* **Academic Support Units and Teaching-Learning Process (125)** 
  1. **Academic Support Units (50)**

**7.1.1 Admission Intake (5)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item** | **CAY**  **2021-22** | **CAY**  **2020-21** | **CAY**  **2019-20** | **CAY**  **2018-19** |
| Sanctioned Intake Strength of the Institute (N) | **60** | **120** | **120** | **120** |
| Number of students, admitted on merit (N1) | **-** | **-** | **-** | **-** |
| Number of students, admitted on management quota/otherwise (N2) | **59** | **76** | **22** | **57** |
| Number of total  admitted students in the Institute (N1 + N2) | **59** | **76** | **22** | **57** |

Table 7.1.1

**7.1.2 Admission Quality (10)**

Divide the total admitted student ranks (or percentage-marks) into 5 or a few more meaningful ranges

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Rank Range** | **CAY**  **2021-22** | **CAY**  **2020-21** | **CAY**  **2019-20** | **CAY**  **2018-19** |
| Above 90 % | **2** | **2** | **0** | **0** |
| 80 – 89% | **5** | **5** | **6** | **12** |
| 70-79 % | **29** | **27** | **9** | **17** |
| 60-69 % | **22** | **37** | **5** | **25** |
| 50-59% | **1** | **5** | **2** | **3** |

Table 7.1.2

**7.1.3 Language Laboratory (10)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Language**  **laboratory** | **Space, Number of Students** | **Software used** | **Type of**  **experiments** | **Quality of instruments** | **Guidance** |
| Language  Laboratory  (RB 101) | 66 sq.m, 63 | ETNL  Language  Lab 4.0 | Communication  Skills:-  Listening,  Reading,  Pronunciation,  English words  usage, Sentence  construction | PC, LCD  Projector,  Sound card,  Headphones  with mike  for teacher  and student | English  Department |

Table 7.1.3

*(Instruction: The institution may provide the details of the language laboratory. The descriptors as listed here are not exhaustive).*

**7.1.4 Career Guidance, Training, Placement, and Entrepreneurship Cell (10)**

*(Instruction: The institution may specify the facility and management to facilitate career guidance including counselling for higher studies, industry interaction for training/internship/placement, entrepreneurship cell and incubation facility and impact of such systems.)*

Effective services for career guidance including counselling for placements

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl.No.** | **Course/Activity** | **Status of the Course** | **Level at which it is offered** | **Duration** | **Source of the resources** |
| 1 | Technical English & Communication skills | Co-Curricular | I/II MCA | I/II/III/IV  Semester | In-house |
| 2 | Aptitude | Co-academic | I/II/III MCA | All  Semesters | In-house |
| 3 | Campus Recruitment Training | Co-academic | I/II/III MCA | Subject to  change  from  time to time | External &  In-house |
| 4 | Personality Development Classes | Co-academic | I/II/III MCA | Subject to  change  from  time to time | External &  In-house |

Table 7.1.4

**Provisions for improving Placements:**

* The students get an opportunity to have exposure to the emerging technologies.
* Mock interviews, GD, Aptitude trainings given on regular basis.
* Some of the students may even come to a clear understanding that ,they would visualize their career in those areas.
* Value-added courses to accommodate changing industry requirements.
* Project trainings are introduced in order to encourage compartmentalization of learning and to offer simulated industrial operations.
* Association based department level competitions are being conducted.
* In addition to all the above, teachers offer counseling individually or in small groups

**Outcome:-**

The students have been utilizing the infrastructural facilities and training offered by the college to mould their career.

**Training and placement facility with training and placement officer, industry interaction for training/internship/placement**

**Facility:-**

Infrastructure : A separate department is available

No. of chambers for personnel : 03

No. of chambers for conducting Interviews : 2

**HR:-**

Full time officers :07 (TPO & ATPO)

Full time Trainers :05 (04-Soft Skills, 01-Aptitude)

Non – Teaching : 02

**Training:**

1. In – House Training:

The training needs of students relating to employment are taken care by an In –house training module.

