Resources Engineering	0.5	-
16.	Mr. B. I. Welke	M. E.	Assistant Professor	Transportation Engineering	1.5	-
17.	Mr. A.S. Kawale	M. E.	Assistant Professor	Structural Engineering	0.5	-
18.	Ms. S. P. Bansode	M. E.	Assistant Professor	Water Resources Engineering	0.5	-
19.	Mr. Z. N. Shaikh	M. E.	Assistant Professor	Structural Engineering	2.0	-
20.	Mr. A. S. Satpute	M. E.	Assistant Professor	Structural Engineering	6.0	-
21.	Ms. P. A. Gujrathi	M. E.	Assistant Professor	Environment	0.5	-

22.	Dr. L. V. Uttarwar*	Ph. D.	Assistant Professor	Chemistry	19	-
23.	Ms. S. M. Ghusale*	M. Sc.	Assistant Professor	Chemistry	5.5	-
24.	Mr. A. C. Gurav*	M. Sc.	Assistant Professor	Chemistry	5.0	-
25.	Ms. R. A. Suryawanshi*	M. Sc.	Assistant Professor	Chemistry	9.0	-
26.	Dr. Jiji Mathew	Ph. D.	Adjunct Faculty	Structural Engineering	18.0	-
27.	Dr. V. G. Achawal	Ph. D.	Adjunct Faculty	Structural Engineering	35.0	-
28.	Prof. B. D. Kulkarni	M. E.	Adjunct Faculty	Water Resources Engineering	35.0	-
29.	Mr. Sanjiv Shelar	M. E.	Adjunct Faculty	Steel Structures	25.0	-
30.	Mr. S. B. Deshmukh	M. E.	Adjunct Faculty	Structural Engineering	18.0	-

*Faculty from BSH Department.

11. List of senior visiting faculty: Nil

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: Nil

13. Student -Teacher Ratio (Programme wise) UG –14:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Post Name	Available
Laboratory Assistant	1
Peon	1

15. Qualifications of teaching faculty with Ph. D / PG:

Ph.D.: 06

M. E. /M. Tech. /M. Sc: 23

B. E. / B. Tech: 1

16. Number of faculty with ongoing projects from (a) National and (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 per faculty:

Sr. No.	Faculty Name	Total No. of Publications	
		National	International
1.	Dr. A. G. Dahake	16	09
2.	Dr. J. H. Godihal	03	-

- Number of papers published in peer reviewed journals (National / International) by faculty and students:** 28
- Monographs:** Nil
- Chapter in Books:** 01
- Books Edited:** Nil
- Books with ISBN/ISSN numbers with details of publishers:** Nil
- Citation Index: (Google scholar):** 27
- SNIP:** 0.27
- SJR:** 0.545
- Impact factor range / average:** Nil
- h-index range:** 0 to 3

20. Areas of consultancy and income generated: Nil

21. Faculty as members in a) National committees b) International Committees c) Editorial Boards

a) National Committees:

Sr. No.	Name of Faculty	Name of Committee and Designation
1.	Dr. J. H. Godihal	1. Rapid Performance Audit Committee (RPAC), constituted by Govt. of Maharashtra to assess the performance of Aurangabad W/S schemes during the year 2001.

		2. Environmental Public hearing of M/s Empire mall Pvt. Ltd. Aurangabad Constituted by MPCB, Ministry of Environment, Govt. Maharashtra, 2006.
		3. TSDF for MSW AMC, Aurangabad, Constituted by MPCB, Ministry of Environment, Govt. Maharashtra, 2007.

b) International Committees: Nil

c) Editorial Boards: 2

Dr. A. G. Dahake	International Journal of Scientific Research Publication, IJSRP
Dr. A. G. Dahake	Journal of Experimental and Applied Mechanics, STM Publications.

22. Student Projects

a. Percentage of students who have done in-house projects including inter departmental / programme:

Academic Year	Percentage of students (in house)	Percentage of students (inter department)
2016-17	100	0
2015-16	100	0
2014-15	100	0
2013-14	100	0
2012-13	100	0

b. Percentage of Students placed for projects in organizations outside the institution i. e. in Research laboratory / Industry / other agencies: Nil

23. Awards / Recognitions received by faculty and students

a. Recognitions received by faculty

Name of faculty	Recognitions
Dr. A. G. Dahake	P. G. Teacher recognition by Dr. BAM University, Aurangabad
	Reviewer of "Latin American Journal of Solid and Structures (LAJSS)".

	<p>Reviewer of “OMICS Group – Engineering Journals”.</p> <p>Local enquiry committee (LIC) member for Dr. Babasaheb Ambedkar University, Aurangabad</p> <p>Board of Studies Member (BOS) for Dr. Babasaheb Ambedkar University, Aurangabad.</p> <p>Master of Engineering Dissertation Examiner for other Universities.</p> <p>Faculty Coordinator for Pre Ph. D. course work by Dr. BAM University</p> <p>Session chair at national conference at Govt. College of Engineering, Karad</p> <p>Conducted 2 Day Refresher Course on Structural Engineering, organized by Department of Civil Engineering, MIT, Aurangabad on 30-31 July 2015.</p> <p>2 Week ISTE, MHRD sponsored STTP, Introduction to Structural Engineering, worked as Teaching Assistant, Conducted by IIT, Kharagpur at RC 1098, MIT, Aurangabad</p> <p>2 Week ISTE, MHRD sponsored STTP, Environmental Engineering, worked as Teaching Assistant, Conducted by IIT, Bombay, Mumbai. At RC 1098, MIT Aurangabad.</p> <p>Key note speaker and Session Chair for the National conference at JSPM, Pune on 10 and 11th February 2017.</p>
Dr. J. H. Godihal	<p>Reviewed the Papers of ICTIEE 2015 held at Bengaluru and ICTIEE 2016 held at Pune, ICTIEE 2017 held at Hyderabad, Rajkot and Jaipur.</p> <p>P. G. Teacher recognition by Dr. BAM University, Aurangabad</p> <p>Local enquiry committee (LIC) member of Dr. BAM University, Aurangabad</p> <p>Technical Session Chair of the International conference (ICRTES-2017).</p> <p>Chaired The session on Application of GIS, National conf. on “Emerging trends in Information Technology”</p> <p>Conducted FDPs, STTPs, Workshop at MIT, Aurangabad</p> <p>Workshop Coordinator for NMEICT workshops on Environment Studies , June 2015, by IIT Bombay</p> <p>Workshop Coordinator of Four Week AICTE approved FDP by IIT Bombay on - Use of ICT in Education for Online and Blended Learning, May- July 2016.</p> <p>Delivered a Talk on: Basics of Academic Environment, 12 Jan to 18 Jan 2015</p> <p>Delivered a Talk on: Students and Academic excellence, August 2015</p> <p>Training for managers of Industries of Aurangabad, Basics of ETP, 23 Dec 2015</p> <p>Environment and Role of Youths, INSPIRE 2016</p> <p>Sustainable Development, INSPIRE 2016</p> <p>AICTE & IIT Bombay Four Week AICTE approved FDP by IIT Bombay on – Use</p>

	of ICT in Education for Online and Blended Learning @ MIT Aurangabad Remote Center, Towards Teaching excellence; Ways & Means, 26 July 2016
	Delivered a Talk on “Urban Air Quality: Challenges and Strategies, A consultative Stakeholder Workshop on Clean Air Roadmap for Aurangabad, organized by Clean Air Asia, Dept. of Env. Sc., Dr. BAMU, Aurangabad, 25 Nov. 2016
	Effective and Efficient Design Aspects of ETP, Dept. of Env.Sc, Dr. BAMU, Aurangabad, One Day Workshop “Environmental Pollution: Emerging Prospective”, 11 March 2017
	Contribution of Chapter on “Water Quality Monitoring of Godavari River” in the book entitled “Integrated water resources planning and management” edited by K. Srinivas Raju, A. K. Sarkar, Motilal Dash of BITS, Pilani, Chapter 23, pp 213-219.
Mr. S. R. Kendre	P. G. Teacher recognition by Dr. BAM University, Aurangabad Green Rating for Integrated Habitat Assessment (GRIHA) Certified Trainer and Auditor for green building
Mr. P. R. Awasarmal	P. G. Teacher recognition by Dr. BAM University, Aurangabad
Ms. Rashmita Srinivasan	P. G. Teacher recognition by Dr. BAM University, Aurangabad

(b) Awards received by students

Sr. No.	Title of Event	Name of Student	Award/ Level	Organization
1	Arobic gymnastic	Shweta Shirodkar	State Level	Maharashtra State Gymnastic Association
2	Arobic gymnastic	Siddharth Kadam	International Level	World gymnastic Association

24. List of eminent academicians and scientists / Visitors to the Department: -

Sr. No.	Date	Name of academicians and scientists	Purpose
1	21/03/2017	Dr. D. G. Regulwar, Govt. College of Engineering, Aurangabad Dr. Pyinanad Agle Govt. Polytechnic, Aurangabad	Expert Lecture on occasion of World Water Day
2	31/08/ 2016	Dr. U. B. Kalwane Professor in Civil Engineering	Organized Vasundhara Film Festival
3	26/09/.2016	Dr. M. K. Shrimali Associate Prof. NIT, Jaipur	Visit
4	22/09/ 2016	Dr. Milind Sohni Professor, (CTARA- IITB)	Expert talk on Rural development and Technology
5	18/07/2016	Dr . Sharad Duggad Alumni of IITB Jain Irrigation, Jalgaon	Expert Lecture on Field Applications of Fluid Mechanics
6	15/09/ 2015	Dr U. J. Kahalekar Professor in Civil Engg. Govt. College of Engg, A'bad	Expert Lecture on Smart City and Challenges
7	30/07/ 2015	Dr. Siddhartha Ghosh Associate Prof. IIT B	Refresher Course on Structural Engineering
8	13/07/ 2015	Dr. Raosaheb Chavan Professor, IIT-R	Expert Talk on Waste Water Recycling
9	23/03/ 2015	Dr. Dasaka S. Murthy Associate Prof. , IIT Bombay	Expert Talk on 'Foundation Problems'
10	28/02/ 2014	Dr. P. B. Murnal Professor in Applied Mechanics Govt. College of Engg, A'bad	Expert Talk on Concrete Mix Design
11	27/02/ 2014	Dr Rajan Garge Rtd. Principal, Govt. Science College A'bad	Guest on National Science Day

12	12/07/ 2013	Dr Sanjay Jamkar Associate Professor in App. Mechanics,	FDP on Limit State Design
13	01/02/2013	Dr. K. A. Patil Govt. College of Engineering, Aurangabad	Expert talk on Investigation of Soil for Different Structures
14	27/08/2011	Dr. D. M. Dewaikar IIT, Bombay	Expert lecture on Advanced Foundation Engineering
15		Dr. Dasaka S. Murthy IIT, Bombay	
16	07/09/ 2010	Dr. D.G. Regulwar Govt. College of Engineering,	Expert lecture on Watershed Management
17	12/08/ 2010	Dr. V. L. Shah Professor and Author	Expert Lecture on Design of RCC structure – Beams.

25. Seminars/ Conferences/Workshops organized and the source of funding:-

a. National

Sr. No.	Title of Seminars/Conferences/Workshop	Duration	Source of Funding
1	One day workshop on Concrete Mix Design	20 Jan. 2017	Self financed
2	Three days workshop Entrepreneurship Development	28,29,30 Jan 2016	Self financed
3	One day workshop on Concrete Mix Design	22 Mar. 2013	Self financed
4	Two days national level event “NATURALAMI”	16.17 Mar. 2012	Industry Sponsored
5	One day national level workshop on “Advanced Foundation Engineering”	27 Aug. 2011	Self financed

b. International :- Nil

26. Student profile programme/course wise:

Name of the Course/ programme (refer question no. 4)	Applications Received	Selected	Enrolled		Pass percentage
			*M	*F	
2012-16	Centralized Admission Procedure (CAP)	58	46	12	89.66
2011-15		48	40	8	97.00
2010-14		105	96	9	85.13
2009-13		57	45	12	98.00

*M = Male *F = Female

27. Diversity of Students:

UG:

Year of Admission	Name of the course	% of students from the same state	% of students from other States	% of students from abroad
2015-16	B. Tech. (Civil)	97.50	2.5	Nil
2014-15		93.00	7.0	Nil
2013-14		95.00	5.0	Nil
2012-13		95.00	5.0	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Year	GATE
2013-2014	21
2014-2015	18
2015-2016	03

29. Student progression

Student Progression	Against % enrolled			
	2012-13	2013-14	2014-15	2015-16
UG to PG	24.56	5.82	4.17	3.57

PG to Ph. D.	Nil	Nil	Nil	Nil
Ph. D. to Post-Doctoral	Nil	Nil	Nil	Nil
Employed - Campus Selection	21.05	21.36	41.66	37.5
- Other than Campus Recruitment	36.84	63.10	45.83	42.85
Entrepreneurship / Self-employment	8.77	5.83	6.25	3.57

30. Details of Infrastructural facilities:

Sr. No.	Infrastructural facility	Details of Item	Number
1	Departmental Library	Total Books available	76
2	Internet laboratory facility for staff and students	Computers	34
3	Classrooms	with ICT facility	01
4	Seminar Hall	with ICT facility	01
5	Laboratories	UG	10
6	Tutorial Room	UG	01

➤ **Laboratory details**

Sr. No.	Name of Laboratory	Area (Sqm)	Total cost of the Laboratory (Rs.)
01	Environmental Engineering Lab	73.52	186500
02	Concrete Technology Lab	68.78	431095
03	CAD Lab	69.30	907050
04	Engineering Geology Lab	66	30000
05	Mechanics and Kinematics Lab	66	28990
06	Material Testing Lab	205	1212761
07	Transportation Lab	60	319221
08	Geotechnical Lab	213	347730

09	Fluid Mechanics Lab	105	488555
10	Survey Store	66	136770
Total			4088672

➤ **Availability of computing facilities in the department**

Name of the Laboratory	Number of Computers Available
Auto CAD Lab	28
Computers allotted to Faculty members	06

- All Computers are LAN connected.
- AUTOCAD, LATEX and MAT LAB are available.
- Labs are made available during recess time and, also after the end of the semester for extra practice if required.

31. Number of students receiving financial assistance from college, university, government or other agencies

Sr. No.	Details of Financial Assistance	Academic year/ No. of students		
		2014-15	2015-16	2016-17
1	OBC Freeship, GOI	49	74	95
2	SC Freeship, GOI	35	55	78
3	SBC Freeship, GOI	5	4	7
4	ST Freeship, GOI	3	6	10
5	VJ/NT Freeship, GOI	40	56	64
6	TFWS	08	11	13

32. Details on student enrichment programmes (special lectures / workshops /Seminar) with external experts:

Sr. No.	Date	Details of External Experts	Purpose
1	21/03/2017	Dr. D. G. Regulwar, Govt. College of Engineering, Aurangabad Dr. Pyinanad Agle Govt. Polytechnic, Aurangabad	Expert Lecture on occasion of World Water Day
2	15/02/ 2017	Er. Sanjeev Shelar Structural Consultant Steel estimation.com	Expert lecture on Steel and Reinforcement
3	20/01/2017	Mr. Malwiya Marketing Director ACC Cement	One day workshop advance concrete mix design
4	31/08/2016	Dr. U. B. Kalwane Professor in Civil Engineering	Organized Vasundhara Film Festival
5	18/07/ 2016	Dr . Sharad Duggad Alumnus of IITB Jain Irrigation, Jalgaon	Expert Lecture on Field Applications of Fluid Mechanics
6	28- 30/01/ 2016	Mr. Vishwanath Damodhare MITCON, Pune (Sponsored by: NSTEDB, Dept of Science and Technology, Govt. of India.	3 days Entrepreneurship Awareness Camp
7	15/09/2015	Dr U. J. Kahalekar Professor in Civil Engg. Govt. College of Engg, A'bad	Expert Lecture on Smart City and Challenges
8	15/09/ 2015	Mr. Ramachandra Niturkar Chief Engineer, WRD Govt. of Maharashtra	Expert Lecture on Current Drought analysis
9	13/07/2015	Dr. Raosaheb Chavan Professor, IIT Roorkee	Expert Talk on Waste Water Recycling

10	23/03/2015	Dr. Dasaka S. Murthy Associate Prof. , IIT Bombay	Expert Talk on Foundation Problems
11	13-14/03/ 2014	Bhartiya Jal Sanskruti Mandal, Aurangabad	2 days workshop on Jalasahitya,
12	03/03/2015	Ms. Natasha Zarine CEO, CRT A'bad	Expert Talk on Solid Waste Management Issues
13	28/02/2014	Dr. P. B. Murnal Professor in Applied Mechanics Govt. College of Engg, A'bad	Expert Talk on Concrete Mix Design
14	27/02/2014	Dr. Ranjan Garge Rtd. Principal, Govt. Science College A'bad	Interaction on National Science Day
15	28/09/2013	Dr. J. H. Godihal Professor, MIT, Aurangabad	Expert talk on Water as Saviour /Destroyer - Role of Engineer
16	12/07/2013	Dr Sanjay Jamkar Associate Professor in App. Mechanics,	FDP on Limit State Design
17	22/03/2013	Mr. Malwiya Marketing Director ACC cement	One day workshop on Concrete Mix Design
18	28/02/2013	Mr Sanjeev Unhale Executive Editor Lokmat Daily	Expert Lecture on SCI clone 'Mitigation in Draught'
19	01/02/2013	Dr. K. A. Patil Govt. College of Engineering, Aurangabad	Expert talk on Investigation of Soil for Different Structures
20	17/10/2012	Mr. Sasidhar Vsingampalli IGBC Consultant	Expert lecture on Green building rating system
21	17/03/2012	Mr. Harsh Chavan IIT Delhi Almuni Founder, Sivganga Prathishthan	Expert Lecture on Community Participation in Water Development Program
22	17/03/ 2012	Mr. M. Anand IGBC, Hyderabad	Expert talk on Green Building Technology and Certification
23	27/08/2011	Dr. D. M. Dewaikar IIT, Bombay	Expert lecture on Advanced Foundation

24		Dr. Dasaka S. Murthy IIT, Bombay	Engineering
25	07/09/2010	Dr. D.G. Regulwar Govt. College of Engineering, A'bad	Expert lecture on Watershed Management
26	12/08/2010	Dr. V. L. Shah Professor and Author	Expert Lecture on Design of RCC structure – Beams.

33. Teaching methods adopted to improve student learning

1. Power point presentations.
2. Industrial visits
3. NPTEL Videos
4. Tutorial classes
5. Practical classes
6. Field / Site visit

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Sr. No.	Type of activity	Duration	Details of activity
1	Ground water Quality analysis	2016-17	To extend technical services to society, the project in association with AMC Ward office, Satara Village, team of students have conducted project to identify the “ Qualitative depletion of GW due to unplanned Land use and Land planning”. The Pre-monsoon and Post-monsoon water testing reports are tabulated for comparison.
2	Heritage marathon	2016-17	Aurangabad Heritage Run was organized by ABB and MIT. The theme was to conserve nature. Team of 33 participants and more than 30 volunteers helped to spread the message strongly.
3	Vasundhara Film Festival	2016-17	Documentary broadcast on various concerns related to nature and environment. The sensitive issues like water scarcity, deforestation, global warming were covered during this festival.

4	Swachha Bharat Abhiyan	2015 -16	CII organized Deogiri fort ‘Run For Clean’(Swachah Bharat Abhiyan) 1 st Feb. 2015. Department of Civil Engineering Students have participated actively in organizing this run and even volunteered in cleaning the fort premises.
5	Blood donation program	2015-13, 2014-15, 2015-16	Blood Donations camps are aperiodic activity in department with the help of NSS and CESSA. The days like, Shivajayanti, Birthday of Hon’ble Y. A. Kawade are celebrated with this noble cause.
6	Rain Water Harvesting	2015-16	8 Students and 1 Faculty have conducted a drive under the flagship name ‘Naturalami’ to create awareness among the citizens about RWH. Aiming to resolve their queries about cost, effects on bore well, maintenance of filter, the team Naturalami successfully installed RWH system in 144 bungalows and 15 apartments in various areas of Aurangabad.
7	Solid waste management for CIDCO	2015 -16	Solid Waste Management project survey CIDCO-Waluj (5 March.2015). Department of civil engineering students second and third are involved in ongoing CIDCO Waluj Sustainable solid waste management program. CRT (civic response team) is working as consultant with CIDCO and they teamed up with Maharashtra Institute of Technology, Civil Engineering Department for conducting survey and analyzing the data.
8	Women Safety and empowerment Run	2015-16	World Women’s day 8 th March 2016, Cycle rally organized by Hon’ble Commissioner Aurangabad Police, students and staff has participated and volunteered in the event.
9	NSS camp to extend solution for villages	Every Year	NSS is one of the platform utilized by students and staff to extend services in remote rural areas. Work for approach road and water conservation works.
10	Tree Plantation	2012-13	‘Naturalami’ (Friend of Nature) group is formed by Civil engineering students and 250+ houses been identified for plantation. 500 saplings were planted in ‘2 Trees for Every house’ method.

35. SWOC analysis of the department and Future plans

a. SWOC Analysis

Strengths

- Highly qualified and experienced faculties with diverse area of expertise.
- State of the art laboratory facilities.
- Large number of social responsibility and extension activities.
- Strong alumni base.

Weaknesses

- Low faculty retention.
- Absence of PG programme.
- No NABL accredited laboratory.
- Relatively less research publications in reputed journals.
- No research funding from various funding agencies.

Opportunities

- Big Infrastructure projects available in city for learning and employment.
- Large number of construction companies and designer firms.
- Aurangabad is declared as would be “Smart city” by Govt. of India.

Challenges

- Faculty retention due to high demand for Civil Engineers in industry and government sector.
- Improve the soft skills and to develop the communication skills of students.

b. Future Plans

- Funded research projects in collaboration with government and private organizations.
- Collaboration with big construction companies for In-plant training and placement
- Tie-ups with National and International Educational Institutes.
- Faculty Qualification Improvement.
- Enhancing Soft-skills, Aptitude Skills and Technical skills of the students.

Evaluative Report

Department of Computer Science and Engineering

- 1. Name of the department** : Computer Science and Engineering
- 2. Year of Establishment** : 2001
- 3. Names of Programmes / Courses offered (UG, PG, M. Phil., Ph.D., and Integrated Masters; Integrated Ph. D., etc.)** : B. Tech (Computer Science and Engineering)
M. Tech (Computer Science and Technology)
- 4. Names of Interdisciplinary courses and the departments/units involved:**

Sr. No.	Year	Semester	Course Code	Course	Department
1	FY	I	BSH101	Engineering Mathematics-I	Basic sciences and Humanities
2	FY	I	BSH102/103	Engineering Physics/ Engineering Chemistry	Basic sciences and Humanities
3	FY	I	BSH104	Basic Electrical Engineering	Electrical Engineering
5	FY	I	BSH105	Engineering Drawing	Mechanical Engineering
6	FY	I	BSH107	Basic Civil Engineering	Civil Engineering
7	FY	I	BSH126	Workshop Practice I	Mechanical Engineering
8	FY	II	BSH151	Engineering Mathematics-II	Basic sciences and Humanities
9	FY	II	BSH103/102	Engineering Chemistry/ Engineering Physics	Basic sciences and Humanities
11	FY	II	BSH152	Basic Electronics	Electronics and Telecommunication Engineering
12	FY	II	BSH153	Engineering Mechanics	Civil Engineering

13	FY	II	BSH154	Basic Mechanical Engineering	Mechanical Engineering
14	FY	II	BSH155	Environment & Ecology	Basic sciences and Humanities
15	FY	II	BSH174	Development of Skills-I	Basic sciences and Humanities
16	SY	III	BSH201	Engineering Mathematics-III	Basic sciences and Humanities
17	SY	III	BSH225	Development of skills -II	Basic sciences and Humanities
18	SY	IV	BSH251	Engineering Mathematics-IV	Basic sciences and Humanities

5. Annual/ semester/choice based credit system (programme wise):

UG: Choice based Credit system

PG: Choice based Credit system

6. Participation of the department in the courses offered by other departments:

Sr. No	Year	Semester	Course Code	Course	Name of other Department
1	FY	I	BSH106	Computer Fundamental And Programming	Basic Sciences and Humanities
2	SY	II	ETC256	Data Structure	Electronics and Telecommunication Engineering
3	SY	IV	BSH251	Engineering Mathematics-Iv	Electronics and Telecommunication Engineering
4	SY	IV	ELE256	Data Structure	Electrical Engineering

5	SY	IV	CED275	Technical Writing	Civil Engineering
6	TY	V	ETC392	System Software And Operating System	Electronics and Telecommunication Engineering
7	MBA	IV	MAN591	Emerging Trends In Information Technology	Department of Management Science

7. Courses in collaboration with other universities, industries, foreign institutions etc.: -

Subject Suggested by the Industries.

1. Introduction to Mainframe System
2. Mobile Application Development
3. Business Intelligence
4. Cloud Computing

Brief about the subject

Above subjects are suggested by the Infosys and Red Hat Pvt. Ltd., Introduction to mainframe system, Mobile application development, business intelligence suggested by the Infosys under campus Connect Program Cloud computing subject suggested by the Red Hat Pvt. Ltd., final year CSE Students learning this subject.

1. We have international certification program of Redhat Pvt. Ltd.
 - a. Red Hat Certified System Administrator
 - b. Red Hat Certified System Engineer
 - c. Red Hat Certified in Virtualization
 - d. Red Hat Certified in Open Stack
 - e. Red Hat Certified in Storage
2. Infosys Campus Connect Program.
 - a. Foundation Program (Technical Track)
 1. Object Oriented Programming using python
 2. RDBMS

3. Software Engineering and Web Technologies
- b. Soft Skill Program
3. Cloudera Pvt. Ltd.
- a. Big Data training program.

8. Details of course/programs discontinued (if any) with reasons: Nil

9. Number of teaching posts:

Post	Sanctioned	Filled
Professor	02	01
Associate Professor	04	03
Assistant Professor	15	17
Adjunct Faculty	-	04
Total	21	25

10. Faculty profile with name, qualification, designation, specialization:

Sr. No	Name of Staff	Qualification	Designation	Specialization	Experience (Years)	No. of Ph.D. Students Guided for the last 4 Years
1	Dr. R. B. Naik	Ph. D.	Professor	Real Time operating systems	19	01*
2	Prof. K. V. Bhosle	M.E. CSE	Associate Professor& Head	Data mining and ware housing	18	Nil
3	Prof. V. Kala	M.E.CSE	Associate Professor	Networking	15	Nil
4	Prof. S. R. Chaudhary	ME CSE	Associate Professor	Data Mining	16	Nil
5	Ms. S.S. Vishnu	M.E.CSE	Assistant Professor	Network Security	12	Nil
6	Mr. B. S. Sonwane	M.E.CSE	Assistant Professor	Network Security	12	Nil

7	Ms. B. B. Gurav	M.E.CSE	Assistant Professor	Image Processing	12	Nil
8	Ms. B. P. Chaudhari	M.E.CSE	Assistant Professor	Image Processing	12	Nil
9	Ms. S. A. Deshmukh	M.E.CSE (App.)	Assistant Professor	Data Mining, Software Engineering, DBMS	10.1	Nil
10	Ms. S. B. Bangar	M.E.CSE	Assistant Professor	Image Processing	11	Nil
11	Mr. J. S. Dhage	M.E.CSE	Assistant Professor	Image Processing/ Networking	12	Nil
12	Mr. R. B. Mapari	M.E.CSE	Assistant Professor	Network Security, Database management Systems	11	Nil
13	Ms. S. S. Patil	M.E.CSE	Assistant Professor	Network security, Database management Systems	10.6	Nil
14	Mr. S.S. Kankal	M.E.CSE	Assistant Professor	Network security, Networking	4	Nil
15	Ms. D. R. Deshmukh	M. Tech. CSE	Assistant Professor	Cloud Computing	7	Nil
16	Ms. Asara Anjum	M.E.CSE	Assistant Professor	Data Mining	6.9	Nil
17	Mr. K. R. Khandarkar	M.E.CSE	Assistant Professor	Image Processing	11	Nil
18	Mr. P. E. Khosre	M.E.CSE	Assistant Professor	CC	6	Nil
19	Mr. Nihit Agrawal	M.E.CSE	Assistant Professor	DS,DM	4.5	Nil

20	Ms. Priti Mishra	M.E.CSE	Assistant Professor	SE	7	Nil
21	Ms. Aparna Chavan	M.TECH CST	Assistant Professor	DM	1.2	Nil
22	Ms. Medha Deshpande	M.E.CSE	Adjunct Faculty	Soft Skill	12	Nil
23	Mr. S T Kulkarni	M.E.CSE	Adjunct Faculty	Software Engg	40	Nil
24	Mr. Muktak Joshi	BE CSE	Adjunct Faculty	Software Development & Programming	12	Nil
25	Dr. S. C. Mehrotra	Ph.D. M.Sc. Comp.	Adjunct Faculty	Remote Computer Applications	44	19

*Number of student registered

11. List of visiting faculty:

Nil

12. Percentage of lectures delivered and practical classes handled by temporary faculty:

Nil

13. Student -Teacher Ratio (Programme wise)

UG – 11.42:1

PG – 12:1

14. Number of academic support staff (technical) and administrative staff filled

Support Staff	Available
Laboratory Assistant	01
Trainee- Computer Hardware Maintenance	01
Peon	01

15. Qualifications of teaching faculty with D. Sc. / D. Litt / Ph. D. / M. Phil. / PG:

Ph. D. : 2

ME /M. Tech.: 21

BE : 2

16. Number of faculty with ongoing projects from (a) National and (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 and Patents by faculty:

a) **Publications:-**

Sr. No.	Name of Faculty	Total number of publications	
		National	International
1	Dr. R. B. Naik	0	20
2	Prof. K.V. Bhosle	0	3
3	Prof. V. Kala	0	2
4	Prof. S. R .Chaudhary	0	6
5	Ms. S.S. Vishnu	0	2
6	Mr. B.S. Sonwane	0	2
7	Ms. B.B. Gurav	0	1
8	Ms. B.P. Chaudhari	0	2
9	Ms. S.B. Bangar	0	5
10	Mr. J.S. Dhage	0	4
11	Mr. R.B. Mapari	0	5
12	Mr. S.S. Kankal	0	4
13	Ms. D.R. Deshmukh	0	7
14	Ms. Asara Anjum	0	3
15	Mr. Kiran R. Khandarkar	0	8
16	Mr. Prashant E. Khosre	1	1
17	Mr. Nihit Agrawal	0	1
18	Ms. Aparna Chavan	0	2

- **Number of papers published in peer reviewed journals (National / International) by faculty and students:** 48
- **Number of publications listed in International Database (For Eg: Web of Science,**

**Scopus, Humanities International Complete, Dare Database
International Social Sciences Directory, EBSCO host, etc.): Nil**

- **Monographs– Nil**
- **Chapter in Books– Nil**
- **Books Edited– Nil**
- **Books with ISBN/ISSN numbers with details of publishers– 2**
- **Citation Index– 1 to 25**
- **SNIP– Nil**
- **SJR– Nil**
- **Impact factor–0.62 to 6.577**
- **h-index– 0 to 1**

20. Areas of consultancy and income generated: Nil

21. Faculty as members in a) National committees b) International Committees c) Editorial Boards

- a) **National Committees: Nil**
- b) **International Committees: Nil**
- c) **Editorial Boards: Nil**

22. Student projects:

(a) Percentage of students who have done in-house projects including Inter-departmental/ program

For UG:

Sr. No.	Academic Year	Percentage of students who have done projects	
		In house	Interdepartmental
1	2016-17	100	Nil
2	2015-16	100	Nil
3	2014-15	100	Nil
4	2013-14	100	Nil
5	2012-13	100	Nil

For PG:

Sr. No.	Academic Year	Percentage of students who have done projects	
		In house	Interdepartmental
1	2016-17	83.34	Nil
2	2015-16	100	Nil
3	2014-15	95.84	Nil

(b) Percentage of number of students placed for projects in organizations outside the Institution i.e. in Research laboratories/Industry/other agencies:

For UG: Nil

For PG:

Sr. No.	Academic Year	Percentage of students placed for projects in outside the institution
1	2016-17	16.66
2	2015-16	Nil
3	2014-15	4.16

23. Awards / Recognitions received by faculty and students

a. Awards received by Faculty

Sr. No.	Name of Faculty	Name of Award / Recognition	Year	Name of Organization
1	Dr. R. B. Naik	Recognized by Infosys as Silver partner Faculty	2016	Infosys Pvt. Ltd.
2	Mr. B. S. Sonwane	Recognized by Infosys as Silver partner Faculty	2016	Infosys Pvt. Ltd.
3	Ms. V. Kala	Recognized by Infosys as Bronze partner Faculty	2016	Infosys Pvt. Ltd.
4	Ms. S.S. Vishnu	Recognized by Infosys as Bronze partner Faculty	2016	Infosys Pvt. Ltd.

