



# QUALITY MANUAL

Muthoot Institute of Technology and Science

---



# QUALITY MANUAL VERSION 2

# **VISION AND MISSION**

## **VISION**

To be a centre of excellence for learning and research in engineering and technology producing intellectually well-equipped and socially committed citizens possessing an ethical value system.

## **MISSION**

- Offer a well-balanced program of instruction, practical experience and opportunities in technology.
- Foster innovation and ideation of technological solutions on a sustained basis.
- Nurture and engender in students, a spirit of inquiry and entrepreneurship.

## CONTENTS

Chapter	Contents	Page No.
<b>1</b>	<b>VISION AND MISSION OF THE INSTITUTE</b>	<b>6</b>
<b>2</b>	<b>ADMINISTRATIVE/ADVISORY BODIES OF THE INSTITUTE</b>	<b>7</b>
	2.1 Board of Governors (BoG)	7
	2.2 College Council	7
	2.3 HOD Council	7
	2.4 Internal Quality Assurance Cell (IQAC)	7
<b>3</b>	<b>VISION - MISSION, PEO, PSO OF THE DEPARTMENT</b>	<b>9</b>
	3.1 PEO	9
	3.2 PSO	9
	3.3 Advisory committees of the department	10
<b>4</b>	<b>ADMISSION PROCESS</b>	<b>11</b>
<b>5</b>	<b>TEACHING LEARNING PROCESS</b>	<b>12</b>
	2.1 Academic Calendar	12
	2.2 Course Allocation	12
	2.3 Academic Timetable	12
	2.4 Course Plan	13
	2.5 Course Diary	13
	2.6 Course Delivery and Evaluation	14
	2.7 Evaluation	16
	2.7.1 Internal Examination	16
	2.7.2 Learning Activities	17
	2.7.3 Internal Mark	18
	2.7.4 End Semester Examination - Theory	18
	2.7.5 End Semester Examination - Practical	20
<b>6</b>	<b>OBE POLICY OF THE INSTITUTE</b>	<b>22</b>
	6.1 Course Outcome	22
	6.1.1 CO-PO/PSO correlation Matrix	22
	6.1.2 Program level Course-PO/PSO correlation Matrix	23
	6.1.3 Course Outcome Attainment	23
	6.1.4 CO Attainment Calculation	24
	6.2 Attainment of PO/PSO	24
	6.3 Continuous Improvement	25
	6.4 Academic Audit & Action Taken	25
	6.5 Documentation of Teaching Learning Process	26
	6.5.1 Course file - Theory	26
	6.5.2 Course file - Lab	26
<b>7</b>	<b>STUDENT SUPPORT SYSTEM</b>	<b>28</b>
	7.1 Library	28
	7.2 Advisory system	28
	7.2.1 Faculty advisory system	28
	7.2.2 Course committee / class committee	29
	7.2.3 Anti-Ragging Committee	31

7.2.4	Students Grievance Redressal Committee	31
7.2.5	Internal Compliance Committee	32
7.2.6	Staff Grievance Redressal Committee	32
7.2.7	Student's wellness and welfare centre	33
7.2.8	Ethics Committee	33
7.2.9	Disciplinary action committee	33
7.2.10	Career Development Centre	34
7.2.11	Entrepreneurship Cell	37
7.2.12	Centre for Industrial Consultancy, Inter disciplinary Research, Innovation & Entrepreneurship (CIDRIE)	37
7.2.13	Research and Consultancy cell	37
7.2.17	IPR Cell	38
7.3	Students Council	39
7.3.1	Technical, Cultural and other Clubs	39
7.4	Sports Activities	41
7.5	National Service Scheme	42
<b>8</b>	<b>PROFESSIONAL BODIES AND DEPARTMENT ASSOCIATIONS</b>	<b>44</b>
8.1	Professional Body student chapters	44
8.2	Departmental Associations	44
8.3	Student Chapters of professional bodies	44
<b>9</b>	<b>NEWSLETTER</b>	<b>46</b>
<b>10</b>	<b>CANTEEN COMMITTEE</b>	<b>47</b>
<b>11</b>	<b>HOSTEL COMMITTEE</b>	<b>48</b>
<b>12</b>	<b>ALUMNI ASSOCIATION (OSAM)</b>	<b>49</b>
<b>13</b>	<b>FACULTY PERFORMANCE AND APPRAISAL</b>	<b>50</b>
<b>14</b>	<b>INDUSTRY INSTITUTE INTERACTIONS</b>	<b>51</b>
14.1	Industrial visit	51
14.2	Industry Internships	52
<b>15</b>	<b>INFRASTRUCTURE FACILITIES</b>	<b>53</b>