1. English for professionals- I/II/III/IV Semesters.

2. Aptitude training – III/IV/V Semesters.

b) Out Sourcing:

External training for the students is given during semester breaks. This site exposure enables them to have sufficient technical reasoning ability and ultimately sets up a logical mindset for the students to enhance communication skills and to brush up in the areas of critical reasoning and vocabulary just before the commencement of placement season. /RSR

**Industry- Institute Interaction Initiatives**

SAINTGITS, while molding its students to become exceptionally employable corporate citizens, gives equal importance to make them entrepreneurs in their own right. The trainings the students undergo are planned and administered with these objectives in focus. While the Training and Placements Cell take care of the former objective of making the students employable through continuous career skills trainings, the latter goal of making them business owners is undertaken by the Entrepreneurship Cell. SAINTGITS is getting unwavering support from the Industry in accomplishing these through continuous Industry- Institute Interaction.

On a formal way, to promote employability and entrepreneurship among its students, SAINTGITS has signed Memorandum of Understandings (MoUs) with reputed institutions as follows:

* IEDC Cell
* Infosys
* ICT Academy
* UST
* Rheinbrucke
* GTech
* CDAC

Sensing the need to be proactive in moulding the students befitting sophisticated corporate requirements, SAINTGITS continuously go for the best of Industry trainings and interactions with corporate captains.

[**Innovation and Entrepreneurship Cell**](http://saintgits.org/main/sie/IEDCCELL.asp)

**Objectives of the IEDC Cell:**

* To act as an institutional mechanism for providing various services including information on all aspects of enterprise building to budding S & T entrepreneurs.
* To conduct programmes related to women and weaker sections of the society.
* To inculcate a culture of innovation driven entrepreneurship through student projects.
* To promote development of engineering and technology based enterprises and promote employment opportunities in the innovative areas.
* To create awareness on entrepreneurship among the students.
* To inculcate entrepreneurial spirit and culture among the Science and Engineering graduates and post graduates.
* To conduct programmes in Entrepreneurship enabling skills.
* To identify and motivate budding entrepreneurs.
* To create a database on industrial information to facilitate entrepreneurs by providing information on entrepreneurial opportunities.
* To assist entrepreneurs in sourcing finance, identifying market, preparation of business plan and product development.
* To guide the prospective entrepreneurs in knowledge based ventures.
* To help entrepreneurs to acquire necessary skills to run the industry effectively.
* To bridge the gap between Industries and Institutions by carrying out the research activities for the industries.
* To conduct skill industrial development training programmes with updated technologies.
* To provide need-based consultancy services to industries.

**Functions of IEDC Cell:**

* To organize Entrepreneurship Awareness Camps, Entrepreneurship Development Programmes, Faculty Development Programmes and Skill Development Programmes in the department.
* To organize project design Competitions in the department .
* To guide and assist prospective entrepreneurs on various aspects such as preparing project reports, obtaining project approvals, loans and facilities from agencies of support system, information on technologies, etc.
* To arrange interaction with entrepreneurs and create a mentorship scheme for student entrepreneurs.
* To act as a Regional Information Centre on business opportunities, processes, technologies, market, etc. by creating and maintaining relevant data bases.

The above said IEDC Cell at SAINTGITS is supported by T-TBI - (Technopark Technology Business Incubator). Technopark Technology Business Incubator (T-TBI), a joint initiative of Technopark, Trivandrum and the Department of Science and Technology (DST), Government of India, is avidly helping the technology business start-ups with all the necessary resources and supports they need to evolve and grow as a ripened business. T-TBI provide incubates with necessary infrastructure support, technology/ prototype development support, research assistance, help in getting funding, business consulting assistance and do whatever is necessary to make the start-up a success.