5	Ms. S. A. Deshmukh	Recognized by Infosys as Bronze partner Faculty	2016	Infosys Pvt. Ltd.
6	Mr. R. B. Mapari	Recognized by Infosys as Bronze partner Faculty	2016	Infosys Pvt. Ltd.
7	Prof. K. V. Bhosle	Member of Board Of Studies	2016	BAMU, Aurangabad
8	Mr. B. S. Sonwane	Recognize by Infosys as Silver partner Faculty	2015	Infosys Pvt. Ltd
9	Prof. K.V. Bhosle	Recognized as PG teacher by University	2015	BAMU, Aurangabad
10	Prof. V. Kala	Recognized as PG teacher by university	2015	BAMU, Aurangabad
11	Prof. S. R. Chaudhary	Recognized as PG teacher by university	2015	BAMU, Aurangabad
12	Ms. B. B. Gurav	Recognized as PG teacher by university	2015	BAMU, Aurangabad
13	Ms. B. P. Chaudhari	Recognized as PG teacher by university	2015	BAMU, Aurangabad
14	Ms. S. B. Bangar	Recognized as PG teacher by university	2015	BAMU, Aurangabad
15	Mr. J. S. Dhage	Recognized as PG teacher by university	2015	BAMU, Aurangabad
16	Mr. R. B. Mapari	Recognized as PG teacher by university	2015	BAMU, Aurangabad
17	Dr. R. B. Naik	Recognize by Infosys as bronze partner Faculty	2015	Infosys Pvt. Ltd.
18	Prof. K. V. Bhosle	Local enquiry committee (LIC) member for Dr. BAMU University, Aurangabad	2012	BAMU, Aurangabad

19	Mr. B. S. Sonwane	Recognized by Infosys as Bronze partner Faculty	2014	Infosys Pvt.Ltd
20	Mr. B. S. Sonwane	GOI Scholarship awarded by Vishwashwarayya PhD scheme	2014	Government of India
21	Dr. R. B. Naik	Members of Board Of Studies, Dr. BAMU.	2014	BAMU, Aurangabad
22	Dr. R. B. Naik	Reviewer for Advances in Electrical and Electronics Engg. Journal	2014	Advances in Electrical and Electronics Engg. Journal
23	Dr. R. B. Naik	Recognize by Infosys as Silver partner Faculty	2014	Infosys Pvt. Ltd.
24	Dr. R. B. Naik	Reviewer for American Association For sciences and Technology Journal	2014	American Association For sciences and Technology Journal
25	Dr. R. B. Naik	Reviewer Pearson Education	2014	Pearson Education
26	Dr. R. B. Naik	Session Chair for ICRTET-2013	2013	SNJB'S Late Sau Kantabai Bhavralal Jain College of Engineering, Chandwad
27	Prof. K.V. Bhosle	Member of UGC for selection Process	2012	BAMU, Aurangabad

b. Awards / Recognitions received by students

Sr. No.	Name of student	Name of Award /Recognition	Organizing Institute
2016-17			
1	Sakshi Agarwal	Winner in Virtual Campus , TechnoMIT-2017	Maharashtra Institute of Technology, Aurangabad

2	Pranav Joshi	3 rd in Movie Making, TechnoMIT-2017	Maharashtra Institute of Technology, Aurangabad
3	Shalini Khokad	Winner in Virtual Campus, TechnoMIT-2017	Maharashtra Institute of Technology, Aurangabad
2015-16			
4	Saurabh Lambe	1 st in Virtual Campus, Flash 2016	Marathwada Institute of Technology, Aurangabad
5	Ganesh Kaple	1 st , in web designing , Flash 2016	MIT Aurangabad
6	Ganesh Kaple	1 st , IETE Student forum west zone congress 2016 -“Techno Cracker” at CSMSS	Chhatrapati Shahu Maharaj Shikshan Sanstha, Aurangabad
7	Akanksha Garad	3 rd In IETE Student forum west zone congress 2016 -“Techno Cracker” at CSMSS	Chhatrapati Shahu Maharaj Shikshan Sanstha, Aurangabad
8	Pranjali Parsewar	1 st in C programming contest	Maharashtra Institute of Technology, Aurangabad
9	Arpan Sharma and his team	1 st runner up in 'Robo-wars' (60kg)'Mindspark15'	College of Engineering, Pune
10	Saurabh Lambe	First rank in Virtual Campus, “Flash 2016”	Marathwada Institute of Technology, Aurangabad
11	Akanksha Garad	3 rd ,1st IETE Student forum WZ congress 2016	Chhatrapati Shahu Maharaj Shikshan Sanstha, Aurangabad
12	Ganesh Kaple	2 nd , Code master, Flash 16	Marathwada Institute of Technology, Aurangabad
13	Bhakti Huljute	2 nd ,TECHKSHETRA 2K 15	Maharashtra Institute of Technology, Aurangabad
2014-15			
14	Shalini khokad	1 st in Talent Night (RYLA)2015	Rotary club Aurangabad
15	Sakshi Agarwal	2 nd , RYLA, Poster Presentation	Rotary club Aurangabad,

16	Payal Sonagra	Winner in Agnitio 2014 “Laptop Junkyard”	Jawaharlal Nehru Engineering College, Aurangabad
17	Prajkta Jadhav	Winner in Kiystron 2015, C Codiac first	Jawaharlal Nehru Engineering College, Aurangabad
18	Apurva Deshpande	Winner in Virtual campus competition Kiystron 2015	Jawaharlal Nehru Engineering College, Aurangabad
2013-14			
19	Chaitanya Mundhe, Ashish Lingayat, Pritam Toshniwal	3 rd in Regional level project competition organized by CSI -March 2014	Regional level (Maharashtra and Goa) project competition organized by CSI -March 2014
20	Yogesh Chichani	2 nd in Paper presentation “Symfony - Open Source ”	Government Engineering College, Aurangabad
2012-13			
21	Sarvagya Kumar, Madan, Aditya Sawrikar, Swapnil Patil	Chosen as one of the top 8 teams in western region among 1200 teams.	Aspiration 20-20, organized by Infosys Pvt. Limited, Pune

24. List of eminent academicians and scientists / Visited to the Department:

Sr. No.	Date	Name of eminent academicians and scientists	Purpose
2016-17			
1	8/3/2017	Dr. Luigi Troiano, University of Sannio, Benevento Italy	Computational Intelligence
2	07/03/2017	Ms. Pallavi Kulkarni Inteliment Technologies (I) Pvt. Ltd., Pune	Deep dive in Big Data Analytics
3	07/02/ 2017	Seminar by “Mr. Arun Epan” from Redhat India Pvt. Ltd	Redhat Linux

4	27/01/ 2017	Seminar by Alumni Mr. Rajeev Mehta	career Guidance
5	16/07/2016	Seminar by alumni Mr. Deepak Singh	career guidance
2015-16			
6	18/02/2016	Seminar by Mr. Arun Epan from Redhat India Pvt. Ltd	Redhat Linux
7	02/02/2016	Seminar by Alumni Mr. Kedar Nath, Kaddy Consulting Solution, New York, USA	Enablement
8	29/09/2015	Seminar by Mr. Anuj Jajoo Lead, Infosys Pune	Career Guidance
9	21/09/2015	seminar by Alumni Miss. Smita Hiswankar from Infosys Pune	Road Show - Career Guidance
2014-15			
10	29/01/2015	Seminar by Alumni Mr. Kishor Deshpande, technical lead at iGate Global solutions,	career Guidance
11	06/08/2014	Seminar -Preparation for Campus Interview by Mr. Kartik and Mr. K. Sreedhar Rao from Techrel, Pune	career Guidance
2013-14			
12	23/01/2014	Seminar by Mrs. Shweta Apte Mr. Suyog Pendkar Dr.Yashpal Kadam	Guidance for GATE
13	01/02/2014	Seminar by Mr. Chandrshekhar Patil(Alumni)	Career Guidance
14	21/10/2013	Seminar by Mr. Moiz Ali (Alumni)	Career Guidance
15	06/10/2013	Seminar by Mr. Pushpendra Chavan	Open Source and Technologies
2012-13			
16	09/02/2013	Seminar by Mr. Bhushan Kadam, Techrel Pvt Ltd.	Preparation of Aptitude Test

25. Seminars/ Conferences/Workshops organized & the source of funding:

National: Nil

International: - Nil

26. Student profile programme/course wise:

Name of the Course/ programme	Applications Received	Selected	Enrolled		Pass percentage
			*M	*F	
2012-16	Centralized Admission Procedure	49	25	24	100
2011-15		49	28	21	96.83
2010-14		54	35	19	65.83
2009-13		67	47	20	100

*M = Male *F = Female

27. Diversity of Students:

UG:

Year of Admission	Name of the course	% of students from the same state	% of students from other States	% of students from abroad
2015-16	CSE	81.90	18.03	Nil
2014-15		84.21	15.78	Nil
2013-14		80.76	19.23	Nil
2012-13		73.92	23.07	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Year	Students having GATE score /GRE/CMAT
2016-2017	1
2015-2016	12
2014-2015	5
2013-2014	2

29. Student progression

Student Progression %	Against% enrolled				
	2012-13	2013-14	2014-15	2015-16	2016-17
UG to PG	10.66	12.65	7.93	3.57	NA
PG to M. Phil.	-	-	-	-	NA
PG to Ph. D.	1.51	-	-	-	NA
Ph.D. to Post-Doctoral	-	-	-	-	NA
Employed	13.63	2.53	14.28	19.64	5.97
- Campus Selection					
- Other than Campus Recruitment	39.39	37.97	41.26	25.00	NA
Entrepreneurship / Self-employment	10.60	5.06	Nil	Nil	1.49

30. Details of Infrastructural facilities (Programme specific):

Sr. No.	Infrastructural Facility	Details of Item	Number
1	Department Library	Books	171
2	Internet facility for staff and students	Computers	306
3	Classrooms	Without ICT facility	1
		With ICT facility	1
4	Seminar Hall	With ICT facility	1
5	Laboratories	UG	10
		Post Graduate	2
6	Tutorial Room	UG	1
		PG	1

Sr. No.	Name of Laboratory	Area (Sq. m)	Total cost of the Laboratory (in Rs.)
01	Database Lab	67	6,00,833
02	Computer Programming Lab – I	67	7,88,823
03	Advanced Computing Lab	67	6,00,533
04	Research Lab	67	7,23,012
05	Computer Software Lab	67	7,87,259
06	Linux Lab	67	7,59,283
07	Computer Network Lab	67	8,13,325
08	Computer Programming Lab-III	67	5,38,613
09	Computer Programming Lab - II	67	6,00,533
10	Computer Hardware & Microprocessor Lab	67	6,68,933
11	Computer Design Lab	67	7,65,292
12	Project Lab	67	6,83,838
13	Computer Center	212	35,00,000
	Total	1016	1,18,30,277

31. Number of students receiving financial assistance from college, university, Government or other agencies

Sr . No	Details of Financial Assistance	Academic year/ No of students of CSED		
		2014-15	2015-16	2016-17
1	OBC Freeship, GOI	52	42	54
2	SC Freeship, GOI	35	36	34
3	SBC Freeship, GOI	05	05	05
4	ST Freeship, GOI	02	02	00
5	VJ/NT Freeship, GOI	29	26	27
6	TFWS	12	11	11
7	AICTE GATE Scholarship	Nil	02	01
8	Earn and learn scheme from Institute(Graduate Teaching Assistant)	01	01	01

32. Details on student enrichment programmes (special lectures / workshops /Seminar) with external experts:

Sr. No.	Date	Details of External Expert	Topic
1	07/03/2017	Ms. Pallavi Kulkarni Intelligent Technologies (I) Pvt. Ltd., Pune	Seminar on “Deep dive in Big Data Analytics”
2	07/02/ 2017	Mr. Arun Epan from Redhat India Pvt. Ltd.	Seminar on “Redhat Linux”

3	04/02/2017	Mr. Krunal Patel Centre Director, TIME Aurangabad.	Work shop on “Aptitude Skill”
4	27/01/ 2017	Mr. Rajeev Mehata, Zest Pvt. Ltd. (Alumni)	Seminar on “Career Guidance”
5	16/07/2016	Mr. Deepk Singh, IBM Pvt. Ltd. (Alumni)	Seminar on “Career guidance”
6	18/02/2016	Mr. Arun Epan from Redhat India Pvt. Ltd.	Seminar on “Redhat Linux”
7	11/2/16 & 12/2/16	Alumni Mr. Vaibhav Khamkar, Siemens Pvt. Ltd. Pune	Workshop on “Java Technology”
8	02/02/2016	Mr. Kedar Nath, Kaddy Consulting Solution, New York, USA (Alumni)	Seminar on “Student Enablement for industry”
9	29/09/2015	Mr. Anuj Jajoo Lead, Infosys Pvt. Ltd. Pune	Seminar on “Career Guidance”
10	21/09/2015	Miss. Smita Hiswankar from Infosys Pune(Alumni)	Seminar on “Road Show - Career Guidance”
11	15/09/2015	Mr. Sachin Naik, Manager Redhat India Pvt. Ltd.	Seminar on “Opportunities in Open Source”
12	25/09/2015	Mr. Varun Patil	Training program on “Web Application”
13	12/08/2015	Mr. Mayur from Focus Academy	Aptitude test for Career Enhancement
14	11/02/2015 to 14/02/2015	Mr. Swapnil Pande Infosys Pvt. Ltd., Pune	Workshop on “Emotional Intelligence”
15	29/01/2015	Mr. Kishor Deshpande, Technical Lead, iGate Global Solutions, Bangalore. (Alumni)	Seminar on “Career Guidance”

16	06/08/2014	Mr. Kartik and Mr. K. Sreedhar Rao from Techrel, Pune	Seminar on for preparation of “Campus Interview “
17	23/01/2014	Mrs. Shweta Apte, Mr. Suyog Pendkar and Dr. Yashpal Kadam Vidyalankar Group of Educational Institute	Seminar on “Guidance for GATE”
18	01/02/2014	Mr. Chandrshekhar Patil	Seminar on “Career Guidance”
19	21/10/2013	Mr. Moiz Ali	Seminar on “Career Guidance”
20	06/10/2013	Mr. Pushpendra Chavan, Red Hat Pvt. Ltd.	Seminar on “Open Source and Technologies”
21	16/10/2013	Mr. Sagar Shrivastav, Manager Redhat Pvt. Ltd. Mumbai	Expert talk on “Career Guidance”
22	09/02/2013	Mr. Bhushan Kadam, Techrel	Seminar on Preparation of Aptitude Test

33. Teaching methods adopted to improve student learning

1. Power point presentations.
2. Industrial visits
3. NPTEL Videos
4. Tutorial classes
5. Practical classes

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Sr. No.	Type of activity	Year	Details of activity
1	ICT for Teachers	2015-2016	ICT for Teacher program conducted by Faculty of Department of Computer Science and Engineering at Washi School in association with DIET.
2	ICT for Municipal Corporation schools of Aurangabad.	2015-2016	Department of computer Science and Engineering have given the computer education related training to the AMC school students. Total 70 schools have got the benefit of this training program.
3	ICT for Teachers	2015-2016	ICT for Teacher program conducted by Faculty of Department of computer Science and Engineering at Rotegaon polytechnic in association with DIET.
4	ICT for School	2015-2016	Students of computer science and engineering have given the computer education training to the Shrikrishna Ashram students. 90 students have participated in the training program. 13 days training given to the students.
5	ICT for School	2015-2016	Yashwantrao Madhyamik Vidhyalay, Rajangaon, Tq. Gangapur Dist. Aurangabd. <u>150 students have participated in ICT learning process.</u>
6	ICT For School	2014-2015	Z. P. High School Shivur Village... students trained about computer education and computer hardware.
7	ICT For Schools	2014-2015	Z.P High School Borasar and Sudamwadi village. Topic: ICT education for school students and information about computer hardware.
8	Computer Technologies.	2013-2014	Faculty of Department of Computer Science and Engineering has trained the 110 students of Giraja Mata School village about information and communication Technology and use of computer Technologies.

9	Computer Education Program	2013-2014	Faculty of Department of Computer Science and Engineering has trained the 110 students of Dnyan Prakash School of Daulatabad village about information and communication Technology and use of computer Technologies.
10	Computer Education Program.	2013-14	Faculty of Department of Computer Science and Engineering has trained the 75 students of Z.P High school Kewadgon village about information and communication Technology.

35. SWOC analysis of the department and Future plans

Strengths

- State of the art infrastructure & facilities
- High faculty retention
- Experienced and dedicated faculty
- Collaboration with reputed industries like Infosys Pvt Ltd, Redhat Pvt Ltd. & Cloudera Pvt Ltd.

Weaknesses

- Relatively less number of faculty with Ph.D. qualification
- Relatively less research publications in reputed journals
- No research funding from various Government funding agencies

Opportunities

- Consultancy in software development
- Good scope for startups
- Obtaining research funding from various Government funding agencies

Challenges

- Availability of few software industries in the vicinity of Institute
- Communication skills among the students
- Availability of faculty with Ph.D. qualification

Future Plans

- Increased number of faculty members with Ph.D. qualification
- Getting funded research projects
- More industry-institute interaction for placement of students
- To get accreditation from various agencies

Evaluative Report

Department of Electrical Engineering

- 1. Name of the department:** Electrical Engineering
- 2. Year of Establishment:** 2014
- 3. Names of Programmes / Courses offered (UG, PG, M. Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**

UG: Bachelor of Technology (Electrical Engineering)

- 4. Names of Interdisciplinary courses and the departments/units involved:**

S. No.	Year	Semester	Course Code	Course	Department
1	FY	I	BSH101	Engineering Mathematics-I	Basic Sciences and Humanities
2			BSH102/103	Engineering Physics/ Engineering Chemistry	Basic Sciences and Humanities
3			BSH105	Engineering Drawing	Mechanical Engineering
4			BSH106	Computer Fundamentals of Programming	Computer Science and Engineering
5			BSH107	Basic Civil Engineering	Civil Engineering
6			BSH126	Workshop Practice-I	Mechanical Engineering
7	FY	II	BSH151	Engineering Mathematics-II	Basic Sciences and Humanities
8			BSH102/103	Engineering Physics/ Engineering Chemistry	
9			BSH152	Basic Electronics Engineering	Electronics and Telecommunication Engineering
10			BSH153	Engineering Mechanics	
11			BSH154	Basic Mechanical Engineering	Mechanical Engineering
12			BSH155	Environment and Ecology	Basic Sciences and Humanities / Plastic and Polymer
13	SY	III	BSH174	Development of Skill -I	Basic Sciences and Humanities
14			BSH201	Engineering Mathematics- III	Basic Sciences and Humanities

15			BSH225	Development of Skill- II	Basic Sciences and Humanities
16	SY	IV	BSH251	Engineering Mathematics- IV	Basic Sciences and Humanities
17			ELE256	Data Structure	Computer Science and Engineering

5. Annual/ semester/choice based credit system (programme wise):

UG: Choice Based Credit System

6. Participation of the department in the courses offered by other departments:

Sr. No.	Year	Semester	Course Code	Course	For Department
1	FY	I	BSH104	Basic Electrical Engineering	Basic Sciences and Humanities
2	SY	III	MED256	Electrical Technology	Mechanical Engineering
3	SY	III	ETC255	Power Devices and Machines	Electronics and Telecommunication Engineering

7. Courses in collaboration with other universities, industries, foreign institutions, etc.: Nil

8. Details of courses/programmes discontinued (if any) with reasons: Nil

9. Number of teaching posts:

Post	Sanctioned	Filled
Professors	01	00
Associate Professors	02	00
Assistant Professors	09	10
Adjunct Faculty	-	04
Total	12	14

10. Faculty profile with name, qualification, designation, specialization, (D.Sc. /D.Litt./Ph.D. / M. Phil. etc.,) :

Sr. No.	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
1.	Mr. K.T. Mahamuni	M.E.	Assistant Professor	Power Systems	41	Nil
2.	Mr. R.P. Naik	M.E.	Assistant Professor	Electrical Engineering	35	Nil
3.	Mr. P.R. Padghan	M. Tech.	Assistant Professor	Power Systems	6.5	Nil
4.	Mr. A.P. Chopade	M. Tech.	Assistant Professor	Power Systems	3.5	Nil
5.	Mr. A.K. Roy	M.E.	Assistant Professor	Power Systems	6	Nil
6.	Mr. Vikash Rajak	M. Tech.	Assistant Professor	Power Systems	2	Nil
7.	Mr. Saravana Kumar	M.E.	Assistant Professor	Power Electronics	4.5	Nil
8.	Mr. Dhanesh Radhakrishnan	M. Tech.	Assistant Professor	Renewable Energy Technologies	2	Nil
9.	Ms. Gouthami Trivedula	M. Tech.	Assistant Professor	Power Electronics	1.7	Nil
10.	Mr. B. Raja Guru	M. Tech.	Assistant Professor	Power Electronics and Drives	2.5	Nil
11.	Mr. B.A. Sawle	M.E.	Adjunct	Power Systems	35	Nil
12.	Mr. R. D. Pathak	B.E.	Adjunct	Electronics	34	Nil
13.	Mr. Suresh Todkar	B.E.	Adjunct	Automation	31	Nil
14.	Mr. V.N. Nadapurkar	B.E.	Adjunct	Power Systems	30	Nil

11. List of senior visiting faculty: Nil

- 12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:** Nil
- 13. Student -Teacher Ratio (programme wise):** UG- 12.8: 1
- 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:**

Support Staff	Available
Peon	01

- 15. Qualifications of teaching faculty with D.Sc. / D.Litt. / Ph.D. / M. Phil. / PG :**

- **M. E. / M. Tech. :** 10
- **Adjunct:** 04

- 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:

a) Publication per faculty:

Sr. No.	Name of Faculty	Total number of paper published	
		National	International
1	Mr. Saravana Kumar	Nil	4
2	Mr. P. R. Padghan	1	Nil
3	Mr. K. T. Mahamuni	1	1
4	Mr. A. P. Chopade	Nil	1

- * **Number of papers published in peer reviewed journals (national / International) by faculty and students:** Nil
- * **Number of publications listed in International Database (For e.g., Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.):** Nil
- * **Monographs:** Nil
- * **Chapter in Books:** Nil
- * **Books Edited:** Nil
- * **Books with ISBN/ISSN numbers with details of publishers:** Nil

- * **Citation Index:** Nil
 - * **SNIP:** Nil
 - * **SJR:** Nil
 - * **Impact factor:** Nil
 - * **h-index:** Nil
- 20. Areas of consultancy and income generated:** Nil
- 21. Faculty as members in a) National committees b) International Committees c) Editorial Boards:**
- a) **National committees :** Nil
 - b) **International Committees:** Nil
 - c) **Editorial Board:** Nil
- 22. Student projects:** NA
- a) **Percentage of students who have done in-house projects including inter departmental/programme :** Nil
 - b) **Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies:** Nil
- 23. Awards / Recognitions received by faculty and students:**
- (a) **Awards / Recognitions received by faculty:** Nil
- (b) **List of awards won in the inter institute/institute technical events by students:**

Sr. No.	Title of the event	Name of Student	Award	Organization
1	TECH'EVE -2015	Anuja Giri	Rank- I	Government College of Engineering , Aurangabad
2	VEDANTA-2015	Anuja Giri	Rank -I	Mahatama Gandhi Polytechnic, Aurangabad
3	WINGS-2016	Rasika Kulkarni	Rank- II	Government College of Engineering , Aurangabad
		Pooja Choutmal		

24. List of eminent academicians and scientists / visitors to the department:

Sr. No.	Date	Name of Speaker	Topic
1	04/06/2016	Mr. A.L. Deshmukh, Retired Chief Engineer , Maharashtra State Electricity Board	Generation of Electrical Energy
2	09/01/2016	Mr. A.L. Deshmukh, Retired Chief Engineer, Maharashtra State Electricity Board	Generation of Electrical Energy
3	16/02/2017	Mr. M. A. Patil, Retired Principal and In-charge Director, Vocational Training and Technical Educational, Maharashtra State.	Career path guidance

25. Seminars/ Conferences/Workshops organized and the source of funding

a) National:

Sr. No.	Title of Workshop	Conference /Workshop	Duration	Source of Funding
1	Need of Electronics in industry for Electrical and ETC Engineer	Workshop	21/02/2017	Self-Sponsored
2	Soft skills Development	Workshop	22 and 23/02/ 2017	Self-Sponsored
3	Electrical safety	Seminar	31/03/2017	Self-Sponsored

b) International: Nil

26. Student profile programme/course wise: NA

27. Diversity of Students:

Year of Admission	Name of the course	% of students from the same state	% of students from other States	% of students from abroad
2015-16	B. Tech. in Electrical	100	Nil	Nil
2014-15	Engineering	100	Nil	Nil

- The batch commenced from the year 2014-15.

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.: NA

29. Student progression:

Student progression	Against % enrolled
UG to PG	NA
PG to M. Phil.	NA
PG to Ph.D.	NA
Ph.D. to Post-Doctoral	NA
Employed	NA
<ul style="list-style-type: none"> • Campus selection • Other than campus recruitment 	
Entrepreneurship/Self-employment	NA

30. Details of Infrastructural facilities: a) Library b) Internet facilities for Staff and Students c) Class rooms with ICT facility d) Laboratories

Sr. No.	Infrastructural facility	Details of Item	Number
1	Departmental Library	Title	65
		Volumes	131
		Journals	Nil
		Journal in softcopy	Nil
		CDs	Nil

2	Internet facility for staff and students	Computers	01
3	Classrooms	without facility	ICT 02
		Drawing hall	Nil
4	Laboratories	UG	08
		Post Graduate	Nil
		Research	Nil
5	Tutorial Room	UG	01
		PG	Nil

Sr. No.	Name of Laboratory	Area (Sq. M.)	Total cost of the Laboratory in Rs
1	Electrical Measurements	70	154003.09
2	Network Analysis / Power Electronics	70	661119.00
3	Electrical Machines / Electrical Drives	200	1317561.00
4	Analog and Digital Circuits / Micro-processor and Micro- controller	70	125037.00
5	Basic Electrical Engineering / Power	70	612402.10
Total		480	2870122.19

31. Number of students receiving financial assistance from college, university, government or other agencies:

Sr. No.	Details of Financial Assistance	Academic year/ No. of students		
		2014-15	2015-16	2016-17
1	OBC Freeship/GOI Scholarships	2	21	37
2	SC Freeship/GOI Scholarships	4	23	73
3	SBC Freeship/GOI Scholarships	2	4	5
4	ST Freeship/GOI Scholarships	0	0	0
5	VJ/NT Freeship/GOI Scholarships	5	24	63
6	TFWS	3	3	3

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts:

Sr. No.	Date	Name of Speaker	Topic
1	04/06/2016	Mr. A.L. Deshmukh, Retired Chief Engineer , Maharashtra State Electricity Board	Generation of Electrical Energy
2	09/01/2016	Mr. A.L. Deshmukh, Retired Chief Engineer , Maharashtra State Electricity Board	Generation of Electrical Energy
3	16/02/2017	Mr. M. A. Patil, Retired Principal and In-charge Director, Vocational Training and Technical Educational, Maharashtra State.	Career path guidance

33. Teaching methods adopted to improve student learning:

1. Power point presentations.
2. Industrial visits
3. NPTEL Videos
4. Tutorial classes
5. Practical classes

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

Sr. No.	Type of activity	Year	Details of activity
1	Blood donation program	2015-16	The camp is being organized to mark birthday celebration of Dr. Y. A. Kawade, President, G. S. Mandal, Aurangabad. From Electrical Department some students
2	Awareness about renewable energy sources	2013-17	Number of people do visit to our solar plant and they are explained the importance of renewable energy source (solar plant). News about this is also published.

35. SWOC analysis of the department and Future plans:

Strengths

- State of the art laboratories.
- Qualified and dedicated faculty members.
- Solar power plant available on campus for all the students and faculty members for study purpose.

Weaknesses

- Lack of faculties with Ph.D. qualification.
- Mostly intake is with poor communication skill.
- Poor in publications in national and international journals.

Opportunities

- Good scope for employment in government and private sectors.
- Good number of industries present in the vicinity of institute.
- Good opportunity in renewable energy sector.

Challenges

- Improving skills among students.
- Personality development for the students.

Future Plans:

- Collaboration with reputed industries as well as small scale industries.
- Tie-ups with National and International Educational Institutes.
- Faculty Qualification improvement.
- Enhancing Soft-skills, Aptitude Skills and Technical skills of the students.
- Improvement in publications in national and international journals.