## **1. VISION AND MISSION OF THE INSTITUTE**

### **VISION**

To be a centre of excellence for learning and research in engineering and technology producing intellectually well-equipped and socially committed citizens possessing an ethical value system.

### **MISSION**

- Offer a well-balanced program of instruction, practical experience and opportunities in technology.
- Foster innovation and ideation of technological solutions on a sustained basis.
- Nurture and engender in students, a spirit of inquiry and entrepreneurship.

## **2. ADMINISTRATIVE/ADVISORY BODIES OF THE INSTITUTE**

An advisory body of the institute plays a crucial role in enhancing the quality of education and aligning academic programs with industry needs. Comprised of experienced professionals, academic experts and industry leaders, provides strategic guidance on curriculum development, emerging technologies, and skill requirements in the engineering sector. By fostering partnerships with local and global industries, the advisory body helps to create internship opportunities, collaborative research projects, and placement initiatives for students.

### **2.1 Board of Governors (BoG)**

The Managing Director in consultation with the Member Secretary (The Principal) will nominate Industry Experts, Academic Experts, Management Representatives, Nominees of the University and the college to the Board of Governors. The head of the departments and Deans will be the special invitees. The constitution will be reviewed and updated depending on the requirements.

### **2.2 College Council**

The college council is constituted as per the norms and directions of Kerala Technological University.

### **2.3 HOD Council**

The Principal in consultation with the Vice Principal and Dean (Academics) will nominate Deans, HoDs and Assistant HoDs of all departments as members.

### **2.4 Internal Quality Assurance Cell (IQAC)**

The Internal Quality Assurance Cell (IQAC) plays a pivotal role in enhancing the educational quality and institutional performance through systematic monitoring and evaluation processes. Its primary objective is to promote a culture of continuous improvement, ensuring that the institute adheres to the standards set by accrediting bodies and regulatory authorities. The IQAC is responsible for developing quality benchmarks, implementing best practices, and facilitating a coherent strategy for quality enhancement across various departments and programs. Additionally, it engages faculty, students, and stakeholders in the evaluation process, promoting transparent feedback



mechanisms and fostering an environment of accountability and excellence. By leveraging data-driven decision-making and organizational collaboration, the IQAC contributes significantly to the overall growth and reputation of the institute, ultimately paving the way for improved student outcomes and industry readiness.

This institute has a well-structured IQAC. Principal nominates one senior faculty as the chairperson and one faculty from each department. IQAC meets at least twice in a semester (one at the beginning and the at the end of the semester). All academic activities are monitored by the IQAC. OBE policies are reviewed and updated regularly by IQAC.

### **3. VISION - MISSION, PEO, PSO OF THE DEPARTMENT**

The vision and mission statements of the department must ensure consistency with the Institute vision and mission statements. The vision and mission statement development process include following steps:

- Prepare draft Vision-Mission statements by the department through internal brain storming sessions
- Conduct review sessions with stake holders:
  - Promoters, Administrators, Faculty
  - Students
  - Employers, Alumni, Industry Experts
- Benchmarking with the reputed institutions.
- Validation of the set statements through Department Advisory Board (DAB)
- Dissemination of the Vision -Mission statements.
- Review in every 5-7 years

#### **3.1 Program Educational Objectives (PEO):**

PEOs are broad statements that describe the career and professional accomplishments that a program is preparing graduates to achieve. PEOs help to ensure that the courses are in alignment with industry and societal needs and guide the design of curricula, teaching learning methods and assessment strategy. The PEOs may be typically stated under the following 5 broad categories:

- Preparation - Employment/Higher studies
- Core competence - Discipline knowledge
- Breadth- 'T' Shaped Engineer
- Professionalism
- Lifelong learning

The process of developing PEO statements is same as Vision-Mission statements. PEOs must have consistency with the mission of the department.