**SAINTGITS Center for Innovation & Entrepreneurship (SCIE)**

SAINTGITS Center for innovation & Entrepreneurship (SCIE) exists to foster innovation driven entrepreneurship among the faculty and students through mentoring and training .The interdisciplinary center provides assistance to innovators, entrepreneurs and researchers to launch and commercialize new products and technologies. It comprise of faculty ,students, alumni of SAINTGITS, mentors and service providers from industry who span a variety of functional areas , sectoral  domains and geographies and are passionately committed to encourage disruptive innovations and enable aspiring entrepreneurs to succeed commercially. The centre is intended to encourage and motivate the innovative talents of engineering teachers and students and to promote research in the field of science and technology. The centre will provide state of the art infrastructure for research with the cooperation and participation of national and international research centers, premier industrial institutions, universities and public institutions. The centre is founded with the motive to find new fields and sectors with unlimited employment opportunities.

**7.1.5 Co-curricular and extra-curricular activities (10)**

*(Instruction: The institution may specify the co-curricular and extra-curricular activities, e.g., NCC/NSS, cultural activities, etc.)*

**Facilities:-**

* The college has NSS units besides a Literary and cultural club which are coordinated by members of faculty
* In addition to the above, the departments has their professional organizations

Literary and cultural club organizes competitions on specific occasions in addition to organizing Annual Literary and cultural competitions. Counseling is offered when the students represent the college at other places

**Departmental Events**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sl. No** | **Name of the Paper / Design contest** | | **Achievements** | | | **Event date** |
| **2016-17** | | | | | | |
| 1 | | MCA DAY | | Get together of all batches of MCA students | 27/8/2016 | |
| 2 | | NCNSC’16 | | National Conclave on Network Security and Cryptography | 23-11-2016 | |
| 3 | | SAMYUKTHA16 | | National Level Technocultural Fest | 18-11-2016  19-11-2016 | |
| 4. | | EXPERT TALK | | Teaching,Mr.Santhosh Kurup | 27-05-2017 | |
| **2017-18** | | | | | | |
| **1** | SAMYUKTHA’17 | | National Level Technocultural Fest | | | 9-11-2017  10-11-2017 |
| **2** | SAUHRDHA’17 | | Get together of all batches of MCA students | | | 31-08-2017 |
| **3** | ORIENTATION PROGRAMME | | Orientation classes for newly joined students | | | 12-10-2017  13-10-2017 |
| **4** | INTERNATIONAL YOGA DAY | | Yoga class by Mr.Uttam Kumar, Physical Education Deaprtment. | | | 21-06-2017 |
| **5** | SMART INAUGURATION | | MCA Association Inaugurated by Mr.Hari S from Infosys TVM | | | 17-10-2017 |
| 6. | AAVISHKAR | | Project exhibition cum competition | | | 09-11-2017 |
| **2018-19** | | | | | | |
| 1 | SAMYUKTHA’18 | | National Level Technocultural Fest | | | 2-11-2018  3-11-2018 |
| **2** | SAUHRDHA’18 | | Get together of all batches of MCA students | | | 3-11-2018 |
| **2019-20** | | | | | | |
| **1** | SAMYUKTHA’19 | | National Level Technocultural Fest | | | 18-01-2020 |
| **2** | SAUHRDHA’19 | | Get together of all batches of MCA students | | | 20-7-2019 |
| **3** | ORIENTATION PROGRAMME | | Orientation classes for newly joined students | | | 15-17-2019 |
| **4** | SMART INAUGURATION | | MCA Association Inaugurated by Mr.Biju VR | | | 05-10-2019 |
| 5 | AAVISHKAR | | Project exhibition cum competition | | | 18-01-2020 |
| **2020-21** | | | | | | |
| **1** | SAUHRDHA’20 | | Get together of all batches of MCA students | | | 4-8-2020 |
| **2** | SAMYUKTHA-20 | | National Level Technocultural Fest | | | 26-06-2021 |
| **3** | ORIENTATION PROGRAMME | | Orientation classes for newly joined students | | | 10-08-2020 |
| 4 | SMART INAUGURATION | | MCA Association Inaugurated by Mr.Rajeev R | | | 14-10-2020 |
| **2021-22** | | | | | | |
| 1 | ORIENTATION PROGRAMME | | Orientation classes for newly joined students | | | 27-09-2021 |
| 2 | SMART INAUGURATION | | MCA Association Inaugurated by Dr.Brijesh George John | | | 01-02-2022 |