Evaluative Report

Electronics and Telecommunication Engineering Department

1. Name of the department: Electronics and Telecommunication Engineering

2. Year of Establishment: 2001

3. Names of Programmes / Courses offered (UG, PG, Ph. D. etc.)

- Bachelor of Technology (Electronics and Telecommunication Engineering)
- Master of Technology (Electronics and Telecommunication)
- Ph. D. in Electronics and Telecommunication Engineering

4. Names of Interdisciplinary courses and the Departments / units involved:

Sr. No.	Year	Semester	Course Code	Subject	Department
1	First Year Engineering	I	BSH101	Engineering Mathematics-I	Basic Sciences and Humanities
			BSH102/103	Engineering Physics Engineering Chemistry	Basic Sciences and Humanities
			BSH104	Basic Electrical Engineering	Electrical Engineering
			BSH105	Engineering Drawing	Mechanical Engineering
			BSH106	Computer Fundamentals & Programming Languages	Computer Science and Engineering
			BSH107	Basic Civil Engineering	Civil Engineering
			BSH126	Workshop Practice-I	Mechanical Engineering
2	First Year Engineering	II	BSH151	Engineering Mathematics-II	Basic Sciences and Humanities
			BSH102/103	Engineering Physics Engineering Chemistry	Basic Sciences and Humanities
			BSH153	Engineering Mechanics	Mechanical Engineering

			BSH154	Basics Mechanical Engineering	Mechanical Engineering
			BSH155	Environment & Ecology	Basic Sciences and Humanities
			BSH174	Development of Skill -I	Basic Sciences and Humanities
3 Second Year Engineering	III		BSH201	Engineering Mathematics-III	Basic Sciences and Humanities
			ETC206	Data Structure	Computer Science and Engineering
			BSH225	Development of Skill -II	Basic Sciences and Humanities
	IV		BSH251	Engineering Mathematics-IV	Basic Sciences and Humanities
			ETC255	Power Device & Machines	Electrical Engineering
			ETC275	Department Skills	Basic Sciences and Humanities
4	Third Year Engineering	VI	ETC375	System software & operating System (El-I)	Computer Science and Engineering

5. Annual/semester/choice based credit system (Programme wise)

- UG: Choice based Credit system
- PG: Choice based Credit system
- PhD: Credit based System for course work by Dr. B.A.M. University, Aurangabad

6. Participation of the Department in the courses offered by other Departments

Sr. No.	Year	Semester	Course Code	Subject	Name of other Department
1.	First Year	I	BSH104	Basic Electrical Engineering	Basic Sciences and Humanities

2.	First Year	II	BSH152	Basic Electronics	Basic Sciences and Humanities
3.	Second Year	III	ELE204	Electronics Device & Circuits	Electrical Engineering
		IV	ELE255	Analog & Digital Circuits	
4	Third Year	VI	ELE352	Digital Signal Processing	

7. Courses in collaboration with other universities, industries, foreign Institutions, etc.

Sr. No.	Name of Industries / Institutes	Programme
1	Indo German Tool Room, Aurangabad	1. PLC Programming 2. Integrated Course in PLC Programming, SCADA and Pneumatics 3. Embedded System 4. Integrated Course in PLC Programming, Embedded System and VLSI
2	Maven Technology, Aurangabad	1. Arduino 2. Internet of Things (IOT)
3	Gill Instruments Pvt. Ltd., Bangalore	1. MSP-430 Low Cost & Low Power Micro-controller
4	Inventrom Pvt. Ltd, Panaji	1. Raspberry Pi & Wireless Sensor Network

8. Details of courses/programme discontinued (if any) with reasons: Nil

9. Number of teaching posts:

Post	Sanctioned	Filled
Professors	04	01

Associate Professors	08	04
Asst. Professors	24	29
Adjunct Faculty	-	03

10 Faculty profile with Name, Qualification, Designation, Specialization, (M.E/ M. Tech /M.S/Ph.D. etc.)

Sr. No	Name of Faculty	Qualification	Designation	Specialization	No. of Year's Experience	No. of Ph.D. Student Guided for the last four Years
1	Dr. G. S. Sable	Ph. D.	Prof and Head	Signal & Image Processing	16	Nil
2	Dr. A. D. Mishra	Ph. D.	Asso. Prof.	Antenna Designing, Signal Image	10	Nil
3	Dr. S.R. Patil	Ph. D.	Asso. Prof.	Signal & Image Processing	22	Nil
4	Prof. S.P. Kodgire	M. E.(Elec.)	Asso. Prof.	VLSI & Embedded System	19.8	Nil
5	Prof. R.K. Kanhe	M. E. (Instru.)	Asso. Prof.	Process Control & Biomedical Signal Processing	20	Nil
6	Mrs. S. J. Nandedkar	M. E. (Elec.)	Asst. Prof.	Communication & Antenna	16	Nil
7	Ms. M. D. Pawar	M. E. (C.E.)	Asst. Prof.	Signal & Image Processing	11	Nil
8	Ms. A. A. Somani	M. E. (Elec.)	Asst. Prof.	VLSI & Embedded System	10	Nil
9	Mr. V. R. Gosavi	M. E. (Elec.)	Asst. Prof.	Electromagnetic Engineering	13	Nil
10	Ms. S. B. Wagh	M. E. (ETC)	Asst. Prof.	VLSI Design	9	Nil

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11	Mr. B. B. Wattamwar	M. E. (VLSI)	Asst. Prof.	Communication Engineering & VLSID	25	Nil
12	Mr. R. L. Gaike	M. E. (Elec.)	Asst. Prof.	VLSI Design	16	Nil
13	Ms. R.B. Palve	M. E. (Elec.)	Asst. Prof.	Communication Engineering	11	Nil
14	Ms. A.H. Utgikar	M. Tech (EDT)	Asst. Prof.	Electronics Design & Technology	6	Nil
15	Mr. U.D. Shirale	M. Tech (EDT)	Asst. Prof.	Electronics Design & Technology	6	Nil
16	Mr. S. B. Biradar	M. Tech (EDT)	Asst Prof.	Electronics Design & Technology	5	Nil
17	Mr. S. Y. Gadkari	M. Tech (EDT)	Asst. Prof.	Electronics Design & Technology	7	Nil
18	Ms. P. P. Patil	M. E. (Elec.)	Asst. Prof.	Electronics	6	Nil
19	Mr. S. S. Chate	M. E. (S.P.)	Asst. Prof.	Image processing & Robotics	4	Nil
20	Mr. A. S. Bhalerao	M. E. (Elec.)	Asst. Prof.	Signal processing	10	Nil
21	Mr. S. R. Chavan	M. Tech (Emb. sys)	Asst. Prof.	Embedded System	4	Nil
22	Ms. S. R. Zambre	M. Tech (ETC)	Asst. Prof.	Signal processing & Image processing	4.7	Nil
23	Mr. A. V. Navalagire	M. Tech (VLSI)	Asst. Prof.	VLSI	2	Nil
24	Mr. P. G Ambhore	M. E. (S.P.)	Asst. Prof.	Signal processing	3	Nil
25	Mr. P. D. Bharad	M. E. (Elec.)	Asst. Prof.	Signal Processing & VLSI	1	Nil
26	Mr. M. S. Khan	M. E.(Elec.)	Asst. Prof.	Communication Engineering	8	Nil

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27	Mr. S. M. Laeq	M. S. (R.T.E.S.)	Asst. Prof.	Embedded Systems & AI	6	Nil
28	Mr .G. V. Jawale	M. Tech (Electronics Ceramics)	Asst. Prof.	Electronic Ceramics	0.6	Nil
29	Mr. J. S. Renius	M. Tech (P&ED)	Asst. Prof.	Power Electronics & Drives	0.6	Nil
*30	Dr. B.G .Toksha	Ph. D.	Asst. Prof.	Physics	10	Nil
*31	Mr. A. B. Bagul	M. A., B. Ed	Asst. Prof.	English	10	Nil
*32	Mr. P. D. Ghodke	M.Sc.	Asst. Prof.	Physics (Electronics)	7	Nil
*33	Mr. N. B. Gawali	M. Phil. , B. Ed.	Asst. Prof.	English	5	Nil
*34	Dr. A. D. Rushi	Ph. D.	Asst. Prof.	Physics	2.5	Nil
#35	Mr. M. R. Thakur	M. E. (EC)	Adjunct Faculty	Embedded System & IOT	10	Nil
#36	Mr. C. S. Gampawar	B.E. (Elec.)	Adjunct Faculty	P.G.in EMI/EMC (Singapore)/ OEM/ODM (Singapore)	22	Nil
#37	Mr. N. A. Kale	M. Sc. (Physics)	Adjunct Faculty	Physics	40	Nil

* Faculty Members working in BSH department

Adjunct Faculty

11. List of senior visiting faculty: Nil

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty : Nil

13. Student-Teacher Ratio (Programme wise)

UG : 14.54:1

PG : 12:1

14. Number of academic support staff (technical) and administrative staff, sanctioned and filled

Sr. No.	Support Staff	Available
1	Technical Assistant	0
2	Lab Assistant	2
3	Lab Attendant	0
4	Peon	1

15. Qualifications of Teaching faculty with M. Sc/ Ph. D/M.E/ M. Tech/ M. Phil

Sr. No.	Qualification	Total Faculty
1	Ph. D.	5
2	M. E./M. Tech/M. Phil /M. Sc.	32

16. Number of faculty with ongoing projects from

a) National : Nil

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

- Ph. D (Electronics and Telecommunication Engineering)
- Ref No. ACAD/AFFIL/R.C/MCM/2014-15/1083-90
- Research Center recognized by Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.

19. Publications & Patents by faculty Members:

a) Publication per faculty

- Faculty of the department has published research papers in reputed national and international journals

Sr. No.	Name of The Faculty	Number of Publications	
		International Journals	National Journal
1.	Dr. G. S. Sable	39	0
2.	Dr. A. D. Mishra	21	0
3.	Dr. S. R. Patil	6	0
4.	Mrs. S. P. Kodgire	25	0
5.	Mr. R. K. Kanhe	4	0
6.	Mrs. S. J. Nandedkar	3	0
7.	Ms. M. D. Pawar	6	0
8.	Ms. A. A. Somani	1	0
9.	Mr. V. R. Gosavi	4	0
10.	Mr. B. B. Wattamwar	4	0
11.	Mr. R. L. Gaike	2	0
12.	Ms. R. B. Palwe	1	0
13.	Ms. A. H. Utgikar	6	0
14.	Mr. S. B. Biradar	2	0
15.	Ms. P. P. Patil	2	0
16.	Mr. S. S. Chate	1	0
17.	Mr. A. S. Bhalerao	4	0
18.	Mr. S. R. Chavan	1	0
19.	Mr. A.V. Navalagire	2	0
20.	Mr. P. G. Ambhore	3	0
21.	Mr. P. D. Bharad	1	0

22.	Mr. M.S. Khan	2	0
23.	Mr. S. M. Laeeq	1	0
24.	Mr. G.V. Jawale	1	0
25.	Mr. J. S. Renius	5	0
26.	Dr. A. D. Rushi	14	0
27.	Dr. B. G. Toksha	15	0
28.	Mr. N. S. Gawali	02	04
29.	Mr. A. B. Bagul	04	02

Number of papers published in peer reviewed journals (national/international) by Faculty and students: 21

****Number of publications listed in International Database**

(e.g.: Web of Science, Scopus, Humanities International Complete, Dare Database-International Social Sciences Directory, EBSCO host, etc.): 156

***Monographs:** Nil

***Chapter in Books:** Nil

***Books Edited:** Nil

***Books with ISBN/ISSN numbers with details of publishers:**

Sr. No.	Name of Faculty as an author	Title and place of book	Year	Complete reference of book (Publisher, edition, page no.)	ISBN
1.	Dr. G. S. Sable	Microprocessor and computer organization	2009	Saraswati Prakashan	-

2.	Mr. S. S. Chate	Human Palm: Biometric Recognition and Challenges	2013	LAMBERT Academic Publishing ,Heinrich- Böcking- Str. 6-8, 66121, Saarbrücken, Germany.	ISBN-13: 978- 3659435751
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Citation Index: Max: 689

SNIP : 1.830

SJR : 2.375

Impact factor: Max: 4.836 Journal of Physical Chemistry C (American Chemical Society)

h-index : Max: 12

b) Patent by Faculty

Sr. No.	Faculty	Application Number	Title
1	Dr. A.D. Mishra	2625/MUM/2013A,INDIA-2016	Smart travel Alarm
2	Mr. S. M. Laeeq	201621039985:TEMP/E/1/39289/ 2016/MUM-2016	Apparatus, System and process of internal thread inspection by an embedded system using current controlled DC Motor and IOT.
3	Dr. A. D. Rushi	TEMP/E-1/345/2017-MUM	Annealing Induced Control for Functionalization of Single Walled Carbon Nanotubes Matrix and Application Thereof.

		TEMP/E-1/310/2017- MUM	Automated Equipment for Thin Film by Dip Coating and Successive Ionic Layer Adsorption and Reaction”
		TEMP/E-1/370/2017-MUM	A Method to Select Porphyrins as Building Blocks for Selective Volatile Organic Compound

20. Areas of consultancy and income generated: Nil

21. Faculty as members in

a) National Committees: Nil

b) International Committees

Sr. No.	Name of Faculty	Name of Committee/Journal/Conference	Designation	Year
1	Mr. R. K. Kanhe	International Conference on Recent Trends in Engineering and Science ICRTES-2017	Technical Member	26/12/2016

c) Editorial Boards

Sr. No.	Name of Faculty	Name of Committee/Journal/Conference	Designation	Year
1	Dr. G. S. Sable	International Journal of Advance Scientific Research and Engineering Trends ISSN:2456-0774	Editorial Board Member	2015
2	Dr. G. S. Sable	IEEE International Conference on Advanced Computation & Telecommunication	Editorial Board Member	2015
3	Dr. G. S. Sable	International Journal of Innovative Research in Sciences ,Engineering and Technology ISSN:2319-8753	Editorial Board Member	2015

4	Mr. R. K. Kanhe	International Journal of Emerging Technologies and Applications in Engineering and Technology and Sciences IJ-ETA-ETS Jan/July	Editorial Board Member	01/3/20 12
5	Mr. R. K. Kanhe	International Journal of Computer Applications in Engineering and Technology and Sciences IJ-CA-ETS Jan/July	Editorial Board Member	01/3/20 12

22. Student projects

- a) Percentage of students who have done in-house projects including inter departmental / Programme (B. Tech)**

Sr. No.	Academic Year	In-house projects (%)	
		Departmental	Interdepartmental
1	2012-2013	00	00
2	2013-2014	100	00
3	2014-2015	99.98	00
4	2015-2016	99.83	00

- b) Percentage of students who have done in-house projects including inter departmental/programme (M. Tech)**

Sr. No.	Academic Year	In-house projects (%)	
		Departmental	Interdepartmental
1	2015-2016	87.5	00
2	2016-2017	72	00

- c) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/other agencies (B. Tech.)**

Sr. No.	Academic Year	Outside projects (%)
1	2012-2013	00
2	2013-2014	00

3	2014-2015	0.02
4	2015-2016	0.17

Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/other agencies(M. Tech.)

Sr. No.	Academic Year	Outside projects (%)
1	2015-2016	12.5
2	2016-2017	28

23. Awards/Recognitions received by faculty and students:

a) Awards/Recognitions received by Faculty

Sr. No	Name of Faculty	Awards/Recognitions	Year	Organization	Details
1	Dr. A. D. Mishra	IETE Prof. S. N. Mitra Memorial Award 2013	2013	IETE National Committee	Outstanding contribution in Antenna Research
2	Dr. G. S. Sable	Best Paper Award	2014	Dr. Babasaheb Ambedkar Marathwada University Aurangabad	Prescience Congress Conference-2014
3	Mr. R. K. Kanhe	Best Paper Award	2015	Shri Guru Gobind Singhji, Nanded	Most outstanding paper in IConSIP 2015 held at SGGS.
4	Mr. R. K. Kanhe	Travel Bursary Award	2016	Shri Guru Gobind Singhji, Nanded	IConSIP 2016 held at SGGS, Nanded
5	Mr. S. M. Laeeq	GIZ & MASSIA Project challenge award, for the project titled "Internal Thread checking using IOT"	2016	Maharashtra Institute of Technology, Aurangabad	Industry Projects Assignments

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6	Mr. P. G. Ambhore	Best Paper Award	2017	Maharashtra Institute of Technology, Aurangabad	ICoDSIP 2017 held at MIT, Aurangabad
7	Dr. G. S. Sable	Research Guide	2016	Maharashtra Institute of Technology, Aurangabad	Recognition as a Ph. D. Research Guide
8	Dr. S. R. Patil	Research Guide	2015	Shivaji University, Kolhapur, Visvesvaraya Technological University	Recognition as a Ph. D. Research Guide
9	Dr. A. D. Mishra	Research Guide	2015	Maharashtra Institute of Technology, Aurangabad	Recognition as a Ph. D. Research Guide
10	Dr. A. D. Mishra	P. G. Teacher	2014	Maharashtra Institute of Technology, Aurangabad	Recognition as a P. G. Teacher, Dr. B. A. M. U.
11	Dr. S. R. Patil	P. G. Teacher	2012	Rajarambapu Institute of Technology, Islampur	Autonomous Institute of Shivaji University, Kolhapur
12	Mr. R. K. Kanhe	P. G. Teacher	2010	Maharashtra Institute of Technology, Aurangabad	Recognition as a P. G. Teacher, Dr. B.A.M.U.
13	Ms. S. P. Kodgire	P. G. Teacher	2010	Maharashtra Institute of Technology, Aurangabad	Recognition as a P. G. Teacher, Dr. B. A. M. U.
14	Mrs. S. J. Nandedkar	P. G. Teacher	2016	Maharashtra Institute of Technology, Aurangabad	Recognition as a P. G. Teacher, Dr. B. A. M. U.

15	Ms. M. D. Pawar	P. G. Teacher	2014	Maharashtra Institute of Technology, Aurangabad	Recognition as a P. G. Teacher, Dr. B. A. M. U.
16	Ms. A. A. Somanı	P. G. Teacher	2014	Maharashtra Institute of Technology, Aurangabad	Recognition as a P. G. Teacher. Dr. B. A. M. U.
17	Mr. V. R. Gosavi	P. G. Teacher	2015	Maharashtra Institute of Technology, Aurangabad	Recognition as a P. G. Teacher. Dr. B. A. M. U.
18	Ms. S. B. Wagh	P. G. Teacher	2014	Maharashtra Institute of Technology, Aurangabad	Recognition as a P. G. Teacher. Dr. B. A. M. U.

d) Awards/ Recognitions received by Students

Academic Year 2016-17

Sr. No	Title of Event	Name of Students	Award/ Recognition	Organization	Level
1	Robowars	Nikunj Singh	2nd prize	MIND SPARK 2016 , College of Engineering Pune	National
2	Aquaolympics 2016 Robowars	Nikunj Singh	2nd prize	College of Engineering Pune	National
3	Robo Aqua	Atharva Muttepawar	3rd prize	Sardar Patel College Of Engineering	National
4	Robo Aqua	Nikunj Singh	3rd prize	Sardar Patel College Of Engineering	National

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5	Project Competition	Sachin S. Kangne	2 nd Prize	Jawaharlal Nehru Engineering College, Aurangabad	National
6	Contraption	Sushma Yendole	2 nd Prize	Pravah Foundation in Technical Event	National
7	Contraption	Neha Jagdhane	2 nd Prize	Pravah Foundation in Technical Event	National
8	ICODSIP 2017	Dipak Sose	Best Paper Award	Maharashtra Institute of Technology, Aurangabad	International
9	ICODSIP 2017	Bhagyashree V. Shivpuje	Best Paper Award	Maharashtra Institute of Technology, Aurangabad	International

Academic Year 2015-16

Sr. No	Title of Event	Name of Students	Award/ Recognition	Organization	Level
1	E- Ladder Techkshetra 2k15	Neha Shinde	Winner (First)	Maharashtra Institute of Technology, Aurangabad	State
2	Lokmat Dhol-Tasha 2015	Neha Shinde	Remarkable Achievement	Lokamat Aurangabad	State
3	Sumorobot	Nachiket Pande	3rd prize	Veermata Jijabai Technological Institute, Mumbai	National
4	Robowars	Nachiket Pande	2nd prize	Veermata Jijabai Technological Institute, Mumbai	National

Academic Year 2014-15

Sr. No	Title of Event	Name of Students	Award/ Recognition	Organization	Level
1	Volleyball, SportzAgon15	Suraj Pandilwar	Runner-up	Maharashtra Institute of Technology, Aurangabad	Intercollegiate
2	E- Ladder Techkshetra 2k15 State level	Swati Bagde	Winner (First)	Maharashtra Institute of Technology, Aurangabad	Intercollegiate
3	Robosoccer	Shubham Mirajkar	1st prize	Jawaharlal Nehru Engineering College, Aurangabad	National
4	Robosoccer	Shubham Gujrathi	1st prize	Jawaharlal Nehru Engineering College, Aurangabad	National

Academic Year 2013-14

Sr. No	Title of Event	Name of Students	Award/ Recognition	Organization	Level
1	Prometheus 2013	Akshay Karve	Second	Government Engineering College, Aurangabad	National
2	SCI-Poster in Sci-Clone version 5.0	Neha Shinde	Winner (First)	Maharashtra Institute of Technology, Aurangabad	Intercollegiate

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3	SCI-Poster in Sci-Clone version 5.0	Sharayu Tibdewala	Winner (First)	Maharashtra Institute of Technology, Aurangabad	Intercollegiate
4	Awyt 2014	Nakul Rane Akshay Karve Abhijeet Jadhav Pranav Chandankar	First	Jawaharlal Nehru Engineering College, Aurangabad	National
5	Flash 14	Akshay Karve	Second	Marathwada Institute of Technology, Aurangabad	Intercollegiate
6	Prometheus 2013 Technical Event Artilligence	Akshay Karve	Second	Government Engineering College, Aurangabad	National
7	Kalavihangam 2014 Fashion Show	Bhushan Hukare	Winner	Maharashtra Institute of Technology, Aurangabad	Intercollegiate
8	Kalavihangam 2014 Sportz Agon 14 – 400 meter Relay	Vaidehi Deokar	Winner	Maharashtra Institute of Technology, Aurangabad	Intercollegiate
9	Kalavihangam 2014 Sportz Agon 14 – Basket Ball	Vaidehi Deokar	Runner Up	Maharashtra Institute of Technology, Aurangabad	Intercollegiate

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10	Kalavihangam 2014 Sportz Agon 14 – Kho- Kho	Punam Bhadrage	First	Maharashtra Institute of Technology , Aurangabad	Intercollegiate
11	Kalavihangam 2014 Sportz Agon 14 – 400 meter Relay	Punam Bhadrage	Runner Up	Maharashtra Institute of Technology, Aurangabad	Intercollegiate
12	Kalavihangam 2014 SportzAgon 14 – Gully Cricket	KavitaMathp ati	Winner	Maharashtra Institute of Technology, Aurangabad	Intercollegiate
13	Kalavihangam 2014 Sportz Agon 14 – Kho- Kho	Pooja Hake	First	Maharashtra Institute of Technology , Aurangabad	Intercollegiate
14	Kalavihangam 2014 Sportz Agon 14 – Kho- Kho	Nandamuri Bhavanashre	First	Maharashtra Institute of Technology , Aurangabad	Intercollegiate
15	Kalavihangam 2014 Sportz Agon 14 – 400 meter Relay	Swati Ghodke	Runner Up	Maharashtra Institute of Technology , Aurangabad	Intercollegiate
16	Kalavihangam 2014 Sportz Agon 14 – Badminton	Sachin Ghawate	Runner Up	Maharashtra Institute of Technology , Aurangabad	Intercollegiate

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17	Centre Zone Inter Collegiate Judo Tournament (56KG) Chishtiys College Aurangabad	Pravin Jadhav	Second	Dr. BAMU University Board of Physical Education & Sports Collegiate Sports	Intercollegiate
18	Kalavihangam 2014 Sportz Agon 14 – Kho- Kho	Pravin Jadhav	Runner Up	Maharashtra Institute of Technology , Aurangabad	Intercollegiate
19	Kalavihangam 2014 Sportz Agon 14 – Tug of War	Pravin Jadhav	Runner Up	Maharashtra Institute of Technology , Aurangabad	Intercollegiate
20	Paper Presentation in Pragya 2014	Sukanya Jadhav Rina Dofe	Third	Shri Guru Gobind Singhji, Nanded	National
21	Project Competition	Sanhita Hiswankar	First	Maharashtra Institute of Technology , Aurangabad	Intercollegiate
22	Mind Spark 13 Robo Race National Level Event	Pranit Deshpande	Fourth	College of Engineering Pune	National
23	National Level Event	Aditee Deo	Second	Government Engineering College, Aurangabad	National

24	National Level Event	Ganesh Salunke Abhijeet Sadawarte	First	Government Engineering College, Aurangabad	National
25	Aqualympics" in MindSpark'13	Shubham Jadhav Shubham Mirajkar Dipali Bhalerao	Third	College of Engineering Pune	National
26	Paper Presentation	Swati Bagde	Second	Vishwabharti Polytechnic Nanded	District

24. List of eminent academicians and scientists / visitors to the department:

Sr. No.	Date of conduction	Name of the Academician/ Scientist/Visitors	Purpose of Visit
1.	08/03/2017	Dr. Aditya Abhyankar	Keynote Speaker ICoDSIP 2017
2.	07/03/2017	Dr. Sumantra Dutta Roy	Keynote Speaker ICoDSIP 2017
3	07/03/2017	Prof. Luigi Troiano	Chief Guest/Keynote Speaker ICoDSIP 2017
4	07/03/2017	Dr. Raghunath Shevgaonkar	Keynote Speaker ICoDSIP 2017
5	07/03/2017	Dr. B. A. Chopde	Chief Guest IcoDSIP 2017
6	08/03/2017	Dr. A. A. Desai	Keynote Speaker ICoDSIP 2017
7	03/02/2017	Ms. Julia Weozel	Interaction With Students
8	03/02/2017	Ms. Mitali Mishra	Interaction With Students
9	02/01/2017	Dr. S. N. Talbar	Faculty Interaction
10	05/08/2016	Dr. S. S. Pawar	Ph. D Progress
11	15/04/2016	Dr. P. P. Bartakke	Guest Lecture

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12	15/10/2016	Mr. Muktak Joshi	Guest Lecture
13	15/04/2016	Dr. M. S. Sutaone,	Guest Lecture
14	12/03/2016	Mr. Vijay Vilas Shastri	Guest Lecture
15	09/10/2015	Mr. Sreedhar Rao	Guest Lecture
16	25/09/2015	Mr. Varun Deshmukh	Guest Lecture
17	31/07/2015	Mr. Chandrashekhar Gampawar	Guest Lecture
18	12/12/2015	Dr. S. N. Talbar	Resource Person
19	12/12/2015	Dr. J. S. Chitode	Resource Person, "Workshop on “MATLAB, Simulink and Low cost design”
20	12/12/2015	Dr. S. S. Gajre	Resource Person, "Workshop on “MATLAB, Simulink and Low cost design”
21	12/12/2015	Dr. S. P. Narote	Resource Person, "Workshop on “MATLAB, Simulink and Low cost design”
22	12/12/2015	Mr. Nilesh Thakre	Resource Person, "Workshop on “MATLAB, Simulink and Low cost design”
23	03/04/2015	Mr. Mandar Samratsar	Guest Lecture
24	28/03/2015	Dr. S. S. Ardhapurkar	Guest Lecture
25	13/03/2015	Dr. M. S. Kulkarni	Resource Person, Workshop on “Research Methodology”
26	13/03/2015	Dr. A. N. Gaikawad	Resource Person, Workshop on “Research Methodology”
27	13/03/2015	Dr. S. C. Mehrotra	Resource Person, Workshop on “Research Methodology”
28	13/03/2015	Dr. M. B. Kokare	Resource Person, Workshop on “Research Methodology”
29	13/03/2015	Dr. D. G. Thakur	Resource Person

30	07/02/2015	Mr. Prashant Deshpande	Guest Lecture
31	23/08/2014	Mr. Sachin Nikam	Guest Lecture
32	08/08/2014	Mr. Vaishnav Korren	Guest Lecture

25. Seminars/ Conferences/Workshops organized & the source of funding

a) National

Sr. No.	Title of Seminar/Conferences/Workshop	Duration	Source of Funding
1.	Two Days National Level Workshop on Research Methodology	13/03/2015 & 14/03/2015 (2 days)	BCUD, Dr. BAMU, Aurangabad & IETE Sub Centre Aurangabad
2.	Four Days National Level Workshop on MATLAB, Simulink & Low Cost Design Using Signal & Image Processing Toolbox	16/12/2016 to 19/12/ 2016 (4 days)	Self Sponsored

b) International

Sr. No	Title of Seminar/ Conferences/workshops	Duration	The Source of funding
1.	1 st International Conference on Digital Signal and Image Processing (ICoDSIP2017)	07/03/2017 & 08/03/2017 (2 days)	BCUD, Dr. BAMU, Aurangabad & IETE Sub Centre, Aurangabad Indian Space Research Organization (ISRO), Bangalore

26. Student profile programme/course wise

Name of the Course/	Applications Received	Selected	Enrolled		Pass percentage
			Male	Female	
2009-13	Centralized Admission Process	78	50	28	42.46
2010-14		72	43	29	55.55
2011-15		184	125	59	39.01
2012-16		136	102	54	48.38

27. Diversity of Students

Year of Admission	Name of the course	%of students From the same state	%of students from other States	%of students From abroad
2013-2014	B. Tech. (Electronics & Telecommunication Engineering.)	100	0	Nil
2014-2015		100	0	Nil
2015-2016		98	2	Nil
2016-17		100	0	Nil

Year of Admission	Name of the course	% of students From the same state	% of students from other	% of students From abroad
2014-2015	M. Tech (Electronics Telecommunication)	100	00	00
2015-2016		100	00	00

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services , Defense services , etc. ?

Year	GATE
2012-2013	04
2013-2014	03
2014-2015	00
2015-2016	02

29. Student progression

Student Progression %	2012-13	2013-14	2014-15	2015-16	Average (%)
UG to PG	2.94	1.56	0.78	1.44	1.68
Employed in campus Selection	5.88	25	10.93	9.35	12.79
Employed other than Campus Recruitment	1.47	1.56	4.68	3.59	2.82
Entrepreneurship/self-Employment	00	00	0.007	00	0.007

30. Details of Infrastructural facilities

Sr. No.	Infrastructural	Details of Item	Number
1.	Departmental Library	Title of Books Volumes Journals Magazine CD E-journals	206 206 0 69 0 65
2.	Internet facility for staff and students	Computers Internet facility Bandwidth	116 116 1Gbps

•

3.	Classrooms with ICT facility	With Projector , Internet, NPTEL	1
4.	Seminar Hall with ICT facility	With ICT facility	1
5.	Laboratories	UG PG Research*	10 2 1
6.	Tutorial Room	UG PG	2 1

Note: *Research lab is common for Postgraduate and Research centre

Details of laboratories:

Sr. No.	Name of Laboratory	Area (in Sq. m.)	Total Cost of Laboratories in Rs.
1	Research Lab	57	423000.00
2	DSP/VLSI	75	906660.00
3	Electronics circuit	70	804436.52
4	Control System	63	717384.30
5	Basic Electronics	63	456080.43
6	Power Electronics	70	657589.00
7	Digital Circuits	70	1187303.7
8	Communications System -I	70	1954326.62
9	Communications System -II	70	942042.85
10	Computer	70	1244916.00
11	Electronics Workshop	70	535698.00
12	System Development-II	80	423000.00
Total		828	10270702.42

31. Number of students receiving financial assistance from college, university, government or other agencies

Sr. No.	Details of Financial Assistance	Academic year/No of students		
		2014-15	2015-16	2016-17
1.	OBC(GOI, Freeship)	94	74	97
2.	SC (GOI, Freeship)	79	74	73
3.	SBC(GOI, Freeship)	13	10	05
4.	ST (GOI,Freeship)	00	2	00
5.	VJ/NT (GOI, Free ship)	57	61	63
6.	TFWS	06	06	06
7.	AICTE/ GTA	1	1	1
8.	Earn & Learn Scheme	1	1	4

32. Details on student enrichment programs (special lectures/workshops/seminar) with external experts

Sr. No.	Date	Details of External expert	Topic
1	22/02/2013 23/02/2013	Mr. V. P. Singh Experts from ROBOTRYST-2013, IIT DELHI, New Delhi	Workshop on "ROBOTRYST 2013-A Hunt for India's Super Robo Genious"
2	01/09/2012	1- Mr. Mukund Bhople Director Technical, Mihir Enterprises, Pune 2- Mr. Anirudha Kulkarni, R&D Department, Falcon Ltd, Mumbai	One Day Workshop on " Antenna Design"

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3	24/02/2014 and 25/02/2014	Mr. Udayan Patankar CPLAP TradelinksPvt.Ltd,Nagpur	" Electronics Circuit Designing & PCB Designing "
4	20/09/2013 to 23/09/2013	Mr. Shailesh Vyas Director, Smart Solution Institute (SSI)	"C & C ++ Programming"
5	22/02/2015	1- Mr. M.S. Kulkarni, Associate Professor, Mechanical Engg Department, IIT Delhi 2- Dr. S. C. Mehrotra, Shrinivasa Ramanujan Geo Spatial Chair Professor, Department of CS&IT, Dr. BAMU, Aurangabad 3-Dr.M.B. Kokare, BOYSCOT Post Doctorate Research Fellow, USA, Asso. Professor, EXTC, SGGS IE&T, Nanded	"Research Methodology"
6	04/03/2016 to 21/03/2016	Experts from Infosys /Online Activity	Infosys Campus Connect
7	08/04/2016 and 09/04/2016	Prof. B. N. Kshirsagar MIT Red Hat Academy, knowledge Center, Aurangabad	"Linux-OS"
8	20/02/2016 to 26/03/2016	Mr. Zakee Ahmed, Asst. Professor, Dept. of E&TC, PICT, Pune	"Hands on Lab- View"
9	19/02/2016	1- Mr. Mukund Bhople, Director Technical, Mihir Enterprises, Pune 2- Mr. Anirudha Kulkarni, R&D Department, Falcon Ltd, Mumbai	"Antenna Design, Fabrication& Link Budget"

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10	16/12/2015 to 19/12/2015	<p>1- Dr. S. N. Talbar, Professor, Department of E&TC, SGGSIE&T, Nanded</p> <p>2- Dr. J. S. Chitode, Formerly Professor, Dept. of E&TC, Bharti Vidyapith College of Engg., Pune</p> <p>3- Dr. S. S. Gajre, Professor & Head, Department of E&TC, SGGS IE&T, Nanded</p> <p>4- Dr. S.P. Narote, Professor, Department of E&TC,MES College of Engg, Pune</p> <p>5- Mr. Nilesh Thakre, Sr. Manager, ADCC Infocad Limited, Nagpur</p>	"MATLAB, Simulink & Low Cost Design Using Signal & Image Processing Toolbox"
11	01/07/2016	Mr. Manoj Thakur, Director, Maven Technologies, Aurangabad	" Electronics Circuit Design with Arduino"
12	26/8/2016 to 22/10/2016	Mr. Shailesh Vyas, Director, Smart Solution Institute(SSI)	" C, C++"
13	01/09/2016 &	Mr. Amol Hetterkar & Ankit Jain, Tata Communication Limited , Pune	" Communication Networks & Certifications"
14	20/09/2016 to 29/09/2016	Mr.Manoj Thakur, Director, Maven Technologies, Aurangabad	"Internet of Things"
15	22/02/2017 & 23/02/2017	Mr. Shreedharrao , Director KILT Aurangabad	Flying Colours
16	3/02/2017 04/02/2017	Mr. Manoj Thakur, Director, Maven Technologies	Arduino
17	21/01/2017	Mr. Zakeee Aahmed, PICT, Pune	Lab-view

33. Teaching methods adopted to improve student learning Classroom lectures

Along with traditional teaching Learning methods of number of innovative and interactive methods are adopted by the Faculty to Students Improve Learning as follows,

- Innovative Teaching Learning Methods through audio, Visual aids.
- Interactive Learning Through video lecturers, Webinars like NPTEL.
- Active students participation through Self Learning.
- Project and Problem based learning
- Contents beyond the curriculum to make the students updated with latest Trends.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Sr. No.	Year	Details of activity
1	08/08/2013	Creating the importance and awareness of duty towards society and brotherhood. Blood donation camp was organized on campus.
2	11/09/2013	Creating the importance and awareness of duty towards society and brotherhood.
3	15/10/2013	Tree Plantation was organized in premises of MIT campus
4	23/10/2013 25/10/ 2013	The activity was conducted on adolescent Education by Dr. Rani Bang associated with Stri Jagran Manch
5	10/02/2014 – 16/02/ 2014 (one week)	This camp was arranged at village Jaipur. The students involved in the different activities like cleaning the village area, importance of water usage, plantation, teaching the children the aspect of life.
6	09/08/2014	Tree Plantation was organized in collaboration with Nisarga Mitra Mandal, Aurangabad
7	31/08/2014	Organization of one day activity for Bhagwan Baba orphanage home, Satara parisar, Aurangabad. Medical check-up and talk was organized.