#### **3.2 Program Specific Outcomes (PSO)**

PSOs are statements that describe 'what the graduates of a specific program should be able to do'.

- Each program has to develop two to three PSOs.

- Review and validate through sessions with DAB.

### **3.3 Advisory Committees of the Departments**

All the department activities are monitored and approved by the following advisory bodies.

- **Department Advisory Board (DAB)**

The Department Advisory Board is responsible for advising the department and provides guidelines for conducting various activities across the academic program. DAB meets once in a year. It consists of the Head of the Department, academicians and experts from industries.

- **Program Assessment Committee**

This is an advisory committee which provides guidance and recommendations for all academic activities of the department. PAC consists of the Head of Department and Stream coordinators. PAC meets twice in a semester. It provides guidelines for Academic activities of the Department Course plan verification Curriculum gap identification and approval Review and approval of Internal Examination and learning activity question papers. Analysis of CO, PO/PSO attainments

- **Stream Committee**

The whole courses under the university curriculum are categorized into different streams. The Head of the Department formulated stream committees with a coordinator and the faculty handling the courses under the respective streams as members. The stream committee of the department is responsible for reviewing of COs, CO-PO mapping and finding the Curricular gaps in the respective streams. Stream committee meets as per the requirements.

## 4. ADMISSION PROCESS

Admission to B.Tech program is done as per Government of Kerala directives. 50% of seats are filled through Kerala Engineering and Medical Entrance Examination (KEAM). The remaining 50% is filled through management admission process as described below.

- Applications are invited from eligible students.
- The rank list is prepared based on their Physics, Chemistry and Mathematics marks and score in the entrance examination with weightage
- The admission is done based on their rank and preference of branch.

Admission to M.Tech program is done as per Government of Kerala directives.

Admission to MCA program is done as per Government of Kerala directives. 50% of seats are filled through MCA entrance examination conducted by the Govt. of Kerala. The remaining 50% is filled through management admission process.

## **5. TEACHING LEARNING PROCESS**

### **2.1 Academic Calendar**

Academic calendar is prepared by the college council in compliance with the university calendar.

HoD Council meeting shall be conducted during the last month of each semester, to discuss all aspects regarding the preparation of semester plan for the forth coming semester.

Inputs such as date of commencement of the semester, list of Government holidays, duration of the semester, schedule of internal and university examination (both theory and practical), co-curricular and extracurricular activities etc. are discussed and decided.

### **2.2 Course Allocation**

A complete list of courses to be handled during the forthcoming semester is prepared 'batch wise' and circulated among the faculty in the department.

- The respective syllabus of each course shall be accessible to all the faculty.
- The members of the faculty indicate their choice of courses with their priority.
- HoD (if necessary, in consultation with Principal) allocates the courses to be handled by each faculty in the next semester, considering their expertise. Allocation of faculty to handle subjects in other departments, wherever necessary, is also made. This is communicated to timetable coordinator through department timetable committee member.
- Workload allocation sheet shall be prepared by the Timetable coordinator and the same is to be circulated among the faculty members of the department. The consolidated course allocation chart is to be submitted to the principal after approval by the respective HoD.
- The workload should be capped as per regulations of AICTE

### **2.3 Academic Timetable**

#### **Semester Timetable:**

- A standing committee consisting of one faculty from each department is formed as the timetable committee.