Table 7.1.5

**Life Skill Development ( through various clubs)**

Various clubs are:

* Arts
* Social Activity
* Sports
* Quiz & Debate
* Coding
  1. **Games and Sports, facilities, and qualified sports instructors (5)**

*(Instruction: The institution may specify the facilities available and their usage in brief.)*

**DEPARTMENT OF PHYSICAL EDUCATION**

**Sports Facilities:**

The college offers various facilities for the students for improving their extracurricular activities. The college has a fitness centre located in the south block. Basketball court,Volley ball court, Table tennis, Badinton court, Cricket Net practice area, Chess and anopen ground capable of conducting football, cricket and athletics are provided for the students and staff.

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl.No** | **Ground /  Court / Field** | **Measurement** | **Remarks** |
| 1 | 200 Meters Track | 95.86 x 45.86 Mtrs |  |
| 2 | Football | 90 x 45 Mtrs |  |
| 3 | Basketball | 28 x 15 Mtrs |  |
| 4 | Volleyball | 18 x 9 Mtrs |  |
| 5 | Cricket Nets | 20.12 x 3.05 Mtrs |  |
| 6 | Table Tennis |  | College |
| 7 | Table Tennis |  | 4 Boys Hostel |
| 8 | Table Tennis |  | 1 Girls Hostel |
| 9 | Multi Gym |  | 12 Station Multi Gym |
| 10 | Softball | 30 x 70 Feet |  |
| 11 | Baseball | 200 x 110 Feet |  |
| 12 | Chess |  |  |

Table 7.1.6

**Sports Instructors:**

The physical education department is headed by Mr.Uttam Kumar [Master of Physical Education, Diploma in Sports Coaching (Field Hockey), Certificate in Sports Coaching (Basketball) and Certificate in Yoga.]

**Major achievements of physical education faculty**

**Uttam Kumar**

1. Uttam Kumar was, the Selector of the Field Hockey (Men) Team of the MG University

2. Uttam Kumar was the Coach for the MG University Field Hockey (Men) Team, which came up to the Semi-finals of the South Zone Inter University Hockey Tournament.

3. Uttam Kumar was the selector of the Field Hockey (Women) Team of the MG University.

4. Uttam Kumar was the Technical officer for the South Zone All India Inter University Hockey Tournament (Women)

5. Uttam Kumar was the Technical officer for the South Zone All India Inter University Hockey Tournament (Women)

**Rahul R**

1. Official Assistant in All India ICSE School Meet held at Christ College Irinjalakuda.
2. Member of organizing committee of South India Inter University football championship held at university of Calicut.
3. Experience in conducting of many district and sub-district athletics competitions.
4. Experience in conducting & officiating of many district and sub-district Cricket competitions.
5. Official Assistant in Junior National Youth athletic Meet held at Calicut University.
6. **Teaching – Learning Process (75)** 
   1. Tutorial classes to address student questions: size of tutorial classes, hours per subject given in the timetable (15)

*(Instruction: Here the institution may report the details of the tutorial classes that are being conducted on various subjects and also state the impact of such tutorial classes.)*

Provision of tutorial classes in timetable : **YES**

Tutorial sheets provided : **YES**

Tutorial classes taken by : **Faculty**

Number of tutorial classes per subject per week : **1**

Number of students per tutorial class : **55 to 60 attended by 3 faculties**

Number of subjects with tutorials: 1st year....**10.......**2nd year**....10.......**3rd year**.....4......**

Tutorial periods are conducted in order to give exercises to the students and also to closely monitor their learning ability and achievement. Courses which require more practice or critical thinking are provided with tutorial hours. Tutorial hours are specially Self Assessment Report | MCA DEPARTMENT marked in the time table and it is taken care by the faculty in-charge that the classes are conducted according to the schedule.