8	15/08/2014 to 21/08/2014	Campaign was organized for one week and donation was collected for orphans. Staff members and students donated clothes, educational materials, toys, books etc to the Bhagwan Baba orphanage home, Satara parisar, Aurangabad.
9	02/05/2015 to 08/05/2015	Workshop for various school students and junior college studding in 7 th to 12 th standard was organized by ETC department to enhance the technical updates in robotics field.
10	02/10/2016	The activity was held in MIT campus.

35. SWOC analysis of the department and Future plans

Strengths

- Highly qualified, dedicated and experienced faculty members
- State of the art laboratories and other infrastructure
- University recognized research center for Ph. D. program
- Good industry exposure for students.

Weaknesses

- Lack of externally funded research projects.
- Lack of faculty representation in state/university level committees.
- Poor consultancy.

Opportunities

- Development of Center of Excellence in Digital Signal and Image Processing
- Enhancement in R&D and consultancy work.
- Industry sponsored projects due to upcoming Brownfield Electronic Manufacturing Cluster in the nearby industrial area.
- Interdisciplinary collaborations.

Challenges

- Insufficient core industries in the vicinity of the institute.
- Cope up with rapidly changing technologies in electronics industries.
- Students' employment in core electronics industries.
- Development of graduates for start-ups.

Future plans

- Get accredited from National board of Accreditation (NBA).
- Establish Center of Excellence in Signal & Image processing.
- Receive research funding from national agencies like AICTE, DST, and UGC etc.
- Strengthen Alumni network for the benefit of current students.

Evaluative Report

Department of Mechanical Engineering

1. Name of the department : Mechanical Engineering

2. Year of Establishment : 2001

3. Names of Programmes / Courses offered

(UG, PG, M.Phil., Ph.D., and Integrated

Masters; Integrated Ph. D., Etc.) :

- Bachelor of Technology (Mechanical Engineering – Ist Shift)
- Bachelor of Technology (Mechanical Engineering - IInd Shift)
- Master of Technology (Mechanical Engineering)
- Ph. D. Research Center (Mechanical Engineering)

4. Names of Interdisciplinary courses and the departments / units involved:

Year	Semester	Course Code	Course	Department
First Year	I	BSH101	Engineering Mathematics-I	Basic Sciences & Humanities
		BSH102 / BSH103	Engineering Physics/ Engineering Chemistry	
		BSH104	Basic Electrical Engineering	Electrical Engineering
		BSH106	Computer Fundamentals & Programming	Computer Science & Engineering
		BSH107	Basic Civil Engineering	Civil Engineering
First Year	II	BSH151	Engineering Mathematics-II	Basic Sciences & Humanities
		BSH102 / BSH103	Engineering Physics/ Engineering Chemistry	
		BSH152	Basic Electronics	Electronics & Tele-Communication Engineering
		BSH153	Engineering Mechanics	Civil Engineering
		BSH155	Environment & Ecology	Basic Sciences & Humanities / Plastic and Polymer Engineering
		BSH174	Lab X Development of Skills-I	Basic Sciences & Humanities
Second Year	III	BSH201	Engineering Mathematics-III	Basic Sciences & Humanities
		BSH225	Lab V-Development of Skills-II	

	IV	BSH251	Engineering Mathematics-IV	Basic Sciences & Humanities
		MED256	Electrical Technology	Electrical Engineering

5. Annual/semester/choice based credit system (Programme wise):

- UG: Choice based credit system
- PG: Choice based credit system
- PhD: Credit System (For course work)

6. Participation of the department in the courses offered by other departments:

Sr. No.	Year	Semester	Course Code	Course	Department
1	First Year	I	BSH105	Engineering Graphics	Basic Sciences & Humanities
			MED126	Lab VI Workshop Practice -I	Basic Sciences & Humanities
2	First Year	II	BSH154	Basic Mechanical Engineering	Basic Sciences & Humanities
3	Second Year	V	AED304	Kinematics of Machine	Agricultural Engineering

7. Courses in collaboration with other universities, industries, foreign institutions etc.:

Nil

8. Details of course/programs discontinued (if any) with reasons: Nil

9. Number of teaching posts:

Post	Sanctioned	Filled
Professor	5	1
Associate Professor	12	06
Assistant Professor	34	40
Adjunct faculty	-	09
TOTAL	51	56

10. Faculty profile with name, qualification, designation, specialization:

Sr. No.	Name of Staff	Qualification	Designation	Specialization	Experience (Years)	No. of Ph.D. Students Guided for the Last 4 Years
1	Dr. S. P. Bhosle	Ph.D.	Professor & Principal	Reliability	26.5	06*
2	Dr. A. J. Keche	Ph.D.	Associate Professor & Head	Thermal	25.5	Nil
3	Prof. V. M. Chidri	M.E.	Associate Professor	Design	23	Nil
4	Dr. A. T. Autee	Ph.D.	Associate Professor	Thermal	24	Nil
5	Prof. J. M. Kshirsagar	M.E.	Associate Professor	Thermal	24	Nil
6	Dr. C. D. Kuthe	Ph.D.	Assistant Professor	Design	05	Nil
7	Mr. S. V. Bhivsane	M.E.	Assistant Professor	Production	10.8	Nil
8	Mr. S. B. Charthankar	M.E.	Assistant Professor	Thermal	11.8	Nil
9	Mr. P. S. Kulkarni	M.E.	Assistant Professor	Design	10	Nil
10	Mr. Sayyad Irfan	B.E.	Assistant Professor	Mechanical	8.5	Nil
11	Mr. A. S. Kousal	M.E.	Assistant Professor	Heat Power	19	Nil
12	Mr. T. P. Kulkarni	M. Tech.	Assistant Professor	Manufacturing	10	Nil
13	Mr. A. G .Mapari	M.E.	Assistant Professor	Production	22	Nil
14	Mr. A. S. Gore	M.E.	Assistant Professor	CAD/CAM	4.5	Nil
15	Mr. M. N. Farooqui	M.S.	Assistant Professor	Design	10	Nil
16	Mr. B. D. Gurav	M.E.	Assistant Professor	Production	12.5	Nil
17	Mr. Sayyed Siraj	M. Tech.	Assistant Professor	Heat Power	08	Nil
18	Mr. P. J. Palkar	M.E.	Assistant Professor	CAD/CAM	6.5	Nil
19	Mr. S. N. Joshi	M.S.	Assistant Professor	Design /	3.5	Nil

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				Manufacturing		
20	Mr. P. A. Lad	M.E.	Assistant Professor	Production	1.7	Nil
21	Mr. P. S. Khandelwal	M. Tech.	Assistant Professor	Thermal	3.5	Nil
22	Mr. M. B. Gavandgave	M.E.	Assistant Professor	Heat Power	13	Nil
23	Mr. P. Chakraborty	M.S.	Assistant Professor	Design	3	Nil
24	Mr. S. L. Sathe	M.E.	Assistant Professor	Design	7	Nil
25	Mr. S. S. Lahane	M. Tech.	Assistant Professor	Industrial Process design	3.5	Nil
26	MS. G. B. Awankar	M.E.	Assistant Professor	Production	1.6	Nil
27	Mr. Alok Choudhary	M. Tech.	Assistant Professor	Mechanics of Solids	2.5	Nil

Second Shift

28	Dr. P. M. Ambad	Ph. D.	Associate Professor	Reliability	14	Nil
29	Prof. S. V. Lomte	M.E.	Associate Professor	Materials	23	Nil
30	Mr. V. G. Pandit	M.E.	Assistant Professor	Design, Production	38.5	Nil
31	Mr. A. C. Gorte	B.E.	Assistant Professor	Heat Power	27.2	Nil
32	Mr. P. T. Borlepwar	M.E.	Assistant Professor	Manufacturing	23.5	Nil
33	Mr. S. R. Kulkarni	B.E.	Assistant Professor	Design	22	Nil
34	Mr. S. V. Surya	M.E.	Assistant Professor	Production	17	Nil
35	Mr. R. M. Jadhav	M.E.	Assistant Professor	Production	5	Nil
36	Mr. S. B. Patil	M. Tech.	Assistant Professor	Design & Automation	5	Nil
37	Mr. S. D. Rakhunde	M. Tech.	Assistant Professor	Thermal Fluid	1.6	Nil
38	Mr. S. L. Gomte	M. Tech.	Assistant Professor	Design	2	Nil
39	Mr. S. S. Ingale	M.E.	Assistant Professor	Design Engineering	2.3	Nil

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40	Mr. N. M. Sakhare	M.E.	Assistant Professor	Heat Power	3	Nil
41	Mr. I. A. Quazi	M.E.	Assistant Professor	Production	1.6	Nil

Faculty from Basic Science & Humanities

42	Mr. S.G. Hiwale	M. Sc., B. Ed, M. Phil.	Assistant Professor	Mathematics	10.9	Nil
43	Mr. Zameer Shaikh	M. Sc.	Assistant Professor	Mathematics	6.3	Nil
44	Dr. Poonam Bora	M. Sc., M. Phil., Ph. D.	Assistant Professor	Mathematics	5.6	Nil
45	Mr. S.S. Patil	M. Sc., B. Ed., M.Phil	Assistant Professor	Mathematics	12	Nil
46	Ms. Neeta Gadekar	M. Sc., B. Ed.	Assistant Professor	Mathematics	8.6	Nil
47	Ms. Varsha Patil	M. Sc., B. Ed.	Assistant Professor	Mathematics	2.8	Nil

Adjunct faculty

48	Mr. C. P. Tripathi	B. Tech. Hon.	Advisor-CSR, Bajaj Auto Limited, Waluj, Aurangabad	Mechanical	50	Nil
49	Mr. Abhay Chandrakant Deshmukh	M. S. Computer Science	Director, Logical Automation Solution Pvt. Ltd., A'bad	Mechanical	28	Nil
50	Mr. Yashwant Bhaskarao Kamkhedkar	M. E.	Asst. General Manager, Design, Power Train Department, JCB India Limited, Pune	Mechanical	16	Nil
51	Mr. Sayeed Kaleemoddin	Ph. D.	Associate General Manager, Cotton	Mechanical	18	Nil

			Greaves Pvt. Ltd. Chikalthana, Aurangabad			
52	Mr. Dwarka prasad Bhikulakji Soni	B. E.	Managing Director , META Rolls & Commodities Pvt. Ltd. MIDC, Jalna	Mechanical	28	Nil
53	Mr. Amol Sharadchandra Thakur	B. E.	Vice President, Operations, Parason Machinery Chikalthana, Aurangabad	Mechanical	28	Nil
54	Mr. Sandip Sudhakar Inje	B. E.	Manager, Greaves Cotton Limited, Chikalthana, Aurangabad	Mechanical	10.2	Nil
55	Mr. Ravikiran Madhavrao Kombde	B. E.	General Manager, Videocon International Pvt. Ltd., Aurangabad	Mechanical	22	Nil
56	Mr. Vishwanath Sakharam Borade	B. E.	Director, Upturn Precision, MIDC, Waluj, Aurangabad.	Mechanical	21	Nil

* No. of students registered for Ph.D.

11. List of senior visiting faculty: Nil

12. Percentage of lectures delivered and practical classes handled by temporary faculty:
Nil

13. Student -Teacher Ratio (Programme wise)

UG – 12.85 : 1

PG - 12.00 : 1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Post Name	Available
Laboratory Assistant	01
Technical Assistant	03
Peon	01
Total	05

15. Qualifications of teaching faculty with D.Sc. / D.Litt. / Ph.D. / M.Phil. / PG:

Sr. No.	Qualifications	Department	No.
1	Ph. D. (Mechanical Engineering)	Mechanical Engg.	07
2	M.E./M. Tech.	Mechanical Engg.	32
3	M. S.	Mechanical	03
4	B.E. / B. Tech.	Mechanical Engg. / Production Engg.	09
5	M. Sc. (Math)	BSH	01
6	M. Sc., B. Ed., M. Phil.	BSH	02
7	M. Sc., B. Ed.	BSH	02

16. Number of faculty with ongoing projects from (a) National and (b) International: 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:

Ph. D. Mechanical Engineering, Recognized by Dr. B. A. M. U., Aurangabad

Letter No. ACAD/AFFIL/RC/ABL/2015-16/125-31 **Dated:** 11-08-2015

19. Publications and Patents by faculty:

a) Publications:

Sr. No.	Name of Faculty	No. of papers published in National Journals	No. of papers published in International Journals
1.	Dr. Santosh P. Bhosle	0	3
2.	Dr. Ashok J. Keche	1	20
3.	Prof. Vinay M. Chidri	0	2
4.	Dr. Arun T. Autee	0	7
5.	Prof. Jagdeep M. Kshirsagar	0	5
6.	Mr. Shantanu B. Charthankar	0	1

7.	Mr. Abhijit S. Kousal	0	2
8.	Mr. Prashant S. Kulkarni	0	2
9.	Mr. Mohammed. Naser Farooqui	0	0
10.	Mr. Abhay S. Gore	0	1
11.	Mr. Bharat D. Gurav	0	1
12.	Mr. Sayyed Siraj Rafik	0	10
13.	Mr. Prasad J. Palkar	0	2
14.	Mr. Pravin A. Lad	0	2
15.	Dr. Chetan D. Kuthe	1	4
16.	Mr. Sushil L. Sathe	0	1
17.	Ms. Geeta B. Awankar	0	2
18.	Dr. Prashant M. Ambad	2	4
19.	Prof. Sachin V. Lomte	0	2
20.	Mr. Prashant T. Borlepwar	0	4
21.	Mr. Rahul M. Jadhav	0	2
22.	Mr. Sadanand V. Surya	0	2
23.	Mr. Sushant S. Ingale	0	1
24.	Mr. Izharuddin A. Quazi	0	1

- **Number of papers published in peer reviewed journals (National/International) by faculty:** 79
- **Number of publications listed in International Database (e.g., Web of Science, Scopus, and Humanities International Complete, Dare Database-International Social Sciences Directory, EBSCO host, etc.):** 22
- **Monographs:** Nil
- **Chapter in Books:** Nil
- **Books Edited:** Nil
- **Books with ISBN / ISSN numbers with details of publishers:** Nil
- **Citation Index:** (Google scholar) Total : 61, highest 19
- **SNIP:** Average = 0.725, Highest = 2.018, Lowest = 0.096
- **SJR:** Average = 0.495, Highest = 1.749, Lowest = 0.115
- **Impact factor range /average:** 0 to 2.857, Average 1.301
- **h-index range:** 0 to 2

b) Patents

Sr. No.	Faculty / Student	Application Number	Title
1	Dr. C. D. Kuthe	201621017236	Technique to quantify recovery post-surgery / trauma / treatment.
2	Aniket Adsule, Vishvas Chavan and Mohammad Laeq	201621039985	Method, Apparatus, System and Process of internal thread inspection by an embedded

20. Areas of consultancy and income generated: Nil

21. Faculty as members in a) National committees b) International Committees c)

Editorial Boards

a) National Committees: Nil

b) International Committees: Nil

c) Editorial Boards:

Sr. No	Name of Faculty	Name of Committee / Journal / conference	Designation	Year
1	Dr. A. J. Keche	1 st International and 18 th ISME Conference at NIT Warangal.	Reviewer	2017
2	Dr. A. J. Keche	3rd National Conference for post graduates students, Rajarambapu Institute of Technology, Islampur ,Sangali	Reviewer	2017
3	Dr. A. J. Keche	International Journal of "Ambient Energy" Taylor & Francis Journal	Reviewer	-
4	Dr. A.T. Autee	International Journal of Physics of Fluids	Reviewer	-
5	Dr. A.T. Autee	International Journal of Chemical Engineering.	.Reviewer	-
6	Dr. P.M. Ambad	International Journal of Quality and reliability management	Reviewer	-

7	Dr. P.M. Ambad	International Journal of Production Research	Reviewer	-
8	Dr. P.M. Ambad	International Journal of System assurance Engineering and	Reviewer	-
9	Dr. P.M. Ambad	International Journal-Benchmarking	Reviewer	-
10	Prof. J.M. Kshirsagar	International Journal of thermal Sciences	Reviewer	-

22. Student projects:

UG:

- A) Percentage of students who have done in-house projects including inter departmental / programme

Academic year	Percentage of students completing project	
	In house	Inter-departmental
2013-14	95.90	-
2014-15	88.28	-
2015-16	90.52	-

- B) Percentage of students placed for projects in organizations outside the institution i.e. Research laboratories / Industry / other agencies.

Academic year	Percentage of students placed for projects in organizations outside the institution	
	Outside the institution	Inter-departmental
2013-14	04.10	-
2014-15	11.72	-
2015-16	09.48	-

PG:

- A) Percentage of students who have done in-house projects including inter departmental / programme

Academic year	Percentage of students completing project	
	In house	Inter-departmental
2013-14	100.00	-
2014-15	60.00	-

2015-16	60.00	-
2016-17	57.14	-

- B) Percentage of students placed for projects in organizations outside the institution i.e. Research laboratories / Industry / other agencies.

Academic year	Percentage of students placed for projects in organizations outside the institution
	Outside the institution
2013-14	00.00
2014-15	40.00
2015-16	40.00
2016-17	43.83

23. Awards/Recognitions received by faculty and students

(A) Awards received by faculty

Sr. No.	Name of the Faculty	Name of award	Name of organization	Year
1.	Dr. S. P. Bhosle	Lions Dronacharya Award	Lions Club of Aurangabad	2016
2	Dr. S. P. Bhosle	Certificate of Merit	Institution of Engineers India	2008
3	Dr.A.J.Keche	Best Paper Award	NIT Warangal	2016
4	Dr.A.J.Keche	First Prize at National level	Government College of Engineering, Aurangabad	2005
5	Prof. V. M. Chidri	Shrestha Gurujan award	Rotary Club, Aurangabad	1999
6	Dr. P. M. Ambad	Certificate of Excellence “ESIC”	International Society for Scientific Research	2014
7	Mr. S. R. Kulkarni	Dronacharya Award	SAE INDIA	2016
8	Mr. S. R. Kulkarni	Dronacharya Award	SAE INDIA	2010

9	Mr. S. B. Patil	Second prize in Summer Project Competition	MFT-GIZ-MASSIA	2016
10	Mr. T. P. Kulkarni	Award of Excellence for FDP	IIT Bombay	2016
11	Mr. M.N. Farooqui	Award for best Paper presentation	ITM, Gurgaon, Harayana	2007

(B) Recognition received by faculty

Sr. No.	Name of the Faculty	Recognition	Name of organization	Year
1	Dr. S. P. Bhosle	1 st International Conference on Digital Signal and Image Processing (ICoDSIP-2017) at Maharashtra Institute of Technology, Aurangabad.	Chairman	2017
2	Dr. S. P. Bhosle	International Conference on Ideas, Impact and Innovations in Mechanical Engineering Mechanical Engineering Department of SKNCoE, Vadgaon (BK) , Pune	Member Advisory Committee	2017
3	Dr. S. P. Bhosle	Member Board of Studies (Ad-hoc Board) in M.Sc. Automobile Technology	Dr. B. A. M. U., Aurangabad	2015 to 2017
4	Dr. S. P. Bhosle	All India manufacturing Technology, Design and Research Conference (AIMTDR-2016), College of Engineering Pune, Maharashtra, India.	Session Chair	2016

5	Dr. S. P. Bhosle	Member of Board of Studies for Mechanical Engineering Discipline	Doddappa Appa College of Engineering, Belgaum	2016
6	Dr. S. P. Bhosle	Member of Departmental Advisory Board Department of Information Technology	Government Polytechnic, Ambad	2016
7	Dr. S. P. Bhosle	Member of Academic Council	Dr. B.A.M.U., Aurangabad	2012-2015
8	Dr. S. P. Bhosle	Non Government Member District Corruption Eradication Committee	District Collector Office, Aurangabad	2012-2014
9	Dr. S. P. Bhosle	Chairman Board of Studies for Mechanical Engineering	Dr. B.A.M.U., Aurangabad	2012-2015
10	Dr. S. P. Bhosle	Member of Academic Council	Dr. B.A.M.U., Aurangabad	2012-2015
11	Dr. S. P. Bhosle	National Symposium on Poly-Plast Advance Technology, "Polyxplore supported by Indian Plastics Institute at Maharashtra Institute of Technology, Aurangabad.	Chairman	2014
12	Dr. S. P. Bhosle	Technomillenium on Smart Materials, at Maharashtra Institute of Technology, Aurangabad.	Chairman	2012
13	Dr. S. P. Bhosle	Chairman L.I.C. committee of Dr. B.A.M. University	M.I.T. Aurangabad	2008
14	Dr. S. P. Bhosle	Deputy Management Representative for ISO 9001-2000 Certification	Jawaharlal Nehru Engineering College, Aurangabad	2007-2008

15	Dr. S. P. Bhosle	Judge for CCQC-2006 Convention by Quality Circle Forum of India	Jawaharlal Nehru Engineering College, Aurangabad	2006
16	Dr. S. P. Bhosle	Approved PG Teacher	Dr. B. A. M. U., Aurangabad	2006
17	Dr. S. P. Bhosle	Observer for AIEEE	Anjuman College of Engineering, Nagpur	2004
18	Dr. S. P. Bhosle	CAS Joint-Director/Director	Dr. B. A. M. U., Aurangabad	2003
19	Dr. A .J. Keche	Resource person for Energy Conference	Medium and Small Scale Industries	2017
20	Dr. A. J. Keche	Examiner –Avishkar Competition,	Swami Ramanand Tirth Marathwada University, Latur sub	2017
21	Dr. A. J. Keche	Member of syllabus committee.	Dr. B. A. M. U., Aurangabad	2017
22	Dr. A. J. Keche	External Examiner of ME/M. Tech. Dissertation	Savitribai Phule Pune University, Pune	2017
23	Dr. A .J. Keche	Session Chair for poster presentation 6 th International and 27 th AIMTDR-2016	College of Engineering , Pune	2016
24	Dr. A .J. Keche	Session chair for oral presentation in International Conference on Advances in Mechanical Engineering	Amrutvahini College of Engineering Sangamner	2016
25	Dr. A. J. Keche	Approved PG Teacher	Dr. B. A. M. U., Aurangabad	2014
26	Dr. A. J. Keche	Member of LIC	Dr. B. A. M. U., Aurangabad	2010

27	Dr. A. J. Keche	National Conference on Emerging Trends on Mechanical Engineering for engineering research scholars Faculty members & Industry persons held at Maharashtra Institute of Technology, Aurangabad	Organizing Secretary	2009
28	Dr. A. J. Keche	Member-University Vigilance Squad	Dr. B. A. M. U., Aurangabad	2007
29	Dr. A. J. Keche	Worked as judge for mini-convention on quality circles & allied case studies on Kaizen, Pokayoke, Six sigma, SMED, JIT, Kanban organized by QCFI	Jawaharlal Nehru Engineering College, Aurangabad	2007
30	Dr. A. J. Keche	Technomillenium international conference for Engineering student's faculty members & Industry persons	Working committee member	2006
31	Dr. A.T. Autee	Coordinator of DST sponsored program "Inspire"	Marathwada Institute of Technology, Aurangabad	2015-16 & 2016-17
32	Dr. A.T. Autee	Approved PG Teacher	Dr. B. A. M. U., Aurangabad	2014
33	Dr. A.T. Autee	Member of LIC	Dr. B. A. M. U., Aurangabad	2014
34	Dr. A.T. Autee	External Examiner of ME/M. Tech. Dissertation	SRTU, Pune, North Maharashtra University.	2017
35	Prof. V.M. Chidri	Member of syllabus committee	Dr. B. A. M. U., Aurangabad	2017

36	Prof. V.M. Chidri	. External Examiner of ME/M. Tech. Dissertation	SRTU, Pune, North Maharashtra University.	2016
37	Prof. V.M. Chidri	Organizing Secretary of Central Youth Festival	Dr. BAMU Aurangabad.2015	2015
38	Prof. V.M. Chidri	Member, Governing Body	Marathwada Institute of Technology. Polytechnic, Aurangabad	2011-13
39	Prof. V.M. Chidri	Member of LIC, Dr. B.A.M.U Aurangabad	Marathwada Shikshan Prasarak Mandal's College of Engineering, Aurangabad	2010
40	Prof. V.M. Chidri	CAS officer, Joint- Director, Director	Dr. B. A. M. U., Aurangabad	2002, 2003
41	Prof. V.M. Chidri	Subject Expert (VC- nominee) in UGC committee	Dr. B. A. M. U., Aurangabad	2010
42	Prof. V. M. Chidri	National Conference on Emerging Trends on Mechanical Engineering for engineering research scholars Faculty members & Industry persons held at Maharashtra Institute of Technology, Aurangabad	Convener	2009
43	Prof. V. M. Chidri	State Level ISTE Students Annual Convention “RUTUMBHARA” (Maharashtra-Goa Section)	Convener	2008

44	Prof. V.M. Chidri	Member Governing Body	MIT, Aurangabad	2008
45	Prof. V.M. Chidri	Chairman- University Vigilance Squad,	Dr. B. A. M. U., Aurangabad	2007
46	Prof. V.M. Chidri	JCS Dr. B.A.M.U., Aurangabad	College of Engineering Osmanabad.	1994
47	Dr. P.M. Ambad	BOS Member	Dr. B.A.M.U., Aurangabad	2017
48	Dr. P.M. Ambad	Subject Expert(VC- nominee) in UGC committee	Dr. B. A. M. U., Aurangabad	2016
49	Dr. P.M. Ambad	Approved PG Teacher	Dr. B. A. M. U., Aurangabad	2012
50	Prof. S.V. Lomte	Member of LIC	Dr. B.A.M.U Aurangabad	2010
51	Prof. S.V. Lomte	Member Governing body	MIT, Polytechnic, Rotegaon	2012- 2014
52	Prof. S.V. Lomte	Approved PG Teacher	Dr. B. A. M. U., Aurangabad.	2008
53	Prof. J.M. Kshirsagar	Member of LIC	Dr. B.A.M.U Aurangabad	2005 & 2008
54	Prof. J.M. Kshirsagar	External Examiner of ME/M. Tech. Dissertation	Pune.	2015
55	Prof. J.M. Kshirsagar	Board of Studies, member	Dr. B.A.M.U Aurangabad	2005- 2009
56	Prof. J.M. Kshirsagar	Central Assessment Scheme- Director	Dr. B.A.M.U Aurangabad	2011
57	Prof. J.M. Kshirsagar	Approved PG Teacher	Dr. B.A.M.U Aurangabad	2005
58	Dr. C D Kuthe	Member of Biomedical Engineering Forum	VNIT, Nagpur	2016
59	Mr. A. C. Gorte	Central Assessment Scheme- Director	Dr. B.A.M.U Aurangabad	2015
60	Mr. P. T. Borlepwar	Assistant Director- Central Assessment Scheme	Dr. B.A.M.U Aurangabad	2008, 2009
61	Mr. S. V. Bhivsane	Approved PG Teacher	Dr. B. A. M. U., Aurangabad	2015

62	Mr. P. S. Kulkarni	Approved PG Teacher	Dr. B. A. M. U., Aurangabad	2015
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(C) List of awards / recognition by the students

Sr. No.	Title of Events	Name of Students	Award / Recognition	Organizing Institute
1	1st International and 18th ISME Conference on Enable Sustainable Development in Mechanical Engineering 2017	Mr. Sudhir Autee	Ist Prize	NIT, Warangal
2	i2 Academia Projects competition of IMTEX 2017	Mr. Aniket Adsule & Mr. Vishwas Chavan	IIIrd Prize	IMTEX, Bangalore
3	Summer challenge project	Aniket Shashikant Adsule and Vishwas Arvindrao Chavan	Ist Prize	GIZ- MASSIA- MIT
4	Summer challenge project	Vedant Kirtankar	IIInd Prize	GIZ- MASSIA- MIT
5	My Dream City	Amol R. Mandlik	IIInd Prize	CII
6	PERCEPTION '15	Rushikesh Yande	IIInd Prize	MIT, Aurangabad
7	MIND SPARK 15	Rushikesh Yande Anup Suklikar	IIInd Prize	ROBO WAR

(D) List of awards won in the inter institute / institute technical events

Sr. No	No of students	Name of the event	Department	Place	Level	Achievement
Year : 2014-15						
Sr. No	No of students	Name of the event	Department	Place	Level	Achievement
1	25	SUPRA SAEINDIA 2015 Competition	Department of Mechanical Engineering	Madras Motors sports Club, Chennai	National	Team cleared qualifying round
Year : 2013-14						
Sr. No	No of students	Name of the event	Department	Place	Level	Achievement
1	23	SUPRA SAEINDIA 2014 Competition	Department of Mechanical Engineering	Madras Motorsports Club, Chennai	National	Second prize in cost evaluation event
Year : 2011-12						
Sr. No	No of students	Name of the event	Department	Place	Level	Achievement
1	16	SUPRA SAEINDIA 2012 Competition	Department of Mechanical Engineering	Buddha International circuit, Noida (U.P)	National	

(E) List of awards won in the inter institute sports events

Sr. No.	Title	Name of Student	Level	Organized by
1	Gold Medal (ICT)	Shubham Pangaonkar	All India, University, 2015	TAEKWONDO

2	Bronze Medal (ICT)	Shubham Pangaonkar	All India, University, 2015	TAEKWONDO
3	Gold Medal	Onkar Gaikwad	All India inter university, 2017	Power lifting,
4	Bronze Medal	Ritesh Pawar	Inter College	TAEKWONDO
5	Participation	Bokre Kuldeep	All India inter university, 2014	Judo Competition
6	First Prize	Butekar Sudarshan	Inter college Sports competition , 2013	Running
7	Fourth Rank	Pradnya Gaikwad	National Level Sports Meet	Chess
8	First Rank	Onkar Gaikwad	All India University Level Competition,	Power Lifting
9	Runner Up	Amar Rathod Amrut Warudkar	National Level Sports meet	Volley Ball
10	Runner Up	Nikhil Lanje	National Level Sports Meet, Pune, 2013	Cricket
11	First Prize	Rohit Swaminathan	National Level Sports Meet, Pune, 2013	Judo Tournament
12	Participated	Dange Mahesh	All India inter university.	Swimming

(F) List of awards won in the SAE organized events

Sr. No.	Event	Winning Team details	Rank /Award
1	BAJA SAE INDIA- 2010	Faculty Coordinators: 1. Mr. S.R. Kulkarni, 2. Mr. A. S. Kousal. Captain of the Team: Mr. Karan Bhardiya + 24 students	1. First Prize as overall event winner (Rs.5,00,000) 2. Second Prize in Endurance race (Rs.1,00,000) 3. Consolation prize of “ATV” worth Rs.