Different exercises related to the topics were given and are solved by the students during the tutorial hours with the guidance of faculty.

**Impact:**

* Integration of knowledge is possible during the discussion of this activity.
* Close interaction with the faculty will help to clarify their doubts which are not possible in regular theory classes.
* Skills like critical thinking, communication skills, team collaboration, problem solving etc. are improved

1st year........... 10

* + **Semester 1**
  + RLMCA101- Problem Solving and Computer Programming
  + RLMCA103-Discrete Mathematics
  + RLMCA105-Applied Probability and Statistics
  + RLMCA107-Principles of Management
  + RLMCA109-Digital Fundamentals
  + **Semester 2**
  + RLMCA102-Object Oriented Programming
  + RLMCA104-Data Structures
  + RLMCA106-Operating Systems
  + RLMCA108-Operations Research
  + RLMCA112-Computer Organization and Architecture

2nd year........... 10

* + **Semester 3**
  + RLMCA201- Computer Networks
  + RLMCA203 - Software Engineering
  + RLMCA 205 - Database Management Systems
  + RLMCA 207 - Design and Analysis of Algorithms
  + RLMCA 209 - Web Programming
  + **Semester 4**
  + RLMCA202 - Application Development and Maintenance
  + RLMCA204 - Big Data Technologies
  + RLMCA206 - Mobile Computing
  + RLMCA 208 - introduction to Machine Learning
  + RLMCA2 -- Elective 1

3rd year………. 5

* + **Semester 5**
  + RLMCA301- Web Data Mining
  + RLMCA 303-E-Commerce
  + RLMCA305 - Cryptography And Cyber Security
  + RLMCA3-- Elective II
  + RLMCA3-- Elective II

**7.2.2 Mentoring system to help at individual levels (15)**

*(Instruction: Here the institution may report the details of the mentoring system that has been developed for the students for various purposes and also state the efficacy of such system.)*

* Mentoring System : **Yes**
* Type of Mentoring : **Total Development**
* Number of faculty mentors : **3**
* Number of students per mentor : **20**
* Frequency of meeting : **once in a month**

Staff advisors monitor the performance and activities of students and give proper instructions.

Mentoring system: A profile is maintained for each student where details like:

* Personal Information
* Previous Record
* Academic Performance
* Competitive Examination Details
* Details of Internship and Industrial Trainings
* Scholarships Received
* Co-Curricular and Extra-Curricular activities.

The mentors meet the students periodically and monitor their performance and their activities. Guidance regarding the lagging issues is provided. Occasionally meeting with the parents is conducted based on the requirement.

**Professional Guidance:**

The department is well equipped with eminent faculty members who are radically updated about the advances in their respective fields; provide guidance to the wards for their technical and overall development. Mentoring system ensures attention to the students individually for any hurdle they face during the course of study as well as personal levels to an extent. Experts from various industries are invited to give technical talks.

**Career advancement:**

The training and placement cell is active not only in arranging campus recruitment drives but also in offering awareness and training for the students. Add on courses are provided in each semester which are helpful for the career development. Courses like survey camps help students to work in groups increasing mutual cooperation and understanding capabilities. The Industry institute Partnership cell and Entrepreneurship development cell have been putting efforts in this direction. Mentoring system provides assistance to the students for their career detection and development.

**Course work:**

Faculty members interact with students to improve theoretical grasp on the subject. Seminars and discussions are conducted based on some selected topics to improve presentation skills. Tutorial hours are conducted in order to give exercises to the students and also to closely monitor their learning ability and achievement. Continuous monitoring of students’ performance is carried out by conducting regular series tests, weekly tests and by providing assignments based on relevant and concurrent topics.

Attendance of each student is continuously monitored. Mentoring system ensures frequent interaction with students to assess level of understanding regarding course delivery.

**Remedial Action:**

Weaker students are identified based on their performance in series tests / tutorials. Performance of students is continuously monitored during class hours. Weaker students, identified by faculty members are reported to staff advisors. Staff advisors interact with those students in order to identify their problems, and corrective measures like remedial classes are taken.

**Lab-specific:**

Each of the lab sessions is handled by 2 to 3 teachers in order to have special care for the students while conducting experiments. A demonstrative presentation is given by the teacher concerned before every experiment. The Laboratory records are evaluated after the experiment is held. In other words, there is active involvement of the members of faculty during pre-experiment stage, at the time of experiment and after the experiment.

**Total Development:**

Overall, the mentors put forward efforts to realize total development of the students. In addition to academics, literary, cultural and sports activities are conducted which inculcates leadership qualities, decision making abilities, team spirit, precision, analytical capabilities, socio-psychological awareness etc. resulting in character development. Social commitment of students are developed through the activities of NSS such as blood donation camps, cleaning programs etc. Tech Fests and sports meet are conducted ensuring the participation of students. Several cultural events are organized in order to develop leadership qualities. Group discussions, mock interviews etc. are carried out during placement hours so that the students get well equipped with such skills before going for job interviews. Communication skills are imparted to students providing particular emphasis to English within the curriculum by sparing hours in the regular time table. Mentors help students to identify their tastes and encourage them for participating in events accordingly.

**Efficiency of the System:**

* The mentoring system developed by the college has been proved to be effective considering different parameters.
* The involvement of students in the academics has been increased, like class work, attendance, paper presentations, presentation of projects in exhibitions, participation in NSS, cultural and sports activities etc.
* The performance of weaker students during tests is seemed to be improved.
* Helps in the increased volume of placement.
* As the number of students allocated to each of the mentor is limited to 18 to 20, personal interaction on regular basis can be taken up.

1. **Feedback analysis and reward / corrective measures taken, if any (15)**

*(Instruction: The institution needs to design an effective feedback questionnaire. It needs to justify that the feedback mechanism it has developed really helps in evaluating teaching and contributes to the overall quality of teaching).*

Feedback collected for all courses (Yes/No) : **Yes**

Specify the feedback collection process :**Online**

Percentage of students participating :**70 – 100%**

**Specify the feedback analysis process**

Feedback mechanisms are

1. Class Committee meeting
2. Course Exit Survey

* Feedback mechanism is a well-organized system in the department.
* The system of feedback collection is online.
* The head of department scrutinizes collected feedback.
* The feedback is quantified
* All the parameters mentioned in the feedback form will be analyzed.
* Ability of teaching with respect to each item and comprehensive ability of the teachers will be analyzed
* All the comments written by the students in the feedback forms will be communicated to the respective faculty members along with their feedback levels to know their strengths and weaknesses and to enhance their teaching skills.
* Percentage of students participating in the feedback process is greater than 70%.

**The feedback analysis process is as follows:**

* The feedback analysis is online.
* Class committee meetings are arranged twice in a semester to collect feedback about curricular/non-curricular activities in a class. The class committee includes the HOD, Professor/Senior faculty from the department, Professor/Senior faculty from any other department, staff advisors, class representatives, elected student members.
* The system of feedback collection from class committee is purely interactive and confidential.
* Collected feedback is scrutinized by the head of department.
* All the grievances are discussed and remedial actions are taken at the committee itself as far as possible.
* All the parameters mentioned in the feedback will be analyzed.
* Ability of teaching and comprehensive ability of the teachers will be analyzed.
* All the comments made by the students in committee will be communicated to the respective faculty members.
* In course end survey also a standard questionnaire is given and students are asked to complete the survey. Here student’s details are kept anonymous.

All the comments written by the students in the feedback forms will be communicated to the respective faculty members by HOD along with their feedback levels to know their strengths and weaknesses and to enhance their teaching skills.