			4,00,000 4. Best Faculty award to Mr. S. R. Kulkarni
2	BAJA SAE INDIA- 2011	Faculty Coordinators: 1. Mr. S.R. Kulkarni, 2. Mr. A. S. Kousal. Captain of the Team: Mr. Karan Bhardiya + 24 students	1) First Prize in Hill climbing event (Rs.2,00,000)
3	SUPRA SAEINDIA 2014	Faculty Coordinators: 1. Mr. S.R. Kulkarni 2. Mr. P. T. Borlepwar Captain of the Team: Mukund Jagtap	1) Second Prize In cost evaluation event (Rs.20,000)
4	SUPRA SAEINDIA 2016	Faculty Coordinators: 1. Mr. S.R. Kulkarni 2. Mr. P. T. Borlepwar Captain of the Team: Shubham Sharma	DRONACHARYA AWARD for Faculty

24. List of eminent academicians and scientists / visitors to the Department:

Sr. No.	Date	Name of Speaker	Topic
1	23/03/2017	Mr. Adesh Gokhle, Executive director, IBM, Pune	Entrepreneurship Development Program
2	25/02/2017	Mr. Meghant D. Nichant, Garware Polyester Ltd. Aurangabad.	Lean Six Sigma
3	30/01/2017	Dr. Abhijit Deshpande from Sommaya College Mumbai	Film Appreciation
4	13/01/2017	Mr. Shrikant Bidwai from CAD/CAM Guru, Pune	Design and Manufacturing Integration
5	24/12/2016	Mr. Sudhir Surve, Director from Jyotiba Technologies Pvt. Ltd.	Career Opportunities in Product Development
6	20/09/2016	Prof. Dilip Peshwe, V.N.I.T., Nagpur.	Joy of Giving

7	12/04/2016	Mr Ravindra Puri, Management Consultant, Pune.	Thinking out of the box
8	08/04/2016	Mangala Khivansara, Aurangabad.	Respecting Womanhood
9	25/02/2016	Mr Kiran Kurware, Career Consultant, Aurangabad.	Effective Communication Skills
10	12/10/2015	Mr Aniruddha Kulkarni, PG Student, IIT Chennai.	Preparation for GATE and other competitive
11	03/10/2015	Mr Amol Deshpande, Aurangabad	Managing yourself for excellence
12	25/08/2015	Bhushan Lohar, Asst Manager, QC, General Motors (I) Pvt Ltd, Pune.	Quality in today's world scenario
13	24/04/2015	Mr Mukund Kulkarni, Sriram Narayanan	Pannel Discussion on 'Building India Shared Responsibility'
14	02/03/2015	Mr Joschen Ertl, OSBORN International, Aurangabad.	Requirement of Global Engineers
15	14/0/.2015	Mr Prasanna Joshi, CAD CAM Guru Pune	3D Printing
16	24/01/2015	Prof. S. Srinivasa Rao, Mechanical Engineering Department, NIT Warangal	Inspirational Talk
17	1/6/15 to 5/6/15	Dr. C.Y. Seemikeri, Government Polytechnic, Karad	One Week STTP on Design of Experiments and Optimization
18	1/6/15 to 5/6/15	Dr. Anand Kulkarni, Symbiosis Institute of Technology, Pune	One Week STTP on Design of Experiments and Optimization
19	25/02/2015	Prof. Mohd. Ranzan- Professor MMANTC, College of Engineering, Malegaon. Dist.-Nashik	Nano-Composite Material -Research Horizon
20	21/02/2015	Mr. Atul Bakare, Scientist-F, Addl. Regional Director RCMA, Nasik	Basic Concepts of Engineering Technology

21	19/09/2014	Mr Amol Thakur, V.P. Operations, Parason Machinery Chikhalthana, Aurangabad	Periodic Table
22	16/08/2014	Mr Aniruddha Kulkarni, PG Student, IIT Chennai.	Gate Preparation
23	13/03/2014	Mr Ravi Kombde, Videocon Appliances Ltd, Aurangabad	Injection Molding Process
24	09/08/2014	Dr. G. Venkatesha Rao H.O.D. Dept. of Mechanical Engineering. J.N.T.U. Hyderabad	Rapid Prototyping
25	31/08/2013	Mr. Girish Phadke, Gaurav Engineering, Waluj, Aurangabad	Tool Holders and Cutting Tools

25. Seminars/Conferences/Workshops organized & the source of funding:

(A) National

Sr. No.	Event	Conference / Workshop/ Seminar/ Expert talk	Duration	Source of Funding
1	Opportunities in DRDO, in association with Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	Workshop	21/04/2012 (01 Day)	Dr. B. A. M. U., Aurangabad
2	Advances in Heat and Cryogenic Treatments in association with Indian Institute of Metals, Pune Chapter	Workshop	07- 08/07/2012 (02 Days)	Indian Institute of Metals, Pune Chapter.
3	Reliable Welds in association with Indian Institute of Metals, Pune Chapter	Workshop	05- 06/07/2013 (02 Days)	Indian Institute of Metals, Pune Chapter.
4	CEP Course on Research Methodology	Workshop	09- 10/08/2013 (02 Days)	Self-Sponsored

5	Outcome Based Education	Workshop	27/09/2014 (01 Day)	Self-Sponsored
6	Science Writing and Journalism in association with NCSTC-DST (Govt. of India)	Workshop	25/26/02/2015 (02 Days)	NCSTC-DST (Govt. of India) Sponsored
7	Characterization & Surface Engineering	Workshop	09/10/04/2015 (02 Days)	Self-Sponsored
8	Campus To Corporate	Seminar	24/08/2015	Self-Sponsored
9	DST sponsored and ISTE approved one week national level Short Term Training Programme (STTP) on Modelling and Simulation in association with Goa College of Engineering, Goa	Workshop	27/06/2016 to 02/07/2016 (01 Week)	Sponsored by DST / Industry
10	ANSYS workshop for the mechanical engineering students in association with Element Simulation Academy, Pune	Workshop	13/18/10/2016 (01 Week)	Self-Sponsored
11	Polymer Matrix Composite Material	Seminar	17/18/10/2016 (02 Days)	Self-Sponsored
12	Short Term Training Program on ‘Finite Element Method and Ansys Software’ by Dr. C D Kuthe on Saturdays and Sundays	Workshop	25/03/2017 to 09/04/2017	Self-Sponsored
13	Three day workshop on Nano-Materials and Nano-technology, at MIT, Aurangabad	Workshop	15/09/2013 to 17/09/2013	

(B)International:-Nil

26. Student profile programme / course wise:-

Name of the Course/programme	Applications Received	Selected	Enrolled		Pass percentage
			*M	*F	
2012-16	Centralized Admission Procedure	128	120	8	84.74
2011-15		165	153	12	96.96
2010-14		69	63	6	84.26
2009-13		77	69	8	84.21

*M =Male *F=Female

27. Diversity of Students:-

UG:

Year of Admission	Name of the course	% of students from the same state	% of students from other States	% of students from abroad
2015-16	B. Tech. (Mechanical)	98.53	1.47	Nil
2014-15		94.37	5.63	Nil
2013-14		95.16	4.84	Nil
2012-13		95.12	4.88	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Sr. No	Year	GATE	GRE	CAT	Total
1	2015-16	2	1	2	5
2	2014-15	4	2	3	9
3	2013-14	4	2	3	9

29. Student progression

Student Progression %	Against % enrolled		
	2013-14	2014-15	2015-16
UG to PG	10.11	9.85	4.20
PG to M.Phil	-	-	-
PG to Ph. D	-	0.0	0.0
Ph.D. to Post-Doctoral	-	0.0	0.0
Total Employed	40.45	34.09	33.56
Employed Campus Selection	8.99	15.15	24.47
Other than Campus Recruitment	31.46	18.94	9.09
Entrepreneurship / Self-employment	4.62	2.89	0.00

30. Details of Infrastructural facilities (Programme specific):

Sr.	Infrastructural facility	Details of Item	Number
1	Departmental Library	Total Books available	232
2	Internet facility for staff and students	Computers	54
3	Pearson Digital Smart Classroom	Computer	01
4	Classrooms	Total	05
		With ICT facility	01
		Drawing hall	01
5	Seminar Hall	With ICT facility	01
6	Laboratories	UG	10
		Post Graduate	02
7	Tutorial Room	UG	02
		PG	01

Sr. No.	Name of Laboratory	Area (Sq. m.)	Total cost of the Laboratory (Rs.)
1	Thermal Engineering	104.4	2,06,517
2	Theory of Machines	92.43	3,22,630
3	Refrigeration and Air	143.2	2,96,000
4	Metrology and Measurements	101.28	1,65,510
5	Heat Transfer	106.68	2,32,050
6	Metallurgy	101.28	14,13,576
7	Automatic Control Systems	68.88	1,45,249
8	Hydraulic Machines	101.28	6,98,925
9	I.C. Engines	71.35	4,84,875
10	Research	102.96	44,42,993
11	Machine Tools	66	19,30,426
12	Mechatronics	69.8	60,39,204
	Total	1129.54	1,63,77,955

31. Number of students receiving financial assistance from college, university, Government or other agencies

Sr. No.	Details of Financial Assistance	Academic year/No of students		
		2014-15	2015-16	2016-17
1.	OBC GOI/Freeship	135	83	150
2.	SC GOI/ Freeship	77	139	94
3.	SBC GOI /Freeship	07	07	06
4.	ST GOI/ Freeship	02	03	05
5.	VJ/NT GOI/ Freeship	81	72	92
6.	TFWS	14	16	20
7.	Graduate Trainee Assistant / Earn and Learn Scheme	-	03	-
8.	GATE / AICTE Stipend	04	01	01

32. Details on student enrichment programs (special lectures/workshops/Seminar) with External experts:

Sr. No	Academic Year	Date	Name of Guest	Topic
1	2016-17	20/09/2016	Dr. Dilip Peshave, Professor, V.N.I.T., Nagpur	Joy of Giving
2	2016-17	18/10/2016	Dr. Pierpaolo Carlone, Faculty of Engineering at University of Salerno, Itali	Polymer matrix Composites
3	2016-17	24/02/2017	Mr. Abhay Deshmukh, Shilpin Machines Pvt. Ltd, Aurangabad	Entrepreneurship
4	2015-16	24/08/2015	Mr. Parag Pande, Aurangabad	Classroom to Corporate
5	2015-16	25/08/2015	Bhushan Lohar, Asst Manager, QC, General Motors I Pvt. Ltd	Quality in today's world scenario
6	2015-16	03/10/2015	Mr. Amol Deshpande, Aurangabad	Managing yourself for Excellence
7	2015-16	12/10/2015	Mr. Aniruddha Kulkarni, PG Student, IIT Chennai.	Preparation for Gate and other competitive Examinations
8	2015-16	25/02/2016	Mr. Kiran Kurware, Career Consultant, Aurangabad	Effective communication Skills
9	2015-16	12/04/2016	Mr. Ravindra Puri, Management Consultant, Pune	Thinking Out of the Box
10	2015-16	08/04/2016	Mangala Khivansara, Social Activist, Aurangabad	Respecting Womanhood
11	2014-15	14/02/2015	Mr. Prassana Joshi, CAD CAM Guru, Pune	3D printing
12	2014-15	02/03/2015	Mr. Joschen Ertl, OSBORN International, Germany.	Requirements of Global Engineers

13	2014-15	24/04/2015	Mr. Mukund Kulkarni, Sriram Narayanan, Expert Solutions, Aurangabad	Panel Discussion on "Building India - Shared Responsibility"
14	2014-15	24/01/2015	Prof S. Srinivasa Rao, NIT Warangal.	Inspirational Talk
15	2014-15	16/08/2014	Mr. Aniruddha Kulkarni, PG Student, IIT Chennai.	Gate Preparation
16	2013-14	13/03/2014	Mr. Ravi Kombde, Videocon Appliances Ltd, Aurangabad.	Injection Moulding Process
17	2013-14	31/08/2013	Mr. Girish Phadke, Gaurav Engineers, Waluj, Aurangabad	Tool Holders and cutting tools

- Various skill development programs are conducted in the department by the experts from Industries for the students to enhance their technical knowledge and personal development.

Sr. No.	Title	Duration	Faculty	Date
1	Lean Six Sigma	2 hours	Mr. Meghant D Nichant	25/02/2017
2	Film Appreciation	2 hours	Dr. Abhijit Deshpande	31/01/2017
3	Unnat Maharashtra scheme	3 hours	Mr. Nima, Miss Bithiya, Miss Yangki	19/01/2017
4	Design and Manufacturing Integration	2 hours	Mr. Shrikant Bidwai	13/01/2017
5	Career Opportunities in Parason Machinery Pvt. Ltd.	2 hours	Mr. Pravin Kuttarwade, Mr. Vaibhav Joshi	19/12/2016
6	ANSYS workshop	01 Week	Element Simulation Academy, Pune	13-18/10/2016
7	Characterization & Surface Engineering	02 Days	Dr. T. Sudarshan	9-10/04/2015
8	Reliable Welds	2 days	Dr. D. R. Peshwe, Professor, VNIT Nagpur	05-06/06/2013

9	CEP Course on Research Methodology	2 days	Dr. Vasant Matsagar, Associate Professor, Civil Engineering, IIT Delhi	09-10/08/2013
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33. Teaching methods adopted to improve student learning

Along with traditional teaching learning method, following innovative methods are adopted by faculty to improve teaching learning process.

1. Power point presentations
2. Industrial visits
3. NPTEL Videos
4. Tutorial classes
5. Practical classes

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Sr. No.	Type of activity	Year	Details of activity
1	NSS camp	2016-17	Mechanical Engineering Department has major involvement in NSS camp, this year camp was organized at Balgram, Gevrai Dist. Beed. Various activities are carried out during camp like construction & maintenance of village streets, drainage system, cleanliness drives, Health education, AIDS Awareness and preliminary health care.
2	Tree plantation	2016-17	More than 100 saplings were planted in the premises of Institute on 1st July 2016.
3	Swachha Bharat Abhiyan	2016-17	Swachha Bharat Abhiyan is carried out on 2 nd October 2016. We have cleaned village area beside our college. This is followed by celebration of Mahatma Gandhi Jayanti.

4	Cloth collection and distribution program	2016-17	Used cloth, stationery, books, toys from students and staff members were collected. All this material were donated to Snehalaya Ahamad Nagar.
5	Blood donation program	2016-17	The camp is being organized to mark birthday celebration of our founder President of MIT Hon'ble Dr Y. A. Kawade sir on 8 th August 2016. On this occasion 178 blood bags were collected by Dattaji Bhale Blood bank.
6	NSS camp	2015-16	Mechanical Engineering Department has major involvement in NSS camp, this year camp was organized at Mahabubkheda Taluka: Kannad Dist: Aurangabad. Various activities are carried out during camp like construction & maintenance of village streets, cleanliness drives, Health education, AIDS Awareness and preliminary health care.
7	Tree plantation	2015-16	More than 50 saplings were planted in the premises of Onkar Balwadi, Near Kamalnayan hospital, Aurangabad in the month of August.
8	Swachha Bharat Abhiyan	2015-16	On the occasion of Mahatma Gandhi Jayanti, Swachha Bharat Abhiyan is carried out on 2 nd October 2015. We have cleaned village area beside our college.
9	Waste collection and composting	2015-16	Every year in Pandharpur village near Waluj Ashadi yatra is celebrated where more than two lakhs of devotees gather to worship god, during this yatra lot of waste is thrown on the road side, our students with the help of CRT a NGO working in the field of SWM, collected and segregated the

			waste. Organic waste collected was composted in public garden.
10	Blood donation program	2015-16	The camp is being organized to mark birthday celebration of our founder President of MIT Hon'ble Dr Y. A. Kawade on 8 th August 2015. On this occasion 169 blood bags were collected by Dattaji Bhale Blood bank.
11	NSS camp	2014-15	Mechanical Engineering Department has major involvement in NSS camp, this year camp was organized at Balgram, an Orphanage at Gevrai. Various activities are carried out during camp like construction & maintenance of village streets; cleanliness drives drains, Health education, AIDS Awareness and preliminary health care.
12	Tree plantation	2014-15	More than 50 saplings were planted in the premises of Onkar Balwadi, Near Kamalnayan hospital, Aurangabad in the month of August.
13	Swachha Bharat Abhiyan (street play)	2014-15	On the occasion of Mahatma Gandhi Jayanti, students of department performed street play at Milind nagar area making awareness regarding cleanliness.
14	Blood donation program	2014-15	The camp is being organized to mark birthday celebration of our founder President of MIT Hon'ble Dr Y. A. Kawade sir on 8 th August 2014. on this occasion 150 blood bags were collected by Dattaji Bhale Blood bank.
15	NSS camp	2013-14	Mechanical Engineering Department has major involvement in NSS camp, this year camp was organized at Jaypur Tal. Karmad, Dist Aurangabad. Various activities are carried out

			during camp: construction & maintenance of village streets, cleanliness drives drains, Health education, AIDS Awareness and preliminary health care.
16	Tree plantation	2013-14	More than 80 saplings were planted in the premises of Institute in the month of August.
17	Blood donation program	2013-14	The camp is being organized to mark birthday celebration of our founder President of MIT Hon'ble Dr. Y. A. Kawade sir on 8 th August 2013. On this occasion 178 blood bags were collected by Dattaji Bhale Blood bank.
18	Eye donation awareness program	2013-14	Eye donation program was organized for students and faculties. Dr Anirudha Nalagikar an eye specialist and social activist promoted students for eye donation
19	NSS camp	2012-13	Mechanical Engineering Department has major involvement in NSS camp, this year cap was organized in college premises only.
20	Tree plantation	2012-13	More than 80 saplings were planted in the premises of institute in the month of August.
21	Blood donation program	2012-13	The camp is being organized to mark birthday celebration of our founder President of MIT Hon'ble Dr. Y. A. Kawade sir on 8 th August 2012. On this occasion 160 blood bags were collected by Dattaji Bhale Blood bank.

35. SWOC analysis of the department and Future plans

Strengths

- Well qualified and experienced staff.
- State of the art infrastructural facility.

- Excellent teaching and learning environment.
- In-plant training to good number of the students in reputed industries and research organizations.
- Overall development of students through their participation in co-curricular activities.
- Good number of publications in national and international journals and conferences.
- Recognized research center in Mechanical Engineering.

Weaknesses

- No consultancy.
- No grants from various government funding agencies.

Opportunities

- Relevant industries are in proximity.
- Obtaining research grants from various funding agencies such as DST, AICTE, and UGC etc.
- Collaboration with leading research institutions and industries for research projects and consultancy.
- Scope of qualification up gradation for faculty members.
- Startup promotional activities.

Challenges

- Improving upon consultancy and revenue generation.
- Imparting soft skills to the students from rural background.
- Achieving good placements through campus.
- Diverse socio economic backgrounds of students.

Future Plans

- Funded research projects in collaboration with government, industry and private organizations.
- Tie-ups with National and International Educational Institutes.
- Faculty Qualification Improvement.
- Enhancing Soft-skills, Aptitude Skills and Technical skills of the students.

Evaluative Report

Department of Plastic and Polymer Engineering

1. Name of the department : Plastic and Polymer Engineering

2. Year of Establishment : 2001

3. Names of Program / Courses offered (UG, PG, M. Phil., Ph. D., and Integrated Masters; Integrated Ph. D., etc.):

Bachelor of Technology (Plastic and Polymer Engineering)

4. Names of Interdisciplinary courses and the departments/units involved:

Sr. No.	Year	Semester	Course Code	Course	Department
1	First Year	I	BSH101	Engineering Mathematics-I	Basic Sciences and Humanities
2			BSH102/ BSH103	Engineering Physics/ Engineering Chemistry	
3			BSH104	Basic Electrical Engineering	Electrical Engineering
4			BSH105	Engineering Drawing	Mechanical Engineering
5			BSH106	Computer Fundamental and Programming	Computer Science and Engineering
6			BSH107	Basic Civil Engineering	Civil Engineering
7			BSH126	Workshop Practice - I	Mechanical Engineering
8	First Year	II	BSH151	Engineering Mathematics-II	Basic Sciences and Humanities
9			BSH102/ BSH103	Engineering Physics/ Engineering Chemistry	
10			BSH152	Basic Electronics	Electronics and Telecommunication Engineering
11			BSH153	Engineering Mechanics	Civil Engineering
12			BSH154	Basic Mechanical Engineering	Mechanical Engineering
13			BSH155	Environment and Ecology	1.Basic Sciences and Humanities 2.Plastic and Polymer Engineering
14			BSH174	Development of Skills - I	Basic Sciences and Humanities

15	Second Year	III	BSH201	Engineering Mathematics-III	Basic Sciences and Humanities
16			BSH225	Development of Skills-II	Basic Sciences and Humanities
17		IV	BSH251	Engineering Mathematics-IV	Basic Sciences and Humanities

5. Annual/ semester/choice based credit system (program wise):

UG: Choice based Credit system

6. Participation of the department in the courses offered by other departments:-

Sr. No.	Year	Semester	Course Code	Course	Name of Other Department
1	FY	II	BSH155	Environment and Ecology	Basic Sciences and Humanities
2*	SY	IV	-	Environmental Studies	NA

*“Environmental Studies” is the certificate course only for the students admitted through “direct second year admission”. Its syllabus is set by the university. As per the orders of Hon. Supreme Court., it is a mandatory course for UG students.

7. Courses in collaboration with other universities, industries, foreign institutions etc. : Nil

8. Details of course/programs discontinued (if any) with reasons: Nil

9. Number of teaching posts:

Post	Sanctioned	Filled
Professor	1	1
Associate Professor	4	1
Assistant Professor	11	9
Lecturer	-	2
Adjunct Faculty	-	5
Total	16	18

10. Faculty profile with name, qualification, designation, specialization:-

Sr. no	Name of Staff	Qualification	Designation	Specialization	Experience (Years)	No. of Ph. D. Students guided for the last 4 Years
1	Dr. Arun Ashtaputre	Ph. D.	Professor	Liquid Crystal	53	Nil
2	Ms. Suranjana Mandal	M. Tech	Associate Professor	Superabsorbent Polymers	15	Nil
3	Dr. Aniruddha Chatterjee	Ph. D.	Assistant Professor and Head	Nanomaterials and Composites	12	2*
4	Ms. Aarti H. Mulay	M. Tech	Assistant Professor	Reaction Kinetics and Design	20	Nil
5	Ms. Aastha S. Dutta	M. E.	Assistant Professor	Novel Inorganic Materials	17	Nil
6	Ms. Jaya S. Suryawanshi	M.E.	Assistant Professor	Membrane Technology	10	Nil
7	Mr. Mujahid A. Ansari	M. Tech	Assistant Professor	Polymer Processing and Testing	8	Nil
8	Mr. Vijendra R. Chaudhari	M. E.	Assistant Professor	Design	5.5	Nil
9	Dr. Subhendu Bhandari	Ph. D.	Assistant Professor	Conducting Polymers and Nanomaterials	7	Nil
10	Dr. Prashant A. Gupta	Ph. D.	Assistant Professor	Polymer Compounds and Nano-composites	6.5	Nil

11	Mr. Ayan Dey	M. Tech.	Assistant Professor	Nano Hydrogels	4	Nil
12	Mr. Yaduraj G. Thakare	B.Tech	Lecturer	High Solid Resins	9.5	Nil
13	Mr. Amol V. Patil	M. E.	Lecturer	Particulate Filled Polymer Composites	9	Nil
14	Mr. S. Subhedar	B.Tech	Adjunct Faculty	Polymer Blends and Compounds, Clean room systems, Coatings	42	Nil
15	Mr. Sandeep Deshmukh	M.Com.	Adjunct Faculty	Polymer Master Batches	14	Nil
16	Mr . Sunil Raithatha	B. Tech.	Adjunct Faculty	Machine Design and Rotational moulding of Plastics	35	Nil
17	Mr. Nityanand Bhogle	B.Sc.	Adjunct Faculty	High Performance Polymer Coatings	34	Nil
18	Mr. Vijaykumar Ramdasi	B.E.	Adjunct Faculty	Plastic Processing	33	Nil

* Registered for Ph. D.

11. List of Senior Visiting Faculty: Nil

12. Percentage of lectures delivered and practical classes handled by temporary faculty: -Nil

13. Student -Teacher Ratio (Program wise) UG – 13.33:1

14. Number of academic support staff (technical) and administrative staff, sanctioned and filled:

Support stuff	Available
Asst. Analyst cum Manager (CARS)	01
Laboratory Assistant	01
Peon	01

15. Qualifications of teaching faculty with D.Sc. / D. Litt. / Ph. D. / M. Phil / PG:

Ph. D	: 04
M. E. / M. Tech. / M. Com.	: 09
B.E. / B. Tech. / B. Sc.	: 05

16. Number of faculty with ongoing projects from (a) National and (b) International Funding**agencies and grants received: : Nil****17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received****18. Research Centre /facility recognized by the University : Nil****19. Publications and Patents by Faculty and Technical Staff:****(a) Publications:-**

Sr. No.	Name of Faculty/Technical Staff	Total number of publications	
		National	International
1	Ms. Suranjana Mandal (Asso. Prof.)	02	00
2	Dr. Aniruddha Chatterjee (Asst. Prof.)	Nil	20
3	Ms. Aastha S. Dutta (Asst. Prof.)	04	02
4	Mr. Mujahid A. Ansari (Asst. Prof.)	01	01
5	Ms. Aarti H. Mulay (Asst. Prof.)	Nil	01
6	Dr. Subhendu Bhandari Asst. Prof.)	01	13
7	Dr. Prashant Gupta (Asst. Prof.)	02	01
8	Mr. Ayan Dey (Asst. Prof.)	Nil	11
9	Ms. Pallavi N. Shindikar (Technical Staff)	Nil	02

- Number of papers published in peer reviewed journals (National / International) by faculty and students : 56**

Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.) : 42

- Monographs : 01**
- Chapter in Books : 03**
- Books Edited : Nil**
- Books with ISBN/ISSN numbers with details of publishers: Nil**
- Citation Index : (Google scholar) 0 to 183**
- Impact factor range : 0 to 6.156**
- h-index range : 0 to 10**
- i 10 –index : 0 to 10**
- SJR : 1.11**
- SNIP : 1.19**

(b) Patents

Sr. No.	Faculty	Application Number	Title
1	Dr. Aniruddha Chatterjee	Indian Patent, Application No. 566/MUM/2009 Filing Date: 16/03/2009 Publication Date: 11/01/2013	A Process for Synthesis of Polymer Latex Nanoparticles by Monomer Atomization in Microemulsion
2	Dr. Arun D. Ashtaputre	Indian Patent, Application No.2192/MUM/2014 A, Filing Date: 07/07/2014, Online Publication Date: 25/07/2014	Recycling of PET bottles to fill potholes on road
3	Dr. Aniruddha Chatterjee	Indian Patent, Application No. 2725/MUM/2014, Filing Date: 26/08/2014, Online Publication Date: 12/09/2014	Biosurfactant Fictionalized Biodegradable Filler and Polymer Composite Derived Therefrom
4	Dr. Aniruddha Chatterjee	Indian Patent, Application No. 2726/MUM/2014, Filing Date: 26/08/2014, Online Publication Date: 26/09/2014	Biodegradable Masterbatches and Compositions Thereof
5	Dr. Subhendu Bhandari	Indian Patent, Application No. 987/KOL/2013, Filing Date: 27/08/2013	Synergistic Combination of Dual Dopants for Improved Electrical Conductivity In Conducting

20. Areas of consultancy and income generated:

Income is generated through the two laboratories as mentioned below:

Laboratory	Year	Income Generated (Rs.)
MIT-Shimadzu Analytical Testing Lab	2016-17	1,07,133
	2015-16	92,099
Polymer Testing Lab	2016-17	7,805
	2015-16	11,041

21. Faculty as members in a) National committees b) International Committees c) Editorial Boards

- a) National Committees: Nil
- b) International Committees: Nil

c) Editorial Boards:

Sr. No.	Name of Faculty	Name of Committee and Designation
1	Dr. Aniruddha Chatterjee	Editorial board member of International Journal of Nanomaterials and Nanostructures
		Editorial board member of International Journal of Polymer Science and Engineering
		Editorial board member of International Journal of Composite materials and matrices

22. Student projects:

(a) Percentage of students who have done in-house projects including inter departmental / programme:

Sr. No.	Academic year	In-house project (%)	
		Departmental	Inter-Departmental
1	2013-14	100	0
2	2014-15	100	0
3	2015-16	100	0
4	2016-17	100	0

(b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: Nil

23. Awards / Recognitions received by faculty and students

(a) Awards / Recognitions received by faculty:

Sr. No.	Name of Award/Recognition	Name of Faculty	Name of Organization
1.	Reviewer of the one chapter of the book entitled "Biopolymers and Biomaterials"	Ms. Suranjana Mandal	Apple Academic Press, Canada
2.	Reviewer of "Journal of Green and Sustainable Chemistry"		Clausius Scientific Press
3.	Reviewer of "Macromolecular Symposia"		Wiley
4.	Reviewer of "Journal of Materials and Environmental Science"		University of Mohammed Premier Oujda, Morocco
5.	DST-FASTRACK Young Scientist Fellowship	Dr. Aniruddha Chatterjee	Department of Science & Technology (DST), New

			Delhi
6.	Excellence Award for Quality Research Paper-2014		North Maharashtra University, Jalgaon
7.	Excellence Award for Quality Research and Development-2013		North Maharashtra University, Jalgaon
8.	Cosmo Films "Merit Award"		Cosmo Films Ltd., Aurangabad
9.	Senior Research Fellowship under CSIR Major Research Project		Council of Scientific & Industrial Research (CSIR), New Delhi
10.	Project Fellowship under UGC Major Research Project		University Grants Commission (UGC), New Delhi
11.	Recognition as Post Graduate Teacher/Ph. D. Guide in the subject of Chemical Technology under the faculty of Engineering and Technology		North Maharashtra University, Jalgaon
12.	Recognition as M. Phil. and Ph. D. Guide in the subject of Chemistry under the faculty of Science		North Maharashtra University, Jalgaon
13.	Reviewer of "Journal of Hazardous Materials"		Elsevier Publications
14.	Reviewer of "Material Letters"		Elsevier Publications
15.	Reviewer of "Applied Surface Science"		Elsevier Publications
16.	Reviewer of "RSC Advances"		Royal Society of Chemistry
17.	Gold Medalist in Post Graduate Diploma in Chemical Technology Management (PGD-CTM) in 2014	Dr. Prashant Gupta	Institute of Chemical Technology (ICT), Mumbai
18.	Award of Excellence for presenting poster in 2013		International Conference of Polymers on the Frontiers of Science and Technology (APA-2013) Chandigarh, India
19.	Prize in national level project competition "DESIGN 07"		Maharashtra Institute of Technology (MIT),

			Aurangabad
20.	First prize in a national conference “RANGOTSAV 2010” for presenting the solution of Industry Defined Problem on “Economic way of FRP Recycling”		RANGOTSAV 2010 at Institute of Chemical Technology (ICT), Mumbai
21.	Third prize in Technomillenium 07 for oral presentation of a technical review paper “Plastic Money”		Maharashtra Institute of Technology (MIT), Aurangabad
22.	Best Committee Member Awards for Sponsorship Committee		RANGOTSAV 2012 at Institute of Chemical Technology (ICT), Mumbai
23.	GATE fellowship in 2008		All India Council for Technical Education (AICTE), INDIA
24.	Best poster award in Poster Presentation		PRC 2012
25.	GATE fellowship in 2010	Mr. Ayan Dey	All India Council for Technical Education (AICTE), INDIA
26.	First class first in B.Sc. Chemistry (Hons.) from Maharaja Manindra Chandra College, University of Calcutta		Maharaja Manindra Chandra College
27.	Reviewer in “Colloids and Surfaces A”		Elsevier Publications
28.	Reviewer in “Journal of Applied Polymer Science”		Wiley Publications
29.	Reviewer in “International Journal of Modern Trends in Engineering and Science (IJMTES)”	Dr. Subhendu Bhandari	Research Script
30.	Reviewer in “The 2007 Global Conference on Polymer and Composite Materials (PCM 2017)”		PCM 2017 Organization Committee (Guanzhou, China)
31.	Reviewer of chapter for book entitled “Biopolymers and Biomaterials”	Ms. Aastha S.	Elsevier Publications
32.	Reviewer of “Materials Research Innovations”	Dutta	Taylor and Francis Publications