**7.2.4 Scope for self-learning (15)**

*(Instruction: The institution needs to specify the scope for self-learning / learning beyond syllabus and creation of facilities for self-learning / learning beyond syllabus.)*

Self-learning engage the students to apply their existing knowledge and real world experiences. By apply it, teachers can able to encourage the students to constantly assess how the activity is helping them to gain understanding. Self-learning is better than being taught. The institute promotes and facilitates the process of self-learning among students.

The college inculcates self learning capacity in students by means of several techniques such as seminars, projects, group assignments, study tour, industrial training etc.

* The curriculum offers courses like Seminar **(RLMCA341)** where the topics are self selected or based on guide suggestion. The component of self learning is evaluated in this course. Also students who have teaching skills are encouraged to conduct seminars in presence of faculty about topics covered within or beyond the curriculum. These seminars make those students capable of preparing certain topics themselves. Some guidance is given by faculty members if required. Remaining students will be interested to hear from their friends. They also get benefitted by acquiring knowledge beyond syllabus through these sessions.
* The curriculum offers courses like mini project and major project **(RLMCA351 AND RLMCA352 )** for finalyear students where the topics were self selected or based on guide suggestion. The component of self learning is evaluated in these courses.
* Group projects in Each semester.
* Every student has to submit two assignments in every course which has been evaluated for 10 marks. Some assignments beyond the syllabus are also given to encourage outstanding students to develop their self learning capabilities. Group assignments are provided on some selected topics which may be within or beyond syllabus.

1. **Generation of self-learning facilities, and availability of materials for learning beyond syllabus (15**)

*(Instruction: The institution needs to specify the facilities for self-learning / learning beyond syllabus.)*

Self-learning is promoted in the institute by generating self-learning facilities under various modes. Following are the various modes of self-learning and facilities created there in.

**Web-based Learning:**

* The Internet is an open information system in which various sources of information, media and materials such as texts, images, video sequences can be linked together in diverse ways to form so-called self-learning environments. Internet offers new possibilities to structure, represent, adapt and integrate various learning content and materials. Hence, the potential of the Internet self-learning mode is considered to be very high. The institute has created a 24x7 central internet facility with 47 Mbps leased line and Wi-Fi facility to promote and motivate students to self-learning.

**Learning with Multi-media:**

* Availability of course material in print and digital form
* Language lab facility
* LCD projectors for presentation

**Classroom Presentations:**

* Allowing students to prepare and present topics from curriculum
* Arranging presentation on non-technical topics

**General Library & Department Library**

* The institute offers a General library and library for the department with enormous collection of books, magazines, journals and other publications to facilitate students with their self-learning process.

**Learning Resources Sharing:**

* On-line learning system – Moodle is in use to perform asynchronous activities to assign various tasks like group assignments / group projects and to share the materials.
* In addition to the syllabus mentioned in the curriculum, the students are exposed themselves, as they are provided with the e-content through national and international portals such as:

**NPTEL http://nptel.iitm.ac.in**

**Coursera** [**http://www.coursera.org/**](http://www.coursera.org/)

**Udemy http://www.udemy.com**

**Edx** [**http://www.edx.org**](http://www.edx.org)

Coursera is an education company that partners with the top universities and organizations in the world to offer courses online.

**E Journals:** College provides open access to the following resources.

* 1. **IEEE - http://www.ieeexplore.ieee.org**
  2. **ASCE - https://ascelibrary.org/journals**
  3. **ASME - http://asmedigitalcollection.asme.org/journals.aspx**
  4. **McGraw Hill - http://accessengineeringlibrary.com**
  5. **Springer - http://link.springer.com/**
  6. **ASTM DL - http://enterprise.astm.org**
  7. **J Gate - http://jgateplus.com**
  8. **Elsevier - http://www.sciencedirect.com/**
  9. **EBSCO -** [**http://search.ebscohost.com/**](http://search.ebscohost.com/)