33.	Reviewer of “Food Technology and Biotechnology”		Faculty of Food Technology and Biotechnology, University of Zagreb, Croatia.
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(b) Awards / Recognitions received by students

Sr. No.	Title of The Event	Name of Students	Award	Organization
1.	Plasticon- Plastindia 2015	Badal Panchal	“Best Performing Student Gold Award”	Plastindia Foundation
2.	Affinity and Confluence	Dwij Dave	3 rd prize in paper presentation	Maharashtra Academy of Engineering & Education Research (MAEER), Maharashtra Institute of Technology (MIT), Pune
3.	Affinity and Confluence	Parth Seth	3 rd prize in paper presentation	Maharashtra Academy of Engineering & Education Research (MAEER) , Maharashtra Institute of Technology (MIT)
4.	Affinity and Confluence	Badal Panchal	1 st prize in paper presentation	Maharashtra Academy of Engineering & Education Research (MAEER), Maharashtra Institute of Technology (MIT)
5.	Affinity and Confluence	Ninad Jethwa	1 st prize in paper presentation	Maharashtra Academy of Engineering & Education Research (MAEER) , Maharashtra Institute of Technology (MIT)
6.	Affinity and Confluence	Shyam Tonde	1 st award in Poster presentation on Tamarind seed Polysaccharide	Maharashtra Academy of Engineering & Education Research (MAEER) , Maharashtra Institute of Technology (MIT)
7.	Affinity and	Akshay	1 st award in Poster	Maharashtra Academy of

	Confluence	Tathe	presentation on Tamarind seed Polysaccharide	Engineering & Education Research (MAEER), Maharashtra Institute of Technology (MIT)
8.	Envision 2015	Ajinkya Thale	1 st award in Poster presentation	Mahatma Gandhi Mission`s (MGM's) Jawaharlal Nehru Engineering College (JNEC)
9.	Envision 2015	Supriya Gaikwad	1 st award in Poster presentation	Mahatma Gandhi Mission`s (MGM's) Jawaharlal Nehru Engineering College (JNEC)
10.	Macrotechnovista	Siddharth Mehta	1 st award in Paper presentation	Laxminarayan Institute of Technology (LIT), Nagpur
11.	Rangotsav, 2017	Deepak Prajapati	2 nd award in Poster presentation	Institute of Chemical Technology (ICT), Mumbai
12.	Rangotsav, 2017	Geetanjali Tiwari	2 nd award in Poster presentation	Institute of Chemical Technology (ICT), Mumbai

24. List of eminent academicians and scientists / Visitors to the Department:

Sr. No.	Name of eminent academicians and	Date	Purpose of visit
1	Prof. Bhuvanesh Gupta, Indian Institute of Technology (IIT), Delhi	21 st September, 2016	“Development of polymeric biomaterials for human health care” in National Conference on Materials for Advanced
2	Prof. Rajeev Mehta Thapar University, Patiala, Punjab	21 st September, 2016	“Shear - thickening fluids and their applications” in National Conference on Materials for Advanced Technology and
3	Dr. Sidhanath Vishwanath Bhosale, Indian Institute of Chemical Technology - Council of Scientific and Industrial Research	21 st September, 2016	“Supramolecular polymers” in National Conference on Materials for Advanced Technology and Application (MATA-2016)

4	Dr. Ajit Datar, Shimadzu Analytical (India) Pvt. Ltd, Mumbai	21 st September,2016	“Challenges in characterization of advanced materials” in National Conference on Materials for Advanced Technology and Application (MATA-2016)
5	Dr. Anoop Anand, Defence Research and Development Organization (DRDO),	21 st September,2016	“Structural composites” in National Conference on Materials for Advanced Technology and Application (MATA-2016)
6	Dr. Bhaskar B. Idage, National Chemical Laboratories(NCL), Pune	20 th September,2016	“Biodegradable polymers derived from renewable resource materials” in National Conference on Materials for Advanced Technology and Application (MATA-2016)
7	Dr. Kasilingam, Rajkumar Director, Indian Rubber Manufacturers Research Association (IRMRA),	20 th September, 2016	“Processing of nano fillers in polymer industry – problems and perspectives” in National Conference on Materials for Advanced Technology and Application (MATA-2016)
8	Dr. Rajesh Bhosale, CSIR-IICT, Hyderabad	20 th September,2016	“CO ₂ as a green precursor in polymer synthesis” in National Conference on Materials for Advanced Technology and Application (MATA-2016)
9	Dr. D. M. Badgujar, High Energy Materials Research Laboratory (HEMRLS), Pune	20 th September,2016	“Green approaches for energetic materials synthesis” in National Conference on Materials for Advanced Technology and Application (MATA-2016)
10	Prof. D. R. Peshwe, Visvesvaraya National Institute of Technology (VNIT), Nagpur	20 th September,2016	“Cryogenic treatment on polymers, composites and blends” in National Conference on Materials for Advanced Technology and Application (MATA-2016)

11	Mr. R. Girijan, Toshvin Analytical Private Limited, Mumbai	3 rd September, 2015	“Size exclusion chromatography - tool for polymer characterization” in Four Day Workshop on Analytical testing And Characterization
12	Dr. Ajit Datar, Shimadzu Analytical (India) Private Limited, Mumbai	2 nd September, 2015	“Approach to Material characterization” in Four Day Workshop on Analytical testing And Characterization
13	Ms. Chua Ai Ming, Shimadzu (Asia Pacific) Private Limited, Singapore	1 st September, 2015	“DSC / TGA technique, application capabilities” in Four Day Workshop on Analytical testing And Characterization
14	Ms. Takako Tokura, Shimadzu (Asia Pacific) Private Limited,	31 st August, 2015	“UV / FTIR technique and application capabilities” in Four Day Workshop on Analytical testing And Characterization
15	Prof. N. C. Saha, Indian Institute of Packaging(IIP), Mumbai	5 th April, 2014	“Importance of packaging- as a career option” in National Level Symposiy on Poly-Plast advance tech “Polyxplore-14”
16	Dr. S. Radhakrishnan, National Chemical Laboratories(NCL), Pune	4 th April, 2014	“Polymers and plastics: The evergreen materials from industry” in National Level Symposium on Poly-Plast advance tech “Polyxplore-14”

25. Seminars/ Conferences/Workshops organized and the source of funding:-

- **National**

Sr. No.	Title of Seminars/ Conferences/Workshops	Duration	Source of Funding
1	6 Day Certificate course on Fourier Transform Infrared Spectroscopy	20 – 25 th February, 2017	Self Sponsored
2	National Conference on Materials for Advanced Technology and Application (MATA-2016)	20-21 st September,2016	SERB, Department of Science & Technology (DST), New Delhi and Industry Sponsored

3	6 Day Certificate course on Fourier Transform Infrared Spectroscopy	1 - 6 th February, 2016	Self Sponsored
4	Plastics Product Design and Modelling using CAD	1-5 th March, 2016	Self Sponsored
5	Four Day Workshop on Analytical testing And Characterization	31 st August- 3 rd September, 2015	In collaboration with Shimadzu Analytical (India) Pvt. Ltd, and Toshvin Analytical Pvt. Ltd.
6	National Level Symposium on Poly-Plast advance tech “Polyxplore-14”	4-5 th April, 2014	Sponsored by Indian Plastics Institute (IPI), Mumbai

- **International:- Nil**

26. Student profile program/course wise:-

Name of the Course/ programme	Applications Received	Selected	Enrolled		Pass Percentage
			*M	*F	
2012-16	Centralized Admission Procedure	59	55	4	86.44
2011-15		35	33	2	100
2010-14		65	52	13	95.38
2009-13		41	35	6	95.12

*M = Male *F = Female

27. Diversity of Students:-UG:

Year of Admission	Name of the course	% of students from the	% of students from other	% Of students from abroad
2016-17	B. Tech. Plastic and Polymer Engineering	95.5	4.5	Nil
2015-16		97	3	Nil
2014-15		97	3	Nil
2013-14		98	2	Nil
2012-13		95	5	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Year	GATE	Defense services	Civil services
2013-2014	Nil	Nil	Nil
2014-2015	Nil	Nil	Nil

2015-2016	02	Nil	Nil
2016-2017	04	Nil	Nil

29. Student progression

Student Progression %	Against % enrolled			
	2012-13	2013-14	2014-15	2015-16
UG to PG	36	6.5	13.8	0.03
PG to M. Phil	Nil	Nil	Nil	Nil
PG to Ph. D.	Nil	Nil	Nil	Nil
Ph. D. to Post-Doctoral	Nil	Nil	Nil	Nil
Employed - Campus Selection	28	10	37	51
- Other than Campus Recruitment	28	23	42	34
Entrepreneurship / Self-employment	Nil	Nil	Nil	Nil

30. Details of Infrastructural facilities (Program specific) :-

Sr.	Infrastructural facility	Details of Item	Number
1	Departmental Library	Total Books	125
2	Internet facility for staff and students	Computers with Internet facility	14
3	Classrooms	with ICT facility	1
4	Seminar Hall	with ICT facility	1
5	Laboratories	UG	10
6	Tutorial Room	UG	1

Details of Laboratories available in the department:

Sr. No.	Name of Laboratory	Area (Sq. m)	Total cost of the Laboratory (Rs.)
1	Polymer Testing	71	4,06,775
2	Polymer Synthesis	71	3,10,400
3	Organic Chemistry	71	3,19,400
4	Design Laboratory	71	8,50,511
5	Mechanical Operation	71	3,15,581
6	Rubber Technology	71	3,84,075
7	Polymer Processing Technology	71	7,61,850

8	Chemical Engineering	71	4,99,547
9	MIT Shimadzu Analytical	71	44,62,256
10	Project Laboratory	71	2,90,588
	Total	710	86,00,983

31. Number of students receiving financial assistance from college, university, Government or other agencies

Sr. No.	Details of Financial Assistance	Academic year/ No. of students		
		2014-15	2015-16	2016-17
1	OCB Free ship/GOI Scholarship	08/28	08/35	10/43
2	SC Free ship GOI Scholarship	02/17	03/10	02/15
3	SBC Free ship/GOI Scholarship	01/03	01/03	01/04
4	ST Free ship/GOI Scholarship	0/0	0/0	0/0
5	VJ/NT Free ship/GOI Scholarship	01/16	0/12	0/11
6	TFWS	03	01	03
7	Earn and Learn Scheme	00	00	03

32. Details on student enrichment programs (special lectures / workshops /Seminar) with external experts:-

Sr. No.	Date	Details of External Expert	Topic
1	15 th March, 2013	Mr. Jivan Nakum BASF India Limited, Mumbai	Guest lecture on “Ultramid Polyamide for Extrusion”
2	25 th September, 2015	Mr. M. P. Sharma Varroc Group Engineering Private Limited	Guest lecture on “Recent Trends in Plastic Automotives”
3	9 th January, 2017	Dr. Subhendu Bhattacharya Shell Technology Centre, Bangalore	Guest lecture on “Rheology as Characterization Tool”

4	1-6 th February, 2016	Mr. Yogesh Phansikar Toshvin Analytical Mumbai.	6 Day Certificate course on Fourier Transform Infrared Spectroscopy
5	21 st - 25 th February, 2017	Mr. Shashikant Surve Toshvin Analytical, Mumbai.	6 Day Certificate course on Fourier Transform Infrared Spectroscopy

33. Teaching methods adopted to improve student learning

1. Power point presentations.
2. Industrial visits
3. NPTEL Videos
4. Tutorial classes
5. Practical classes
6. Group discussion
7. Brain storming sessions

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Sr. No.	Type of activity	Year	Details of activity	Participants (students and faculty)
1	Social activity	2014-15	Educated rural area tribal kids regarding studies, hygiene and cleanliness	35 students
2	Social activity	2015-16	Donated footwares to Bhagwanbaba Balikashram Orphanage	60 students

35. SWOC analysis of the department and Future plans

Strengths

- Access to state of the art infrastructural facilities and equipments.
- Highly qualified, experienced and diversely specialized faculties.
- Good number of students' campus (on/off) placements.
- Good number of research publications in reputed high impact factor national and international journals.

Weaknesses

- Less success rate of students in national /international entrance examinations like GATE, CAT, GRE, GMAT, etc.
- Lack of research grants from different government and private funding agencies.

Opportunities

- Increased demand of Plastic and Polymers in all sectors.
- Huge job opportunities around the globe.
- Excellent prospect in higher studies and entrepreneurship.
- Research Collaboration with reputed institute and industries.
- Obtaining research funds from different government funding agencies.

Challenges

- Awareness in people about career in Polymer Technology.
- Improvement of first year UG student enrollment.

Future Plan

- To get Accreditation from various National Accreditation Authorities.
- Receiving research grants from different government and private funding agencies.
- Collaboration with national and international educational institutes.
- Enhancing soft-skills, aptitude skills and technical skills of the students.
- Encouraging students for higher education and entrepreneurship.

Evaluative Report

Department of Basic Sciences and Humanities

1. **Name of the department** : Basic Sciences and Humanities
2. **Year of Establishment** : 2001
3. **Names of Programmes / Courses offered (UG, PG, M. Phil., Ph.D., and Integrated Masters; Integrated Ph.D., etc.):** Bachelor of Technology
4. **Names of Interdisciplinary courses and the departments/units involved:-**

Sr. No.	Year	Semester	Course code	Course	Department
1	F I R S T Y E A R	I	BSH104	Basic Electrical Engineering	Electrical Engineering/ Electronics and Telecommunication Engineering
2			BSH105	Engineering Drawing	Mechanical Engineering
3			BSH106	Computer Fundamental & Programming	Computer Science and Engineering
4			BSH107	Basic Civil Engineering	Civil Engineering
5			BSH126	Lab VI Workshop Practice I	Mechanical Engineering
6		II	BSH152	Basic Electronics	Electronics and Telecommunication Engineering
7			BSH153	Engineering Mechanics	Civil Engineering
8			BSH154	Basic Mechanical Engineering	Mechanical Engineering

5. **Annual/ semester/choice based credit system (programme wise) :**

UG –Choice based Credit System

6. Participation of the department in the courses offered by other departments:-

Sr. No.	Year	Semester	Course code	Course	Department
1	S E C O N D Y E A R	III	BSH201	Engineering Mathematics III	Agricultural Engineering, Civil Engineering, Computer Science and Engineering, Electrical Engineering, Electronics and Telecommunication Engineering, Mechanical Engineering, Plastics and Polymer Engineering
2			BSH225	Development of Skills II	Agricultural Engineering, Civil Engineering, Computer Science and Engineering, Electrical Engineering, Electronics and Telecommunication Engineering, Mechanical Engineering, Plastics and Polymer Engineering

3	S E C O N D Y E A R	IV	BSH251	Engineering Mathematics IV	Agricultural Engineering, Civil Engineering, Computer Science and Engineering, Electrical Engineering, Electronics and Telecommunication Engineering, Mechanical Engineering, Plastics and Polymer Engineering
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7. Courses in collaboration with other universities, industries, foreign institutions etc.: - Nil
8. Details of course/programs discontinued (if any) with reasons: - Nil
9. Number of teaching posts:-

Name of the post	Sanctioned	Filled
Assistant Professor	16	16
Adjunct Faculty	-	1
Total	16	17

10. Faculty profile with name, qualification, designation, specialization:

Sr. No.	Name of Staff*	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students Guided for the last 4 Years
1	Prof. S. P. Kodgire	M.E	Associate Professor and Head	Electronics and Telecommunication	19.8	Nil
2	Dr. B. G. Toksha	M.Sc. Ph. D.	Assistant Professor	Physics	10	Nil
3	Mrs. R.A. Suryawanshi	M. Sc.	Assistant Professor	Organic Chemistry	8	Nil
4	Mr. S. G. Hiwale	M. Sc., B. Ed. , M. Phil.	Assistant Professor	Mathematics	10.9	Nil
5	Dr. L. V. Uttarwar	M. Sc., B. Ed. , Ph. D	Assistant Professor	Organic Chemistry	19	Nil
6	Mr. A. B. Bagul	M.A., B. Ed.	Assistant Professor	English	10	Nil
7	Mr. P. D. Ghodke	M. Sc.	Assistant Professor	Physics (Electronics)	7	Nil
8	Mr. Z. H. Shaikh	M. Sc.	Assistant Professor	Mathematics	6.3	Nil
9	Mr. N. B. Gawali	M. A., M. Phil., B. Ed.	Assistant Professor	English	13	Nil
10	Dr. P.S. Bora	M. Sc., M. Phil., Ph. D.	Assistant Professor	Mathematics	5.6	Nil
11	Mr. S. S. Patil	M. Sc., B. Ed., M. Phil.	Assistant Professor	Mathematics	12	Nil
12	Mrs. N. N. Gadekar	M.Sc., B. Ed.	Assistant Professor	Mathematics	8.6	Nil

13	Mrs. S. M. Ghusale	M.Sc., B. Ed.	Assistant Professor	Organic Chemistry	5.5	Nil
14	Dr. A. D. Rushi	M.Sc., Ph. D.	Assistant Professor	Physics	2.5	Nil
15	Mr. A. C. Gurav	M.Sc.	Assistant Professor	Organic Chemistry	5	Nil
16	Mrs. V. S. Patil	M. Sc., B. Ed.	Assistant Professor	Mathematics	2.8	Nil
17	Mrs. J. G. Gorde	M. Tech.	Assistant Professor	Industrial Mathematics with computer applications	2	Nil
18	Mr. N. A. Kale	M.Sc.	Adjunct Faculty	Physics (Electronics)	40	Nil

*Faculty members of BSH Department considered in all other departments offering B. Tech. courses.

11. List of senior visiting faculty: Nil

12. Percentage of lectures delivered and practical classes handled (Programme wise) by temporary faculty: - Nil

13. Student -Teacher Ratio (Programme wise) – NA

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Sr. No.	Supporting Staff	Available
1	Lab Assistant	01
2	Peon	01

15. Qualifications of teaching faculty with D. Sc. / D. Litt. / Ph. D. / M. Phil. / P.G:

Sr. No.	Qualification	No. of Teaching Faculty
1	Ph. D.	4
2	M. Phil.	3
3	M. Tech.	1
4	M. E.	1
5	M. Sc.	8
6	M. A.	1

16. Number of faculty with ongoing projects from (a) National and (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 and Patents by faculty:-

- Publication per faculty

Sr. No.	Name of Faculty	Total Number of Publications	
		National	International
1.	Mrs. R. A. Suryawanshi	0	1
2.	Dr. B. G. Toksha	0	15
3.	Dr. L. V. Uttarwar	3	5
4.	Mr. A. B. Bagul	4	2
5.	Dr. P. S. Bora	1	3
6.	Mr. S. S. Patil	0	4
7.	Mr. N. B. Gawali	2	4
8.	Dr. A. D. Rushi	0	14

- Number of papers published in peer reviewed journals (National / International) by faculty and students: 58
- Number of publications listed in International Database (e.g., Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.): 10
- Monographs : Nil
- Chapter in Books: Nil
- Books Edited: Nil
- Books with ISBN/ISSN numbers with details of publishers: Nil
- Citation Index: (Google Scholar) – 0 to 688
- SNIP: 0.562 to 1.234
- SJR: 0.466 to 1.995
- Impact factor range / average: 0 to 4.836
- h-index range: 0 to 12

b) Patents

Sr. No.	Faculty	Application Number	Title
1	Dr. A. D. Rushi	TEMP/E-1/345/2017-MUM	Annealing induced control for fictionalization of single walled carbon
2		TEMP/E-1/310/2017-MUM	Automated equipment for thin film by dip coating and successive ionic layer
3		TEMP/E-1/370/2017-MUM	A method select porphyrins as building blokes for selective volatile organic

20. Areas of consultancy and income generated: Nil

21. Faculty as members in a) National committees b) International Committees

c) Editorial Boards

a) National Committees: Nil

b) International Committees: Nil

c) Editorial Boards: Nil

22. Student projects: NA

a) Percentage of students who have done in-house projects including inter departmental/programme

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies

23. Awards / Recognitions received by faculty and students-

a. Awards

Sr. No.	Name of Faculty	Name of Award	Name of Organization	Year
1.	Prof. S. P. Kodgire	Women's achievement award	Aarya Vaishya Lions Club Aurangabad	2017
2.	Dr. B. G. Toksha	Completed and received certificate of excellence for "Use of ICT in Education for Online and Blended Learning"	IIT Bombay	2016
		Completed with high grades	IIT Bombay	2016

		"Educational Technology for Engineering Teachers" online MOOC		
Dr. L. V. Uttarwar		University Topper list – VIIth Merit Rank for B. Sc..	Sant Gadge Baba University, Amravati	1990
		Gold medal in B. Sc.	Phulsing Naik College, Pusad	1990
		Gold medal in M.Sc.	Arya Vaishya Samaj, Pusad	1992
Dr. P. S. Bora		University Topper list - IIInd Merit Rank for B. Sc.	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	2006
		University Topper in M. Sc. with Gold medal	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	2008
		University Scholar Fellowship for Ph.D.	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	2012-14
Mr. Z. H. Shaikh		University Topper in M. Sc. With Gold medal	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	2012
Dr. A. D. Rushi		University Grant commission Project Fellowship	University Grant commission	2012-14
		Department of Science and Technology -Technology System Design Project Fellowship	Department of Science and Technology	Jan 2012-Oct 2012

b. Recognition

Sr. No.	Name of Faculty	Name of Recognition	Name of Organization	Year
1	Mrs. S.P. Kodgire	Recognized as PG Teacher in Electronics and Telecommunication Engineering,	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	2010

c. Students

Sr. No.	Name of the student	Class	Level	Event	Achievements
2016-17					
1	Rushikesh Shete,	First Year	International	Quiz Competition held by DY Patil Rotract club Pune in 2017	2 nd Rank
2	Naman Chakrawarti,	First Year	International	Quiz Competition held by DY Patil Rotract club Pune in 2017	2 nd Rank
3	Kalpak Wabale,	First Year	International	Quiz Competition held by DY Patil Rotract club Pune in 2017	2 nd Rank
4	Ahutosh Bagadia	First Year	International	Quiz Competition held by DY Patil Rotract club Pune in 2017	2 nd Rank
5	Kaustubh Kolhe	First Year	National	Zeal College of Engineering and Research, Pune NIRMANN 2K17	1 st Prize
6	Avinash Mishra	First Year	National	Sardar Patel College of Engineering, Mumbai SPECTRA Mumbai 2017	2 nd runner up Robosumo
7	Chetan Sonawane	First Year	National	Sardar Patel College of Engineering, Mumbai NIRMAAN 2017	2 nd runner up Robosumo
8	Chetan Sonawane	First Year	National	Zeal College of Engineering and Research, Pune NIRMAAN 2017	1 st Robosumo
9	Avinash Mishra	First Year	National	Zeal College of Engineering and Research, Pune NIRMANN	1 st Robosumo

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				2K17	
10	Chetan Sonawane	First Year	National	Sardar Patel College of Engineering, Pune NIRMAAN 2017	2 nd Robosumo
2015-16					
11	Shantanu Naik	First Year	National	College of Engineering, Pune, Mindspark 2016	2 nd Prize in Robowars
12	Ameya Mande	First Year	National	Mahatma Gandhi Mission's College, Nanded Visiotech 2016	2 nd Robowar
13	Aniket Mahulikar	First Year	National	Mahatma Gandhi Mission's College, Nanded Visiotech 2016	2 nd Robowar
14	Ameya Mande	First Year	National	Shri Guru Gobind Singhji Institute of Engineering and Technology, Nanded- Praggya 2016	1 st Robosumo
15	Aniket Mahulikar	First Year	National	Shri Guru Gobind Singhji Institute of Engineering and Technology, Nanded- Praggya 2016	1 st Robosumo
2014-15					
16	Arpan Sharma	First Year	National	Vishwakarma Institute Of Information Technology (VIIT), Pune Perception 2014	4 th rank in Robowars
17	Anup Suklikar	First Year	National	Vishwakarma Institute Of Information Technology (VIIT), Pune Perception 2014	4 th rank in Robowars
18	Shreyas Abhyankar	First Year	National	Vishwakarma Institute Of Information Technology (VIIT), Pune Perception 2014	4 th rank in Robowars

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19	Rushi Yande	First Year	National	Vishwakarma Institute Of Information Technology (VIIT), Pune Perception 2014	4 th rank in Robowars
20	Arpan Sharma	First Year	National	Government College of Engineering, Aurangabad Wings2014	4 th rank in Robowars
21	Anup Suklikar	First Year	National	Government College of Engineering, Aurangabad Wings2014	4 th rank in Robowars
22	Shreyas Abhyankar	First Year	National	Government College of Engineering, Aurangabad Wings2014	4 th rank in Robowars
23	Rushi Yande	First Year	National	Government College of Engineering, Aurangabad Wings2014	4 th rank in Robowars

2013-14

24	Arpan Sharma	First Year	National	College of Engineering, Pune, Mindspark 2013	4 th rank in Robowars
25	Anup Suklikar	First Year	National	College of Engineering, Pune, Mindspark 2013	4 th rank in Robowars
26	Shreyas Abhyankar	First Year	National	College of Engineering, Pune, Mindspark 2013	4 th rank in Robowars
27	Rushi Yande	First Year	National	College of Engineering, Pune, Mindspark 2013	4 th rank in Robowars

24. List of eminent academicians and scientists / Visitors to the Department:

Sr. No.	Date	Title of Seminar	Name of Scientist/Academician /Speaker	Purpose
1	28/02/2017	Renewable Energy	Mr. Priyadarshan Sahastrabuddhe (COE, Renewable Energy Sources)	Science Day celebration

2	27/02/ 2016	Social Activity Awareness	Ms. Natasha Zareen (Founder of Civic Response Team)	Science Day celebration
3	27/02/2015	Social Activity-Balgram	Mr. Santosh Garje (Founder of Balgram)	Science Day celebration
4	27/02/2015	Environment Awareness	Dr. Vijay Diwan (Eminent Environmentalist)	Science Day celebration
5	28/02/2014	Innovation and Implementation of Scientific Ideas.	Dr. D. B. Shinde (Head, Chemical Technology, Dr. BAMU, Aurangabad)	Science Day celebration

25. Seminars/ Conferences/Workshops organized & the source of funding:

a) National:-

Sr. No.	Title of Workshop/ Seminar/ Conference	Duration	Source of Funding
1	FDP on Empowering in English Communication and Soft skill	11/01/2016-16/01/2016	Self Sponsored
2	FDP on Professional English Communication Skills	17/01/2015	Self Sponsored

b) International :- Nil

26. Student profile Programme /course wise:- NA

27. Diversity of Students:- NA

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.? :- NA

29. Student progression- NA

30. Details of Infrastructural facilities (Programme specific):

Sr. No.	Infrastructural facility	Details of Item	Number
1	Classrooms	with Basic Amenities	8

		with ICT facility	1
2	Laboratories	UG	3
3	Internet Facility for Staff and Students	Computers with Internet Facility	38

Details of Laboratories.

Sr No.	Name of Laboratory	Area (Sq. m)	Total cost of the Laboratory in Rs.
01	Engineering Physics Laboratory	101.112	2,57,524
02	Engineering Chemistry Laboratory	104.96	10,34,000
03	Language Laboratory	86.31	8,16,000
Total		292.382	21,07,524

- 31. Number of students receiving financial assistance from college, university, Government or other agencies-** Considered at each Department.
- 32. Details on student enrichment programmers (special lectures / workshops /Seminar) with external experts:-**

Sr. No.	Date	Details of External Exports	Topic
1	28/02/2017	Mr. Priyadarshan Sahastrabuddhe (COE, Renewable Energy Sources)	Renewable Energy on Science Day
2	27/02/ 2016	Ms. Natasha Zareen (Founder of Civic Response Team)	Social Activity Awareness on Science Day
3	27/02/2015	Mr. Santosh Garje (Founder of Balgram)	Social Activity- Balgram on Science Day
4	27/02/2015	Dr. Vijay Diwan (Eminent Environmentalist)	Environment Awareness on Science Day
5	28/02/2014	Dr. D. B. Shinde (Head, Chemical Technology,	Innovation and Implementation of Scientific

		<p>Dr. Babasaheb Ambedkar Marathwada University, Aurangabad)</p>	<p>Ideas. on Science Day</p>
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33. Teaching methods adopted to improve student learning

1. Power point presentations.
2. Industrial visits/ Field visits
3. NPTEL Videos
4. Tutorial classes
5. Practical classes
6. Use of GOLS in Language laboratory

34. Participation in Institutional Social Responsibility (ISR) and Extension activities-

Sr. No.	Type of Activity	Duration	Details of Activity
1	Blood donation program	2015-16	The camp is being organized to mark birthday celebration of our founder President Hon'ble Dr. Y A. Kawade and on the occasion of Shiv Jayanti
2	Blood donation program	2016-17	The camp is being organized to mark birthday celebration of our founder President Hon'ble Dr. Y A. Kawade and on the occasion of Shiv Jayanti

35. SWOC analysis of the department and Future plans:

Strengths

- 1) Highly qualified, experienced and dedicated faculty members
- 2) State of the art infrastructure and laboratories
- 3) Good number of publications by faculty members

Weaknesses

- 1) Lack of proficiency in English Language of students
- 2) Less number of research publications in the area of Mathematics

Opportunities

- 1) Exploring research in Basic Sciences

- 2) Consultancy services in Basic Sciences
- 3) Collaboration with Dr. Babasaheb Ambedkar Marathwada University, Aurangabad for Research & Development work.

Challenges

- 1) Developing communication skills among the students
- 2) Students with low merit at entry level of admission

Future Plans

- 1) Establishing research centre in Basic Sciences
- 2) Enabling the faculty members to offer consultancy services in their respective domains
- 3) Enabling Soft Skill Courses for students

Evaluative Report**Master of Business Administration**

- 1. Name of the department** : Master of Business Administration
- 2. Year of Establishment** : 2009
- 3. Names of Programmes / Courses offered (UG, PG, M. Phil., Ph.D., and Integrated Masters; Integrated Ph.D., etc.)** : PG – MBA
- 4. Names of Interdisciplinary courses and the departments/units involved:-**

Sr. No.	Year	Semester	Course Code	Course	Department
1	Second Year	III	MANB- 591	Emerging Trends in Information Technology	Computer Science and Engineering

5. Annual/ semester/choice based credit system (programme wise):

Choice Based Credit System

6. Participation of the department in the courses offered by other departments: Nil

7. Courses in collaboration with other universities, industries, foreign institutions etc.:
Nil

8. Details of course/programs discontinued (if any) with reasons:

PGDM: Low student enrollment.

9. Number of teaching posts:

Post	Sanctioned	Filled
Professor	01	01
Associate Professor	02	00
Assistant Professor	07	07

10. Faculty profile with name, qualification, designation, specialization:-

Sr. No.	Name of Staff	Qualification	Designation	Specialization	Experience (Years)	No. of Ph.D. Students Guided for the last 4 Years
1.	Mr. S. B. Vaidya	MMS	Professor	Operations	38	Nil
2.	Ms. M. V. Hiranya	M Phil	Assistant Professor	Finance	12	Nil
3.	Mr. Y. B. Khandre	MBA	Assistant Professor	Marketing	14	Nil
4.	Ms. D. H. Sharma	MBA	Assistant Professor	HR, Marketing	9	Nil
5.	Ms. L. G. Coates	MBA	Assistant Professor	Finance	18	Nil
6.	Mr. A. S. Bagade	MBA	Assistant Professor	HR and Marketing	28	Nil
7.	Ms. D. R. Biradar	MBA	Assistant Professor	IT and HR	7	Nil
8.	Ms. M. U. Tiwari	MBA	Assistant Professor	Finance	4	Nil
9.	Mr. J. K. Padalkar	MMS	Adjunct Faculty	Operations	54	Nil
10.	Mr. U. M. Dashrathi	MBA	Adjunct Faculty	Marketing	29	Nil
11.	Mr. B. M. Joshi	PGDM	Adjunct Faculty	Finance	29	Nil
12.	Mr. S. G. Sohoni	B.E.	Adjunct Faculty	Mechanical	32	Nil
13.	Mr. J. S. Aphale	M.E.	Adjunct Faculty	Production	44	Nil
14.	Mr. A. H. Goyal	MBA	Adjunct Faculty	General Management	50	Nil

11. List of senior visiting faculty:

Sr. No.	Visiting Faculty name	Designation and Institute/University/Organization Name
1	Dr. Nandkumar Rathi	Associate Professor, University Department of commerce, Dr. Babasaheb Ambedkar Marathwada Aurangabad.
2	Dr. Syed Azharuddin	Associate Professor, University Department of commerce, Dr. Babasaheb Ambedkar Marathwada Aurangabad.
3	Dr. Vidya Gawali	Principal, Ajantha Learning Hub School, Ajantha, District Aurangabad
4	Dr. Padmapani Bhagwan Sawai	Assistant Professor, Millennium Institute of Management , Aurangabad
5	Dr. Manjusha Kulkarni	Assistant professor, Foster Institute of Management, Aurangabad
6	Mr. Harshal Sharma	Assistant manager, Corporate ER, Endurance Technologies Pvt. Ltd. Aurangabad
7	Mr. Umesh Jadhav	Branch Manager , Geojit BNP Paribas Financial services ltd., Aurangabad

12. Percentage of lectures delivered and practical classes handled by temporary faculty: 20%

13. Student -Teacher Ratio (Programme wise): PG : 8.5:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Post Name	Available
Peon	01

15. Qualifications of teaching faculty with D.Sc. / D.Litt. / Ph.D. / M.Phil. / PG:

Sr. No.	Qualification	Total Faculty
1	M. Phil.	01
2	MBA	08
3	MMS	02
4	PGDM	01
5	M.E.	01
6	B.E./B. Tech.	03

16. Number of faculty with ongoing projects from (a) National and (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 and Patents by faculty:

a) Publications:

Sr. No.	Name of Faculty	Total number of publications	
		National	International
1	Ms. M. V. Hiranya	4	4
2	Mr. Y. B. Khandre	1	2
3	Ms. D. H .Sharma	6	7
4	Ms. L. G. Coates	2	1
5	Mr. A. S. Bagade	6	5
6	Ms. D. R .Biradar	2	2
7	Ms. M. U. Tiwari	3	--

- Number of papers published in peer reviewed journals (National / International) by faculty and students:** Nil
- Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.):** Nil
- Monographs:** Nil
- Chapter in Books:** Nil
- Books Edited:** Nil
- Books with ISBN/ISSN numbers with details of publishers:** Nil
- Citation Index: (Google Scholar)** Nil
 - SNIP:** Nil
 - SJR:** Nil
 - Impact factor range / average:** Nil
 - h-index range:** Nil
- b) Patents:** Nil

20. Areas of consultancy and income generated: Nil

21. Faculty as members in a) National committees b) International Committees c)

Editorial Boards

- a) National Committees:** Nil

b) International Committees: Nil

c) Editorial Boards: Nil

22. Student projects

a) Percentage of students who have done in-house projects including inter departmental/ programme: Nil

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/other agencies: 100%

- Details of Student projects sponsored by Industry/ company: Nil
- Number of students placed for projects in organizations outside the institution i. e. in Research laboratories/Industry/other agencies: Nil

23. Awards / Recognitions received by faculty and students

(a) University Rank: Nil

(b) List of technical paper presentation /Workshop events attended/ won by the students

Sr. No.	Title of the event	Name of Student	Award	Organization
1	Research Methodology workshop	1. Kavita Pardesi 2. Vaishali Bhalerao 3. Ashwini Deshmukh 4. Madhavi Patil 5. Vaishal Rokade 6. Jayant Sajgure 7. Kunal Bhaware 8. Mahesh Surase 9. Girish Mungikar 10. Kailash Gavande 11. Swapnil Bandale 12. Suraj Chavan 13. Ravindra Ghuge 14. Seema Fundse 15. Santosh Basnet 16. Ritesh Jaiswal 17. Sharda Rajput	Attended	Government Arts , Science and Commerce College of Aurangabad

(c) List of awards won in the inter institute/ institute technical events

Sr. No	Title of the event	Name of Student	Award	Organization
1	Tatva 2015	Aseem Madar	Winner	Department of Management Science , Dr. Babasaheb Ambedkar Marathwada University, Aurangabad
		Kavita Pardesi	Runner Up	
2	Tata Nano Twist Competition 2014	Ms. Ashwini Garad Mr. Chinmay Kulkarni Mr. Narendra Pandit (Team Leader) Mr. Devesh Darp Mr. Sahikant Mahamuni Mr. Prashant Koranne Shaikh Arshad Ms. Nikita Mahurkar Mr. Pradeep Dandge Mr. Somesh Shah Ms. Preeti Dixit Ms. Sonal Bhagwat	Winner	Tata Motors Limited, Aurangabad

(d) List of awards won in the inter institute sports events:

Sr. No.	Title of the event	Name of Student	Award	Organized by
1	Basketball tournament	Mr. Ravindra Ghuge	Winner	Wockhardt Ltd
2	Taekwondo- Inter College Tournament	Mr. Santosh Basnet	Gold Medal	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad

24. List of eminent academicians and scientists / Visitors to the Department:

Sr. No.	Date	Name of academicians / scientists	Purpose
1	26/11/2016	Mr. Rahul Deshpande Vice President Operations, Electromechanical Projects Group, Blue star ltd. Mumbai.	Interaction about the opportunities for MBA students and expectation from the students projects
2	02/08/2014	Ms.Nisha Subhash Assistant Vice President National Stock Exchange Mumbai	Interaction with the faculty members on the role and initiative of NSE for enhancing the career opportunities.
3	09/08/2014	Dr. W.K. Sarwade Head of Student Welfare, Dr B.A.M U. Aurangabad	Interaction with the students related to the new courses and opportunities provided by the university.
4	11/01/2013	Dr. Purushottam Rao Dean Management Science Osmaniya University.Hyderabad	The project development and insists on industry interface

25. Seminars/ Conferences/Workshops organized and the source of funding:-

National

Sr. No.	Title of Seminar/Conference	Seminar/Conference /Workshop	Duration	Source of Funding
1	Aptitude Skills and How to face interview	Workshop	4/02/2017	Self Sponsored
2	SWOT Analysis	Workshop	15/10/2015	Self Sponsored
3	Entrepreneurship and Business Planning	Workshop	6/10/2014	Self Sponsored
4	Emotional Intelligence	Workshop	7/09/2013	Self Sponsored

International: - Nil

26. Student profile programme/course wise:-

Name of the Course/programme	Applications Received	Selected	Enrolled		Pass percentage
			*M	*F	
2016-18	Centralized Admission Procedure through DTE	30	20	10	Appeared
2015-17		31	25	6	Appeared
2014-16		28	18	10	47.62
2013-15		31	23	8	42.30
2012-14		55	41	14	78.43

*M = Male *F = Female

27. Diversity of Students:

Year of Admission	Name of the course	% of students from the same state	% of students from other States	% of students from abroad
2015-16	Master of Business Administration	100	Nil	Nil
2014-15		96.4	3.57	Nil
2013-14		96.7	3.22	Nil
2012-13		94.5	5.45	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc.? Nil

29. Student progression

Student Progression %	Against % enrolled		
	2014-15	2013-14	2012-13
PG to M. Phil.	-	-	-
PG to Ph. D.	-	-	-
Ph. D. to Post-Doctoral	-	-	-
Employed	34.48%	32.26%	7.14%
- Campus Selection			
- Other than Campus	13.79%	2.58%	17.86%
Recruitment			
Entrepreneurship / Self-employment	0	0	0

30. Details of Infrastructural facilities (Programme specific):-

Sr. No.	Infrastructure Facility	Details of Items	Number
1	Departmental Library	Number of Titles	151
		Volumes of books	162
		Journals and Magazines	52
2	Classrooms with ICT	Multimedia Set up	3
3	Internet facility for staff and students	Computers	5
4	Tutorial Room		1

31. Number of students receiving financial assistance from college, university, Government or other agencies

Sr. No.	Details of Financial Assistance	Academic year/ No. of students			
		2016-17	2015-16	2014-15	2013-14
1	OBC Freeship , OBC-GOI	4	2	1	7
2	SC Freeship, SC-GOI	12	10	11	19
3	SBC Freeship, SBC-GOI	0	1	1	1
4	ST Freeship , ST-GOI	0	0	0	0
5	VJ/NT Freeship , VJ/NT-GOI	8	5	4	8

32. Details on student enrichment programmes (special lectures / workshops /Seminar) with external experts:-

a. Details on student enrichment programmes workshops with external experts:-

Sr. No.	Name of the Speaker	Topic	Date
1	Mr. Krunal Patel, Centre Director, T.I.M.E.,	Workshop on Aptitude Skills and How to face interview	04/02/2017
2	Mr. Ram Marlapalle , Executive Vice President- Strategic HR/IR & EHS –	SWOT Analysis	15/10/2015
3.	Mr. Amit Grover , Founder, Nuture Talent Academy	Workshop on Entrepreneurship and Business Planning	06/10/2014
4.	Mr. Swapnil Pandey, Infosys Ltd. Pune	Workshop on Emotional Intelligence	7/9/2013

b . Details on student enrichment programmes special lectures with external experts

Sr. No.	Date	Name of the Speaker	Topic
1	3/10/2015	Mr. S. M. Shuttari, Owner, Polychem Industries, MIDC Chikalthana	Steps to setup an Industry leading to Entrepreneurship.
2	12/9/2015	Mr. Roopesh Deoda, Network Marketing Distributor	Network Distribution
3	1/10/2014	Mr. Ram Bhogle, Director, Nirlep Appliances Ltd. Aurangabad	Challenges on Globalization
4	6/9/2014	Mr. Sumeet Bhangde, Certified Graphologist	Handwriting Skills
5	30/8/2014	Ms.Soniya Kagliwal. Director, Nath Bio-gene(I)Ltd., Aurangabad	Skill sets required by industry
8	27/08/2014	Mr. Rishi Darda, Joint Managing Director, Lokmat Group, Aurangabad	Opportunities for MBA Students in Media sector
6	02/08/2014	Ms.Nisha Subhash, Asst.Vice President, National Stock Exchange, Mumbai	The role and initiative of NSE for enhancing the career opportunities
7	18/03/2014	Mr. Ajay Kumar Tannu , President and CEO , OMR Bagla Automotive System India Ltd. Aurangabad	The skill sets required in the industry
9	15/03/2014	Mr. Nakul Bhoomkar , MIT Alumni doing research in water ways transport in Europe.	Opportunities available for students in Belgium
10	21/02/2014	Mr. A. D. Pole , Chief Controller, NIBL, Aurangabad	Time Management

11	14/2/2014	Mr. Prashant Vaishnav , Marketing Manager Rajuri Steel Pvt. Ltd. Jalna	Positive attitude and introspection to bring a significant change in our lives
12	31/01/2014	Mr. Rishi Kumar Bagla , Chairman and Managing Director, OMR Bagla Automotive System India Ltd. Aurangabad Group, Aurangabad	Personal and professional life
13	02/01/2014	Mr. Prashant Deshpande, Managing Director, Expert Net Cad Solution Pvt. Ltd. Aurangabad	Entrepreneurship
14	16/03/2013	Dr. Aparna Bhonde, Assistant Professor, Department of Commerce & Management. Science, Maulana Azad College of Arts, Science & Commerce, Aurangabad	Workshop financial planning
15	11/03/2013	Mr.Tushar Jagtap , Director, Institute of Success Nasik	The derivatives new financial product in India.
16	22/02/2013	Ms. Shivani Dani Business development Manager Money Bee Institute Pvt Ltd. Mumbai	The knowledge about the working of stock market in India
17	12/02/2013	Mr. Satya Ranjan DGM GTL Ltd. Aurangabad	The importance about emotional Intelligence in management decision making.
18	11/01/2013	Dr. Purushottam Rao , Dean management Sciences , Osmaniya University, Hyderabad.	The Project Development and insists on Industry Interface

- Various skill development programs are conducted in the department by the experts from Industries for the students to enhance their technical knowledge and personal development:

Sr. No.	Date	Name of the Speaker	Topic
1	14/09/2016	Mr.Kiran Kurwade – Director I win Foundation, Aurangabad	Employability Skills
2	3/10/2015	Mr. S.M Shuttari – Entrepreneur	Steps to setup an Industry leading to Entrepreneurship.
3	18/03/2014	Mr. Ajay Kumar Tannu , President and CEO , OMR Bagla Automotive System India Ltd.	The skill sets required in the industry
4	16/03/2013	Dr. Aparna Bhonde, Assistant Professor, Department of Commerce & Management. Science, Maulana Azad College of Arts, Science & Commerce, Aurangabad	Technical Session on Financial Planning
5	11/03/2013	Mr.Tushar Jagtap , Director, Institute of Success, Nashik	The derivatives new financial product in India.
6	22/02/2013	Ms. Shivani Dani Business development Manager Money Bee Institute Pvt. Ltd.	The knowledge about the working of stock market in India

33. Teaching methods adopted to improve student learning

The department has adopted the following participatory learning activities for promoting students centric learning, which contribute to self-management of knowledge development and skill formation.

1. Use of PowerPoint presentations and videos
2. Case Study Method/Role Play /Group discussion.
3. Educational tour and industrial visits organized by the institute for students to acquire practical knowledge.
4. Industry Expert /Guest Lectures/Adjunct Faculty lectures.
5. Department Library facility.

6. Encouragement to group study.
7. Showing management movies and asking to present the learning.
8. Campus to corporate Activities
9. Online courses Like NPTEL

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Sr. No.	Type of activity	Duration	Details of activity	Participants
1	Visit to Bhagwanbaba Balakashram, Kannad (2016)	1 Day	The students and teachers of MBA Dept. donated various daily need items and sports equipments to the orphans on this occasion. Mrs. Kavita Wagh, Secretary of the Orphanage shared information about the activities of the orphanage.	Students and faculty
2	Awareness about Investment Avenues among the Villagers (2013)	1 Day	Visit to Adgaon Village- <ul style="list-style-type: none"> ➤ The team of the students visited the Adgaon village 10Km from MIT ➤ Conducted the awareness program for the villagers on different investment avenues ➤ Organized the skit on the importance on investment in life ➤ Students had conducted the different game for the villagers ➤ The event was very special experience 	Students and faculty
3	Visit to Remand home (2013)	1 Day	<ul style="list-style-type: none"> ➤ The team of the students visited the Remand Home, N-3, CIDCO. ➤ Organized the skit, games for remand home children. ➤ Students interacted with in-charge of the remand home. ➤ The visit was eye-opener for the students 	Students and faculty

4	Visit to Matoshri Old Age Home (2013)	1 Day	<ul style="list-style-type: none"> ➤ The team of the students visited the Matoshri Old age Home ➤ Organized different activities for senior citizens ➤ Sponsored the lunch for them and gifts ➤ After this event the students felt the satisfaction by giving charity 	Students and faculty
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35. SWOC analysis of the department and Future plans

Strengths

1. Qualified faculty with diversified background in terms of qualification, work experience in teaching and Industry.
2. Activity based teaching learning.
3. Exposure to academic and industry experts to students for effective learning.
4. Good overall development of students through departmental campus to corporate activity.

Weaknesses

1. Participation in national-International Conferences and Faculty Development Programs and Management Development Programs.
2. Lack of faculty members with Ph.D. qualification.

Opportunities

1. MOUs and Collaboration with Industry –Institution for faculty exchange and research projects for students and Faculty members.
2. Enabling the faculty and students for offering Consultancy services to industries.
3. Due to presence of good number of industries ample projects and placement opportunities are available.

Challenges

1. To improve the communicative skills and leadership qualities, amongst the students.
2. Bridging the gap between management education and the ever changing and dynamic requirement of the corporate world.

Future plans

1. To have MoUs with industries and other reputed institutes in order to generate opportunities for better learning and research.
2. To increase the number of faculty with Ph.D.
3. To organize Management Development Programs /Faculty Development Program/ National/International Level conferences.
4. To motivate faculty members for good research publications.



G.S. Mandal's
MAHARASHTRA INSTITUTE OF TECHNOLOGY
AURANGABAD

(Formerly Known as College of Applied Science)
Approved by All India Council for Technical Education (AICTE), New Delhi
Affiliated to Dr. Babasaheb Ambedkar Marathwada University, Aurangabad

Ref. No.: MIT/B.Tech./SSR/2017/434

Date:- 30/03/2017

Declaration by the Head of the Institution

I certify that the data included in this Self-Study Report (SSR) is 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.

Date – 30/03/2017
Place – Aurangabad


(Dr. Santosh P. Bhosle)

PRINCIPAL

PRINCIPAL
MAHARASHTRA INSTITUTE
OF TECHNOLOGY
AURANGABAD.





G.S. Mandal's

MAHARASHTRA INSTITUTE OF TECHNOLOGY AURANGABAD

(Formerly Known as College of Applied Science)

Approved by All India Council for Technical Education (AICTE), New Delhi
Affiliated to Dr. Babasaheb Ambedkar Marathwada University, Aurangabad

Ref. No.: MIT/B.Tech./CoC/2017/436

Date:- 30/03/2017

Certificate of Compliance

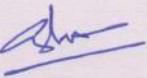
This is to certify that Gramaudyogik Shikshan Mandal's Maharashtra Institute of Technology, Aurangabad, Maharashtra, fulfills all norms –

1. Stipulated by affiliating university and
2. Regulatory Council such as AICTE and
3. The affiliation and recognition is valid as on date.

It is noted that NAAC accreditation, if granted, shall stand canceled automatically, once the institution loses its university affiliation or recognition by the regulatory Council, as the case may be.

In case the undertaking submitted by Gramaudyogik Shikshan Mandal's Maharashtra Institute of Technology, Aurangabad, Maharashtra, 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: 30/03/2017
Place: Aurangabad


(Dr. Santosh P. Bhosle)

Principal

PRINCIPAL
MAHARASHTRA INSTITUTE
OF TECHNOLOGY
AURANGABAD.



अर्ज़ा... 1022 अस्थि
 अर्जदाराचे नांव... गायडे
 नकलेवा अर्ज आला तो दि
 नकल तयार दि...
 नकल विली तो दि...
 संपत्ती... 16 दि



अर्जी नकल स्थगन प्रमाणित

अधिकारक
 सार्वजनिक व्यास नोंदणी कार्यालय
 औरंगाबाद विभाग, औरंगाबाद

संख्या 15
 ऑ.- (वाय) २०३-२१५ पुस्तके-९-६७-एल३ ए३
 G. M., L. D., Nos. 10376, dated 30-6-1951.
 10031-C. 22-9-1952.

रोजी मिळाले

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३०२५

No 19944



नोंदणीचे प्रमाणपत्र

सार्वजनिक विश्वस्त व्यवस्थेचे नाव आमीघोषीक द्विष्ठान
 मठ्ठ, वेंजापूर, जिं. औरंगाबाद
 नोंदणी क्रमांक १५ - ४२८ (झोरंगाबाद)
 कोणाला दिले श्री शानदराव मिश्र तशव देहमुख
 श्री रेटिंगीव सेक्षांग, ताठ वेंजापूर जिं. औरंगाबाद.

दिनांक १३/३/१९६८.

मुद्रा १००० रुपयां प्रमाणपत्र देणार
 दिनांक १३/३/१९६८.

प्रमाण पत्र

प्रमाण पत्र

प्रमाण पत्र

अर्जका... १०.३२ क अम्बल
 अर्जदारचे नांव लक्ष्मी
 नवकलेघा अर्ज आला तो दि ४/३/१९७५
 नवकल तयार दि
 नवकल दिली तो दि
 रुपये. १५.१. दि शेजी मिळाले

अतीसुलभनावाइसेन्ट्रल

G.P.A.—(Y) 218—85 Bks.—I—68—ALA4

No 3770

CERTIFICATE OF REGISTRATION

The Societies Registration Act, 1860.

Registration No. ओजीडी-२१०६

Office: Assistant Registrar of Societies,

आरंगाबाद Region.

Name of Society: ग्रामो धौगिक शिक्षण

मंडळ, वैजापुर ता. वैजापुर जि. आरंगाबाद

To whom issued: श्री आनंदराव भगवंतराव देशमुख

श. कोठगोव जि. आरंगाबाद

Date: २५/११/७६

R/RK

Assistant Registrar of

ग्रामी नवकल मण्डळ मन्त्रालय

अधिकारक

सार्वजनिक स्थास नोंदवी वार्तालय
आरंगाबाद विभाग, औरंगाबाद

वर्ष १९७६
वर्ष १९७७
वर्ष १९७८

वर्ष १९७९

1/2

GRAMAUDYOGIK SHIKSHAN MANDAL AURANGABAD.

Reg. No. F. 429 (A'bad)

FOUNDER
ANANDRAOJI DESHMUKH
Freedom Fighter



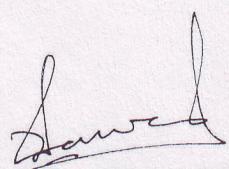
P. B. No. 327,
AURANGABAD - 431 005.

Ref. No. G.S.M./ACTE/2K/391

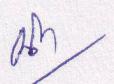
Date : 18/12/2000

Resolution of the Executive Committee meeting of the G.S. Mandal Aurangabad
held on 2nd Dec. 2000.

It has been decided to earmark exclusively the area shown in yellow shaded portion and measuring 10.209 acres i.e., 41,331.28 Sq.m. of Gut No. 72 (as shown in the enclosed site plan of this Trust) owned by this Trust for the proposed Govt. aided Technical Institute. This is as per the resolution passed in the Executive Committee meeting held on 2nd Dec. 2000. Building construction activities for the proposed Institute shall be undertaken on this area in due course of time.

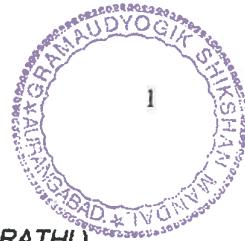

(Prof. Y.A. KAWADE)

General Secretary


PRINCIPAL
MAHARASHTRA INSTITUTE
OF TECHNOLOGY
AURANGABAD

Moted and Registered
at Serial Number

5206 of 201



SALE DEED
(TRANSLATED ENGLISH VERSION OF THE ORIGINAL SALE DEED IN MARATHI)

REGISTRY Serial No. 4942

The value of agricultural land in the location: Satara lying in Aurangabad Corporation area as per sale deed is Rs. 49,000/- as on date 05/11/1980.

Purchaser :-On behalf of **GRAMAUDYOGIK SHIKSHAN MANDAL, AURANGABAD**, Shri. Satish Balbhimrao Deshmukh, Age :- 35 years; Occupation : - Service, Residence :- Begumpura, Aurangabad.

Seller : - Digamber Rangnath Patankar, Age:- 72 years, Occupation:- Service, Residence: - Aurangabad, on account of sale deed hereby declare that all the agricultural land owned and possessed by me in the boundary of Satara Gut No. 72 in total area is 17 hectares 99 R. A. Rs. 18=77. Out of this 2 hect. 83 R.(7A) of land whose boundaries are towards East – S. No. 47; West – From the same Gut No. a part sold to Kapilavastu Institute; South – S. No. 51 and North – the remaining part of land in the same Gut No., still in my possession. Accordingly, the land within the said boundaries has been never pledged, mortgaged or sold and doesn't have Govt. or private obligations. So, such non-objectionable land, I hereby sell to the above mentioned Institute permanently at the present value of Rs. 49,000/- (Rs. Forty Nine Thousand only) and give the possession of the same with all the ownership rights and items. Henceforth, in your ownership period if any of my brothers, kin, heirs, etc. or anyone else tries to pose any problem, I solely take the responsibility of the same. Accordingly, an amount of Rs. 49,000/- (Rs. Forty Nine Thousand only) has been received by me on the date 12/04/1979. So I have no complaints of the deposit amount. On agreement by both the parties on 12/04/79 the said token receipt & the sale agreement stand cancelled and the amount given on this date is for the sale deed. So, henceforth there is no disagreement between us. The sold land has already been given in possession of the Institute. You have no ownership right on my remaining land, so I have no objection on getting the measurements and fixing the boundaries of the purchased land as per the Government regulations. The purchaser is an Institute & hence the above said land has been sold to them. It is not necessary to take any permission for sale of above said land as per the Maharashtra State Government's amended law of 1977 under section 31(B). I have sold this above said land with full consciousness to the Institute on 05/11/1980.

Sd/-
Seller

अध्यक्ष

ग्रामोद्योगिक शिक्षण मंडळ,
औरंगाबाद.

TRUE TRANSLATION CERTIFIED



TRUE TRANSLATION FROM..... Marathi TO English
OF..... Sale deed . Pages Five Dated... 5/11/1980
CERTIFIED NO. 4942

S. Deora
17/12/2001

NOTARY
GOVT. OF MAHARASHTRA
AURANGABAD (DIST.)

SAMPATRAJ P. DEORA
ADVOCATE, NOTARY
AURANGABAD (DIST.)



Dated and Registered
at Serial Number
5208 of 2001



SALE DEED
(TRANSLATED ENGLISH VERSION OF THE ORIGINAL SALE DEED IN MARATHI)

REGISTRY Serial No. 2070

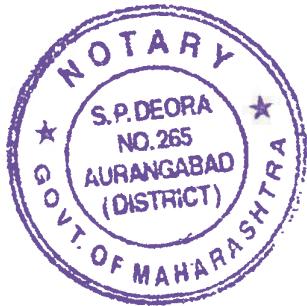
The value of agricultural land in the location: Satara lying in Aurangabad Corporation area as per sale deed is Rs. 20,000/- as on date 20/04/1982.

Purchaser :-On behalf of **GRAMAUDYOGIK SHIKSHAN MANDAL, AURANGABAD**, Shri. Satish Balbhimrao Deshmukh, Age :- 36 years; occupation : - Service, Residence :- Jaisingpura, Aurangabad.

Seller : - Shivlal Kakkul Patel, Age:- 71 years, Occupation:- Farmer, Residence: - Gulmadi, Aurangabad, on account of sale deed hereby declare that the agricultural land in the boundary of Satara Gut No. 72 in total area is 17 hectares 99 R. A. Rs. 18=77. As per decisions of the Civil Court in Case No 28/1971; 4 hect. 19 R of land is owned by me and is under my possession. Out of this 0 hect. 81 R of land whose boundaries are towards East – Land purchased by the Trust earlier; West – S.No. owned by Mohd. Ibrahim; South – S. No. 49 and North – S. No. 44. Accordingly, the land within the said boundaries has been never pledged, mortgaged or sold and doesn't have Govt. or private obligations. So, such non-objectionable land, I hereby sell to the above mentioned Institute permanently at the present value of Rs. 20,000/- (Rs. Twenty Thousand only) and give the possession of the same with all the ownership rights and items. Henceforth, in your ownership period if any of my brothers, kin, heirs, etc. or anyone else tries to pose any problem, I solely take the responsibility of the same. Accordingly, an amount of Rs. Rs. 20,000/- (Rs. Twenty Thousand only) has been received by me. So I have no complaints of the deposit amount. So, henceforth there is no disagreement between us. The sold land has already been given in possession of the Institute. The purchaser is an Institute & hence the above said land has been sold to them. I have sold this above said land with full consciousness to the Institute on 20/04/1982.

Sd/-
Seller

अध्यक्ष
ग्रामोद्योगिक शिक्षण मंडळ,
औरंगाबाद.



TRUE TRANSLATION CERTIFIED

TRUE TRANSLATION FROM... Marathi English
OF... Sole Deed Pages Dated 20/4/1982
CERTIFIED No. 2070

Sampatraj P. Deora
(Signature)

NOTARY
GOVT. OF MAHARASHTRA
AURANGABAD (DIST.)

SAMPATRAJ P. DEORA
ADVOCATE, NOTARY
AURANGABAD (DIST.)



52099 20/1



4

SALE DEED
(TRANSLATED ENGLISH VERSION OF THE ORIGINAL SALE DEED IN MARATHI)

REGISTRY Serial No. 440

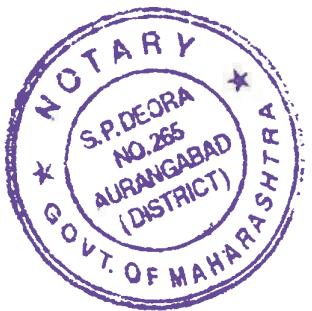
The value of agricultural land in the location: Satara lying in Aurangabad Corporation area as per sale deed is Rs. 30,000/- as on date 14/01/1987.

Purchaser :-On behalf of GRAMAUDYOGIK SHIKSHAN MANDAL, AURANGABAD, President Shri. Anandrao Bhagwantrao Deshmukh, Age :- 73 years; occupation : - Farmer, Residence :- Khokadpura, Aurangabad.

Seller : - 1)Dr. Chandradev Bhagwantrao Kawade, Age:- 50 years, Occupation:- Farmer, Residence: - Gulmadi, Aurangabad, 2)Smt. Mandakini Nilkanthrao Daspute, Age: 35 Years, Occupation: Housewife, on account of sale deed hereby declare that all the agricultural land owned and possessed by us in the boundary of Satara Gut No. 72 in total area is 17 hectares 99 R. A. Rs. 18=77. Out of this 1 hect. 55 R of land whose boundaries are towards East – Land owned by Shri Satish Balbhimrao Deshmukh in Gut No. 72; West – Land owned by Gramaudyogik Shikshan Mandal in Gut No. 72; South – Land owned by Gramaudyogik Shikshan Mandal in Gut No. 72 and North – Land owned by Shri Digamber Ranganath Patankar in Gut No. 72, still in my possession. Accordingly, the land within the said boundaries has been never pledged, mortgaged or sold and doesn't have Govt. or private obligations. So, such non-objectionable land, we hereby sell to the above mentioned Institute permanently at the present value of Rs. 30,000/- (Rs. Thirty Thousand only) and give the possession of the same with all the ownership rights and items. Henceforth, in your ownership period if any of our brothers, kin, heirs, etc. or anyone else tries to pose any problem, we solely take the responsibility of the same. Accordingly, an amount of Rs. 30,000/- (Rs. Thirty Thousand only) has been received by us on the date 14/01/1987. So, henceforth there is no disagreement between us. The sold land has already been given in possession of the Institute. The purchaser is an Institute & hence the above said land has been sold to them. We have sold this above said land with full consciousness to the Institute on 14/01/1987.

Sd/-
Sellers

अध्यक्ष
ग्रामोद्योगिक शिक्षण मंडळ,
औरंगाबाद.



TRUE TRANSLATION CERTIFIED

TRUE TRANSLATION FROM Marathi TO English
OF... Sale Deed Pages Four Dated 16/11/1987
CERTIFIED NO. 440

S.P. Deora
17/12/2006

NOTARY
GOVT. OF MAHARASHTRA
AURANGABAD (DIST.)
SAMPATRAJ P. DEORA
ADVOCATE, NOTARY
AURANGABAD (DIST.)

Filed and Registered
at Serial Number

5210 of 201



SALE DEED

(TRANSLATED ENGLISH VERSION OF THE ORIGINAL SALE DEED IN MARATHI)

REGISTRY Serial No. 1210

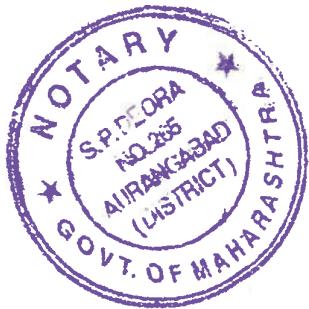
The value of agricultural land in the location: Satara lying in Aurangabad Corporation area as per sale deed is Rs. 20,000/- as on date 06/02/1987.

Purchaser :- On behalf of GRAMAUDYOGIK SHIKSHAN MANDAL, AURANGABAD, Shri. Moreshwar Dinanath Save, Age :- 57 years; Occupation : - Agriculture & Business, Residence :- Near Anjali Talkies, Aurangabad.

Seller : - Prabhakar Ranganathrao Bhalerao, Age:- 36 years, on behalf of Nirlep Employees Cooperative Housing Society, Occupation:- Farmer, Residence: - M.I.D.C. Colony, Station Road, Aurangabad, on account of sale deed hereby declare that all the agricultural land owned and possessed by me as per Sale Deed No. 5208 dated 28-11-1980 in the boundary of Satara Gut No. 72 in total area is 17 hectares 99 R. A. Rs. 18=77. Out of this 0 hect. 81 R. of land whose boundaries are towards East - The road leading to Satara village; West - S. No.33; South - Remaining part of the same Gut No. and North - Land owned by Shri Shivlal Kakku, still in my possession. Accordingly, the land within the said boundaries has been never pledged, mortgaged or sold and doesn't have Govt. or private obligations. So, such non-objectionable land, I hereby sell to the above mentioned Institute permanently at the present value of Rs. 20,000/- (Rs. Twenty Thousand only) and give the possession of the same with all the ownership rights and items. Henceforth, in your ownership period if any of my brothers, kin, heirs, etc. or anyone else tries to pose any problem, I solely take the responsibility of the same. Accordingly, an amount of Rs. 20,000/- (Rs. Twenty Thousand only) has been received by me on the date. So I have no complaints of the deposit amount. So, henceforth there is no disagreement between us. The sold land has already been given in possession of the Institute. The purchaser is an Institute & hence the above said land has been sold to them. I have sold this above said land with full consciousness to the Institute on 06/02/1987.

Sd/-
Seller

ग्रामोद्योगिक शिक्षण मंडळ,
औरंगाबाद.



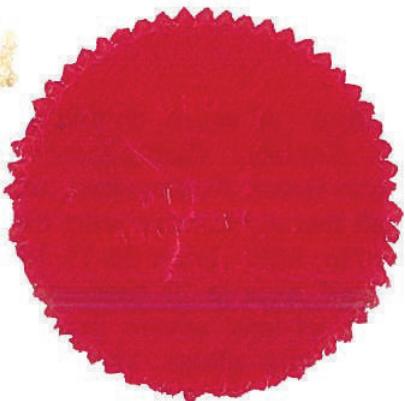
TRUE TRANSLATION CERTIFIED

TRUE TRANSLATION FROM TO
OF Sale Deed Pages Three Dated 16/2/1987
CERTIFIED NO. 1250.

Marathi English

S.P.D. 17/12/2001

NOTARY
GOVT. OF MAHARASHTRA
AURANGABAD (DIST.)
SAMPATRAJ P. DEORA
ADVOCATE, NOTARY
AURANGABAD (DIST.)



Cited and Registered
at Serial Number

5211 of 2001



SALE DEED

(TRANSLATED ENGLISH VERSION OF THE ORIGINAL SALE DEED IN MARATHI)

REGISTRY Serial No. 3225

The value of agricultural land in the location: Satara lying in Aurangabad Corporation area as per sale deed is Rs. 15,000/- as on date 22/03/1988.

Purchaser :-On behalf of GRAMAUDYOGIK SHIKSHAN MANDAL, AURANGABAD, President Shri. Anandrao Bhawantrao Deshmukh, Age :- 74 years; occupation : - Agriculture, Residence :- Jaisingpura, Aurangabad.

Seller : - Satish Balbhimrao Deshmukh, Age:- 50 years, Occupation:- Farmer, Residence: - Aurangabad, on account of sale deed hereby declare that all the agricultural land owned and possessed by me in the boundary of Satara Gut No. 72 in total area is 17 hectares 99 R. A. Rs. 18=77. Out of this 0 hect. 77 R of land whose boundaries are towards East, West and South – Land owned by the Trust earlier and North – Land owned by Shri Digamber Ranganath Patankar in Gut No. 72, still in my possession. Accordingly, the land within the said boundaries has been never pledged, mortgaged or sold and doesn't have Govt. or private obligations. So, such non-objectionable land, I hereby sell to the above mentioned Institute permanently at the present value of Rs. 15,000/- (Rs. Fifteen Thousand only) and give the possession of the same with all the ownership rights and items. Henceforth, in your ownership period if any of my brothers, kin, heirs, etc. or anyone else tries to pose any problem, I solely take the responsibility of the same. Accordingly, an amount of Rs. 15,000/- (Rs. Fifteen Thousand only) has been received by me on this date. So I have no complaints of the deposit amount. So, henceforth there is no disagreement between us. The sold land has already been given in possession of the Institute. The purchaser is an Institute & hence the above said land has been sold to them. I have sold this above said land with full consciousness to the Institute on 12/03/1988.

Sd/-
Seller

अध्यक्ष
ग्रामोद्योगिक शिक्षण मंडळ,
औरंगाबाद.



TRUE TRANSLATION CERTIFIED

TRUE TRANSLATION FROM TO
OF Sale Deed .. Pages .. Face Dated ... 28/3/1988
CERTIFIED No 3225

S.P.D. 17/12/2001

NOTARY
GOVT. OF MAHARASHTRA
AURANGABAD (DIST.)
SAMPATRAJ P. DEORA
ADOVcate, NOTARY
AURANGABAD (DIST.)

5207 9/201



SALE DEED

(TRANSLATED ENGLISH VERSION OF THE ORIGINAL SALE DEED IN MARATHI)

REGISTRY Serial No. 4201

The value of agricultural land in the location: Satara lying in Aurangabad Corporation area as per sale deed is Rs. 50,000/- as on date 13/08/1981.

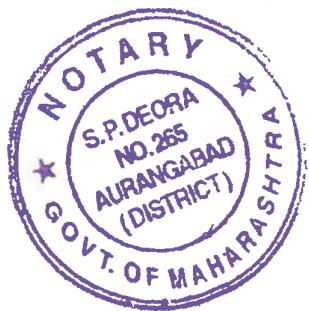
Purchaser :- On behalf of GRAMAUDYOGIK SHIKSHAN MANDAL, AURANGABAD, Shri. Satish Balbhimrao Deshmukh, Age :- 35 years; occupation : - Service, Residence :- Jaisingpura, Aurangabad.

Seller : - Shivlal Kakkulal Patel, Age:- 70 years, Occupation:- Farmer, Residence: - Gulmadi, Aurangabad, on account of sale deed hereby declare that the agricultural land in the boundary of Satara Gut No. 72 in total area is 17 hectares 99 R. A. Rs. 18=77. As per decisions of the Civil Court in Case No 28/1971; 4 hect. 19 R of land is owned by me and is under my possession. Out of this land, 3 hect. 28 R whose boundaries are towards East – land purchased by this Trust earlier; West – From the same Gut No. remaining land of 2 acres owned by me; South – S. No. 49 and North – S. No. 49. Accordingly, the land within the said boundaries has been never pledged, mortgaged or sold and doesn't have Govt. or private obligations. So, such non-objectionable land, I hereby sell to the above mentioned Institute permanently at the present value of Rs. 50,000/- (Rs. Fifty Thousand only) and give the possession of the same with all the ownership rights and items. Henceforth, in your ownership period if any of my brothers, kin, heirs, etc. or anyone else tries to pose any problem, I solely take the responsibility of the same. Accordingly, an amount of Rs.25,000/- (Rs. Twenty Five Thousand only) has been received by me at the time of sale agreement and the balance amount of of Rs.25,000/- (Rs. Twenty Five Thousand only) has been received by me today. So, henceforth there is no disagreement between us. The sold land has already been given in possession of the Institute for Rs. 50,000/- (Rs. Fifty Thousand only). The purchaser is an Institute & hence the above said land has been sold to them. It is not necessary to take any permission for sale of above said land as per the Maharashtra State Government's amended law of 1977 under section 31(B). I have sold this above said land with full consciousness to the Institute on 13/08/1981.

अध्यक्ष

ग्रामोद्योगिक शिक्षण मंडळ,
औरंगाबाद.

Sd/-
Seller

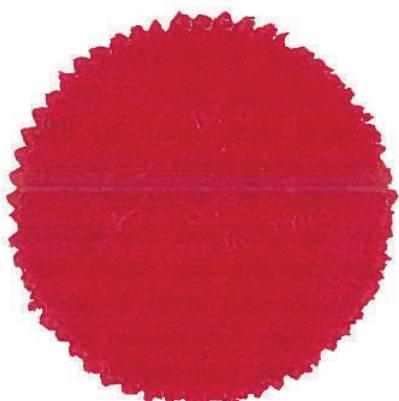


TRUE TRANSLATION CERTIFIED

TRUE TRANSLATION FROM..... TO.....
OF.... Sale Deed Pages Four Dated 13/8/1981
CERTIFIED NO. 4201

S.P.D.
17/12/2001

NOTARY
GOVT. OF MAHARASHTRA
AURANGABAD (DIST.)
SAMPATRAJ P. DEORA
ADVOCATE, NOTARY
AURANGABAD (DIST.)



ग्राम-१८। जम्मा। ७। अकृष्ण। काशी।
लुम्बिनी। हम तंत्रज्ञान औरंगाबाद
दिनांक:- १५.१२.१८

क्रमि,

सरायेराणी स

ग्रामेयोगिकृ-शिक्षण मंडळ-सांतारा
ता. सि. औरंगाबाद

विषय:- अकृष्ण द्वारा भागि बबन्-

ज.नं ७२ भौ. सातारा द्वेत इहे=१८ आर.

संदर्भ:- आपडे प.कु. / ग्रा.सि.मै. अकृष्ण। १८। १८८८ दि. १९२-८।

मालेती

वरीक रेंदर्भिक पत्रकाव्ये आपणास कठोरीच ताचेते

कि डे. जि. ला. घेठारी औरंगाबाद मांनी ट्यांचे प.कु. आर बी

डेर्क-२। जम्मीन। ७। दिनांक १५.५.१९८८ चे. जे पतड या

काचारासे उद्देश्य दिलीहे असुन त्याची प्रत आपणास

काचारी डाहे त्यावरून आपण झौ. सातारा ज.नं. ७२

द्वेत इहे=१८ आर येपडी जभीक शोधाणिक प्रयोजनासाठी

वापर होत आहे त्यामुके गवारावू जभीक भास्युन अस्थिरिना

१९८८ ते कुलमा १९८८(३) नुसार आपण वापर करीत

असाहेही खंभीक भास अकृष्ण द्वारा प्राप्त आहे. कुरीता

मालेती-त१ सादर.

Noted and Registered
at Serial No..... 3376/2m

तहसिलदार औरंगाबाद

TRUE COPY

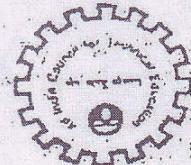


6/11/2m

P. U. KALUSEPATIL
NOTARY GOVT. OF MAHARASHTRA
AURANGABAD

P. U. KALUSEPATIL
ADVOCATE, NOTARY,
N-3, PLOT NO. 41
SIDCO, AURANGABAD





अखिल भारतीय तकनीकी शिक्षा परिषद्
ALL INDIA COUNCIL FOR TECHNICAL EDUCATION
(भारत सरकार का एक सामिनियक संस्थान) (A STATUTORY BODY OF THE GOVERNMENT OF INDIA)

F.No.: 740-89-029 (NDEG)/ET/2000

Date : 13.07.2001

To:

The Secretary
Higher & Technical Education
& Employment Department
Mantralaya, Mumbai - 400 032

Sub: AICTE approval to GRAMAUHYOGIK SHIKSHAN MANDAL, P.B. - 327, AURANGABAD - 431 005, for establishment of MAHARASHTRA INSTITUTE OF TECHNOLOGY, P.B. - 327, AURANGABAD - 431 005.

Sir,

I am directed to state that based on the consultations with the concerned State Govt., the concerned affiliating body and on recommendations of the Regional Committee, the Expert Committee constituted by the Council and as per the provisions of AICTE Act and Regulations, the All India Council for Technical Education (AICTE), is pleased to accord approval to GRAMAUHYOGIK SHIKSHAN MANDAL, P.B. - 327, AURANGABAD - 431 005 for establishment of MAHARASHTRA INSTITUTE OF TECHNOLOGY, P.B. - 327, AURANGABAD - 431 005 for the academic year 2001-02, for course(s) and intake as given below with specific condition that admission shall be made through the Central Counseling by the Government of MAHARASHTRA only. This approval is valid only for the academic years 2001-2002 and cannot be extended for the next year 2002-2003. In the event the establishment of the institutions having not been operationalised, this approval is not valid unless AICTE specifically revalidates.

COURSE(S)	INTAKE	LEVEL	DURATION (YEARS)	PERIOD OF APPROVAL
CIVIL ENGINEERING	30.	Degree	4	2001-02
MECHANICAL ENGINEERING	60.	Degree	4	2001-02
PRODUCTION ENGINEERING	30.	Degree	4	2001-02
AGRICULTURAL ENGINEERING	30.	Degree	4	2001-02
ELECTRONICS & COMMUNICATION ENGG.	60.	Degree	4	2001-02
INSTRUMENTATION & CONTROL ENGG.	30.	Degree	4	2001-02
COMPUTER SCIENCE & ENGG.	60.	Degree	4	2001-02
PLASTIC & POLYMER ENGINEERING	60.	Degree	4	2001-02

This approval has been accorded subject to fulfillment of general conditions and as per the Norms and standards of the AICTE, and also specific conditions (if any, given).

The attention of the management is drawn to the fact that the approval given now is only for one academic session before the end of which an expert committee shall visit to assess if the norms and standards as stipulated by AICTE are fulfilled, and only then will the continuation or otherwise shall be intimated.

The admission will be made in accordance with Regulations notified by the AICTE vide GSR 476(E) dated 20.05.1994 based on the Hon'ble Supreme Court Judgement dated 04.02.1993 with regard to WP(C) No. 607 of 1992 in the case of Lingi Krishnan JP and other etc. V/s. State Government of Andhra Pradesh and others etc. and later judgements. No Management/Institute/Trust or Society shall announce admissions directly under any circumstances. Any action by the institute contrary to any provisions laid down by the Council and concerned State Government shall make it liable for actions.

- Ltr accd.
Contd 2...

Y/2

F.NO.740-29-029(NDEG)/ET/2000

- 2 -

In the event of infringement/contravention or non-compliance of the provisions of AICTE Regulations, Guidelines or the norms and standards as prescribed by the AICTE, the Council shall take further action to withdraw approval, and the liability arising out of such withdrawal of approval will be solely that of Management/Trust/Society and/or Institution.

The Council may inspect/visit the Institution any time it may deem fit to verify the progress/compliance.

You are requested to kindly monitor the progress made by this institution towards fulfilling the norms and standards prescribed by the Council and keep the concerned Regional Office and AICTE, New Delhi informed.

Yours faithfully,

R.S. Grand
(Prof. R.S. Grand)

Copy to :

1. The Regional Officer, WRO, AICTE, 2nd Floor, Industrial Assurance Building, Opp.: Churchgate Railway Station, Veer Nariman Road, Mumbai - 400 020, Maharashtra

He is requested to monitor compliance with the Norms and Standards and conditions stipulated by the Council and keep the concerned Regional Committee and the AICTE informed of the same.

He is also requested to ensure the receipt of notarised undertaking as specified by the Council from the institution/management concerned within the stipulate time frame.

2. The Director of Technical Education, Govt. of Maharashtra, Mumbai - 400 001

3. The Registrar, DR BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY

He is requested to complete the process of affiliation for facilitating admissions.

4. The Principal, MAHARASHTRA INSTITUTE OF TECHNOLOGY, P.B. - 327, AURANGABAD - 431 005.

(i) The institution should submit a notarised undertaking on non-judicial stamp paper as per format given in Annexure I to the concerned Regional Office, AICTE with a copy to the Headquarters, AICTE, New Delhi within one month from the date of receipt of this approval letter.

(ii) The institution/management should also submit a notarised undertaking from the Governing Body to the concerned Regional Office, AICTE with a copy to Headquarters, AICTE, New Delhi and to the concerned State Government, that all the infrastructural and instructional facilities shall be in place as per the norms of AICTE prior to the admissions of any student for the academic year 2001-2002.

5. Guard File

[Signature]

2/3

F.NO.: 740-89-029(NDEG)/ET/2000

SPECIFIC CONDITIONS:

1. NECESSARY CONSTRUCTION, PROCUREMENT AND INSTALLATION OF EQUIPMENT AND FURNITURES SHALL BE DONE LATEST BY 15 JULY, 2001.
2. QUALIFIED FACULTIES SHALL BE ENGAGED AS PER AICTE NORMS AND DETAILS, THEREOF, BE SUBMITTED BY 31ST AUGUST, 2001.
3. STATUTORY PROVISIONS OF P.F. ETC TO BE FOLLOWED AND DETAILS, THEREOF, BE SUBMITTED BY 31ST AUGUST, 2001.
4. PAY SCALES AS PER 5TH PAY COMMISSION ALONG WITH USUAL STATE GOVT. D.A. BE FOLLOWED AND PROOF IN THIS REGARD BE SUBMITTED BY 31ST AUGUST, 2001.
5. DETAILED PLAN IN RESPECT OF INFRASTRUCTURE DEVELOPMENT TO MEET THE FULL REQUIREMENT OF INFRASTRUCTURES, AS PER AICTE NORMS OVER A PERIOD OF 3 YEARS BE SUBMITTED BY 31ST AUGUST, 2001.

B. Preeshal
ADVISER (E&T)



F.No. Western/1-2453894088/2015/EOA

Date: 07-Apr-2015

To,
The Secretary,
Tech. & Higher Education Deptt.
Govt. of Maharashtra, Mantralaya,
Annexe Building, Mumbai-400032

Sub: Extension of approval for the academic year 2015-16

Ref: Application of the Institution for Extension of approval for the academic year 2015-16

Sir/Madam,

In terms of the provisions under the All India Council for Technical Education (Grant of Approvals for Technical Institutions) Regulations 2012 notified by the Council vide notification number F-No.37-3/Legal/2012 dated 27/09/2012 and norms standards, procedures and conditions prescribed by the Council from time to time, I am directed to convey the approval to

Regional Office	Western	Application Id	1-2453894088
		Permanent Id	1-8344254
Name of the Institute	MAHARASHTRA INSTITUTE OF TECHNOLOGY	Institute Address	NH-211,SATARA VILLAGE ROAD,, AURANGABAD, AURANGABAD, Maharashtra, 431028
Name of the Society/Trust	GRAMAUDYOGIK SHIKSHAN MANDAL	Society/Trust Address	NH-211,SATARA VILLAGE ROAD,AURANGABAD,AURANGABAD,Maharashtra, 431028
Institute Type	Unaided - Private		

Opted for change from Women to Co-ed	No	Opted for change of name	No	Opted for change of site	No
Change from Women to Co-ed approved	Not Applicable	Change of name Approved	Not Applicable	Change of site Approved	Not Applicable

To conduct following courses with the intake indicated below for the academic year 2015-16



Application Id: 1-2453894088			Course	Full/Part Time	Affiliating Body	Intake 2014-15	Intake Approved for 15-16	NRI Approval status	PIO Approval status	Foreign Collaboration Approval status
Program	Shift	Level								
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	COMPUTER SCIENCE & TECHNOLOGY	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	24	24	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	ELECTRONICS TELE COMMUNICATION	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	24	24	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	FOOD PROCESSING TECHNOLOGY	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	24	24	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	MECHANICAL ENGINEERING	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	18	18	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	AGRICULTURAL ENGINEERING	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	30	30	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	CIVIL ENGINEERING	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	60	60	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	COMPUTER SCIENCE AND ENGINEERING	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	60	60	NA	NA	NA



Application Id: 1-2453894088			Course	Full/Part Time	Affiliating Body	Intake 2014-15	Intake Approved for 15-16	NRI Approval status	PIO Approval status	Foreign Collaboration Approval status
Program	Shift	Level								
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	ELECTRICAL ENGINEERING	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	60	60	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	ELECTRONICS & TELE-COMMUNICATION ENGINEERING	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	120	120	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	MECHANICAL ENGINEERING	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	120	120	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	PLASTIC AND POLYMER ENGINEERING	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	60	60	NA	NA	NA
ENGINEERING AND TECHNOLOGY	2nd Shift	UNDER GRADUATE	CIVIL ENGINEERING	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	60	60	NA	NA	NA
ENGINEERING AND TECHNOLOGY	2nd Shift	UNDER GRADUATE	MECHANICAL ENGINEERING	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	60	60	NA	NA	NA
MANAGEMENT	1st Shift	POST GRADUATE	MASTERS IN BUSINESS ADMINISTRATION	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	60	60	NA	NA	NA

Note: Validity of the course details may be verified at www.aicte-india.org/departments/approvals



The above mentioned approval is subject to the condition that MAHARASHTRA INSTITUTE OF 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.

Dr. Avinash S Pant
Actg Chairman, AICTE

Copy to:

- 1. The Regional Officer,**
All India Council for Technical Education
Industrial Assurance Building
2nd Floor, Nariman Road
Mumbai - 400 020, Maharashtra
- 2. The Director Of Technical Education,**
Maharashtra
- 3. The Registrar,**
Dr. Babasaheb Ambedkar Marathwada University, Aurangabad
- 4. The Principal / Director,**
MAHARASHTRA INSTITUTE OF TECHNOLOGY
NH-211,SATARA VILLAGE ROAD,,
AURANGABAD,AURANGABAD,
Maharashtra,431028
- 5. The Secretary / Chairman,**
GRAMAUDYOGIK SHIKSHAN MANDAL
NH-211,SATARA VILLAGE ROAD,
AURANGABAD,AURANGABAD,
Maharashtra,431028
- 6. Guard File(AICTE)**



All India Council for Technical Education
(A Statutory body under Ministry of HRD, Govt. of India)

7th Floor, Chandralok Building, Janpath, New Delhi- 110 001
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-india.org



All India Council for Technical Education
(A Statutory body under Ministry of HRD, Govt. of India)

7th Floor, Chandralok Building, Janpath, New Delhi- 110 001
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-India.org

F.No. Western/1-2809300666/2016/EOA

Date: 30-Apr-2016

To,

The Secretary,
Tech. & Higher Education Deptt.
Govt. of Maharashtra, Mantralaya,
Annexe Building, Mumbai-400032

Sub: Extension of approval for the academic year 2016-17

Ref: Application of the Institution for Extension of approval for the academic year 2016-17

Sir/Madam,

In terms of the provisions under the All India Council for Technical Education (Grant of Approvals for Technical Institutions) Regulations 2012 notified by the Council vide notification number F-No.37-3/Legal/2012 dated 27/09/2012 and norms standards, procedures and conditions prescribed by the Council from time to time, I am directed to convey the approval to

Regional Office	Western	Application Id	1-2809300666
Name of the Institute	MAHARASHTRA INSTITUTE OF TECHNOLOGY	Permanent Id	1-8344254
Name of the Society/Trust	GRAMAUDYOGIK SHIKSHAN MANDAL	Institute Address	NH-211,SATARA VILLAGE ROAD,, AURANGABAD, AURANGABAD, Maharashtra, 431028
Institute Type	Unaided - Private	Society/Trust Address	NH-211,SATARA VILLAGE ROAD,AURANGABAD,AURANGABAD,Maharashtra, 431028

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

To conduct following courses with the intake indicated below for the academic year 2016-17

Application Id: 1-2809300666			Course	Full/Part Time	Affiliating Body	Intake 2015-16	Intake Approved for 2016-17	NRI Approval status	PIO / FN / Gulf quota Approval status	Foreign Collaboration/Twinning Program Approval status*
Program	Shift	Level								
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	COMPUTER SCIENCE & TECHNOLOGY	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	24	24	NA	NA	NA



ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	ELECTRONICS TELE COMMUNICATION	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	24	24	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	FOOD PROCESSING TECHNOLOGY	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	24	24	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	MECHANICAL ENGINEERING	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	18	18	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDERGRADUATE	AGRICULTURAL ENGINEERING	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	30	30	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDERGRADUATE	CIVIL ENGINEERING	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	60	60	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDERGRADUATE	COMPUTER SCIENCE AND ENGINEERING	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	60	60	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDERGRADUATE	ELECTRICAL ENGINEERING	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	60	60	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDERGRADUATE	ELECTRONICS & TELE-COMMUNICATION	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	120	120	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDERGRADUATE	MECHANICAL ENGINEERING	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	120	120	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDERGRADUATE	PLASTIC AND POLYMER ENGINEERING	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	60	60	NA	NA	NA
	2nd	UNDERGRADUATE	CIVIL	FULL	Dr. Babasaheb	60	60	NA	NA	NA



ENGINEERING AND TECHNOLOGY	Shift	ER GRA DUA TE	ENGINEERING	TIME	Ambedkar Marathwada University, Aurangabad					
ENGINEERING AND TECHNOLOGY	2nd Shift	UND ER GRA DUA TE	MECHANICAL ENGINEERING	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	60	60	NA	NA	NA
MANAGEMENT	1st Shift	POS T GRA DUA TE	MASTERS IN BUSINESS ADMINISTRATION	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	60	60	NA	NA	NA

The above mentioned approval is subject to the condition that MAHARASHTRA INSTITUTE OF 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.

Prof. Alok Prakash Mittal
Member Secretary, AICTE

Copy to:

1. **The Regional Officer,**
All India Council for Technical Education
Industrial Assurance Building
2nd Floor, Nariman Road
Mumbai - 400 020, Maharashtra
2. **The Director Of Technical Education,**
Maharashtra
3. **The Registrar,**
Dr. Babasaheb Ambedkar Marathwada University, Aurangabad
4. **The Principal / Director,**
MAHARASHTRA INSTITUTE OF TECHNOLOGY
NH-211,SATARA VILLAGE ROAD,,
AURANGABAD,AURANGABAD,
Maharashtra,431028
5. **The Secretary / Chairman,**
GRAMAUDYOGIK SHIKSHAN MANDAL



All India Council for Technical Education
(A Statutory body under Ministry of HRD, Govt. of India)

7th Floor, Chandralok Building, Janpath, New Delhi- 110 001
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-India.org

NH-211,SATARA VILLAGE ROAD,
AURANGABAD,AURANGABAD,
Maharashtra,431028

6. Guard File(AICTE)

DR. BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY, AURANGABAD
NAAC Re- Accredited "A" Grade

Academic Office : (0240) 2403115
BCUD Office : (0240) 2403223
Registrar Office : (2040) 2403334,
Fax (BCUD) : (0240) 2403224 / 335
E-mail : Bcud.office@bamu.ac.in
Web Site : www.bamu.net.
Telegram : BAMUSITY



UNIVERSITY CAMPUS,
AURANGABAD-431 004
(Maharashtra) (INDIA).

Ref. No. ACAD/AFFIL/ R.C/ABL/2015-16/ 125-31

Date: 11-08-2015

To,

The Principal,
G.S. Mandal's,
Maharashtra Institute of Technology &
Engineering College,
P.B. No. 327, Beed Bypass Road, Satara Area,
AURANGABAD.

Subject :- Regarding Continuation of Recognition for the Research Centre in
the Subject of **Mechanical Engineering.**

Ref. :- 1) Resolution of Academic Council as per Item No. 425-24

dated 30-05-2015.

2) Govt. Letter dated 01-11-2011 & provision under clause 84 &
86 of Maharashtra University Act 1994.

3) Your Proposal dated : 30-03-2015.

Sir,

With reference to the subject cited above, I am to inform you that, after varying the facility available at your Research Centre, the Enquiry Committee appointed for this purpose has recommended to the Academic Council to give continuation to the said Research Centre. The Academic Council at its meeting held on 30-05-2015 accepted the said recommendation of the Enquiry Committee to continue recognition as per the provision of Section 84 & 86 of the Maharashtra Universities Act 1994 for a further period of three years.

You are further inform you that to maintain the intake capacity at the proportionate rate as per the availability of the Research guide.

DIRECTOR,
Board of College and
University Development.

DR. BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY, AURANGABAD

NAAC Re-Accredited "A" Grade

Academic Office : (0240) 2408115
BCUD Office : (0240) 2403223
Registrar Office : (0240) 2402334,
Fax : (0240) 2403224 / 335
E-mail : bcud.office@bamu.ac.in
Web Site : www.bamu.net



UNIVERSITY CAMPUS,
AURANGABAD-431 004
(Maharashtra) (INDIA).

BAMU-SITY

Ref. No. ACAD/APTIL/ R.C/MCM/2014-15/10183-30 Date: 20-06-2015.

To,

Maharashtra Institute of Technology &
Engineering College,
P. B. No. 327, Beed Bypass Road,
AURANGABAD.

Subject :- Recognition as Research centre in Electronics &
Telecommunication Engineering .

Ref. :- (1) Resolution of Academic Council Item No. 424-13
dated 30-May 2015.
(2) Govt. letter dated : 01-11-2011.

Sir,

With reference to the subject noted above, I am to inform you that as per the decision of the Academic Council at its meeting held on 30-May 2015 has granted recognition to start Research Centre in **Electronics & Telecommunication Engineering** from the academic year 2015-2016 for a period of three (3) years at first instance as under clause (84) of Maharashtra University Act. 1994 .

The Research Center is permitted to admit student in proportion of number of research guide . It is also compulsory to renew the recognition after every three years in the prescribed format along with recognition fee.

Further to inform you to comply with the condition as laid down by the committee as mentioned below at the earliest.

Nil

DIRECTOR,
Board of College and
University Development.

Copy to :-

1. Joint Director, Technical Education, Aurangabad Region, Aurangabad for information and necessary action.
2. The Controller of Examinations, Dr. Babasaheb Ambedkar Marathwada University Aurangabad.
3. The Deputy Registrar, Special Cell, Dr. Babasaheb Ambedkar Marathwada University Aurangabad.
4. The Administrative Officer, Maharashtra Knowledge Corporation Limited, I.C.C. trade tower, 5th floor, A wing, Senapati Bapat Marg, Pune.
5. The Assistant Registrar, Non Professional Unit, (Academic Section), Dr. Babasaheb Ambedkar Marathwada University Aurangabad.
6. The Deputy Registrar, Eligibility Unit (Academic Section), Dr. Babasaheb Ambedkar Marathwada University Aurangabad.
7. The Deputy Registrar, Ph.D. Section, Dr. Babasaheb Ambedkar Marathwada University Aurangabad.

S/No---
DIRECTOR,
Board of College and
University Development,

Academic Section (0240) 2403118/2403119
 Registrar (Office) 2403334,(R.) 2400203
 B.C.U.D. Office 0240-2403124,2403335
 Fax (0240) 2403224, 2403334
 Telegram BAMUSITY
 Web Site www.bamu.net.
 E-mail bcud.office@bamu.ac.in



UNIVERSITY CAMPUS,
AURANGABAD-431 004
 (Maharashtra) (INDIA).

TO WHOM IT MAY CONCERN

This is to certify that **G. S. Mandal's, Maharashtra Institute of Technology, Aurangabad**, Maharashtra is affiliated to the Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, Maharashtra Since 2001 and approved by the AICTE. The following Courses are taught in this college as per approval.

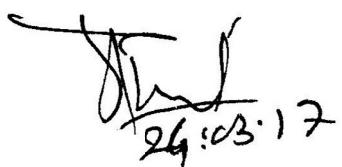
Sr.No.	Name of the Courses[s]	Duration of the Course	Affiliation. Permanent / Temporary	Period of Validity for the year[s]
01	Agricultural Engineering (UG)	Four Year	Temporary	Academic Year 2016-17
02	Civil Engineering (UG)	Four Year	Temporary	Academic Year 2016-17
03	Civil Engineering (UG) Second Shift	Four Year	Temporary	Academic Year 2016-17
04	Computer Science and Engineering (UG)	Four Year	Temporary	Academic Year 2016-17
05	Electronics and Tele-Communication Engineering (UG)	Four Year	Temporary	Academic Year 2016-17
06	Mechanical Engineering (UG)	Four Year	Temporary	Academic Year 2016-17
07	Mechanical Engineering (UG) Second Shift	Four Year	Temporary	Academic Year 2016-17
08	Plastics and Polymer Engineering (UG)	Four Year	Temporary	Academic Year 2016-17

09	Electrical Engineering (UG)	Four Year	Temporary	Academic Year 2016-17
10	Mechanical Engineering (PG)	Two Year	Temporary	Academic Year 2016-17
11	Food Processing Technology (PG)	Two Year	Temporary	Academic Year 2016-17
12	Electronics and Tele-Communication (PG)	Two Year	Temporary	Academic Year 2016-17
13	Computer Science and Engineering (PG)	Two Year	Temporary	Academic Year 2016-17
14	M.B.A. (PG)	Two Year	Temporary	Academic Year 2016-17

Ref. Acad/Affi/ABL./2016-17/ 41034

Dated : 22-03-2016

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26/03/17

In Charge Officer
Dr. Babasaheb Ambedkar Marathwada
University, Aurangabad.