- A senior faculty is nominated as the Timetable coordinator by the Principal.
- Timetable coordinator convenes a meeting of the timetable committee for the preparation of timetable.
- Timetable coordinator with department coordinators prepares a draft timetable in compliance with the course allocation charts received from each department as the basis.
- Draft timetable prepared is circulated among all the departments for verification. Timetable coordinator finalized the time table in discussion with HoD.
- The final time table shall be issued to HoDs for circulation among the faculty members and to the concerned laboratories.
- Any discrepancy, if noticed, shall be resolved by the coordinator.

#### **Special Timetables:**

- Special timetables may have to be prepared from time to time to meet various eventualities.
- Department Timetable coordinator in consultation with HoD is to collate necessary inputs from departments before attempting to formulate such timetables.

#### **2.4 Course plan:**

Course plan is prepared by the course instructor well in advance of the commencement of semester. A meticulously designed format for the course plan is given by the IQAC. The course plan includes:

- Course outcomes
- CO-PO mapping and justification
- Learning outcomes
- Subject coverage in each class
- Mode of delivery
- Learning activities
- Assessment methods
- Remedial classes
- Gaps in the course and action plan for addressing the gap

- Ethical policy
- Honour code

The course plan is then reviewed by the PAC, presented in the department and is to be approved by the HOD.

## **2.5 Course diary**

A course diary in standardized format is prepared by IQAC and issued to be maintained by course instructors.

Attendance marking sheet for sufficient students are included in it. Period-wise attendance is to be marked on this sheet as per the instructions.

Marks of Internal examinations, learning activities, continuous evaluation in laboratories etc. are to be properly documented in the diary.

The faculty advisor shall consolidate the attendance for each month for every class and the same shall be displayed on notice board and informed the parents.

Attendance, including leave of absence, duty leave etc., are monitored and assessed as per KTU regulations.

Course progress report is to be reviewed and the actions taken for improvement are to be properly documented in the diary.

The course diary is to be closed, complete in all respects and shall be filed along with course file.

As per the new LMS system (ETlabs), the faculty and the courses are mapped to the respective classes and the course plan is documented properly in ETlabs.

## **2.6 Course Delivery and Evaluation**

### **2.6.1 Course Delivery**

#### **Theory Subjects:**

- Course delivery is implemented and executed as per the course plan
- The course instructor conducts assessments as per the schedule given in the Course plan
- Remedial classes are arranged for low performers as per the review of the assessments
- The time table for remedial classes are prepared by the departments.
- The course progress report is reviewed by HOD regularly.

**Learning Activities:**

- Learning activities shall be given for each course as per the course plan
- All the learning activities should be in compliance with the OBE standards followed in the department
- Home assignments, assignment tests, quizzes, course projects... shall be given as learning activities.
- The quality of assessment should be ensured

**Tutorial Sessions:**

- Tutorials are conducted for smaller groups to get more interaction and thus to make the concepts more clear
- The tutorial sessions shall be conducted as per the requirements.
- Each tutorial session is arranged in separate tutorial rooms. Batches may be divided constituting a maximum of 30 students in each batch.
- The tutorial may include open book tests, video lectures, quizzes, reading assignments, seminars etc.
- Moodle can be implemented for tutorials.
- Details of the tutorials are properly documented.

**Laboratories/Workshops**

- Laboratory classes are executed as per the course plan
- Faculty in charge of laboratory ensures the working conditions of all the equipment's in the respective laboratory.
- Repairs/servicing and calibration if any, are to be arranged properly in advance of the commencement of the semester.
- The course instructor divides the students into batches, depending on the number of experiments so as to complete all experiments on time.
- The decorum of the lab classes should be ensured by the course instructor.
- Students are to prepare the observation book, with details like objective of the experiments, purpose, equipment used, required tabular columns, etc., before coming to lab class.



- The continuous evaluation is to be done for each experiment. Evaluation parameters are designed as per the university norms in compliance with the OBE standards.
- Internal examination of the lab is scheduled and conducted as per the guidelines of the university.
- As part of the safety measures, the students are made aware of the probable accidents that may occur due to negligence and the safety/first aid measures that are to be taken.
- End semester examination shall be conducted as per the university norms.

## **2.7 Evaluation:**

The assessment of the courses is done based on the university norms in compliance with the OBE standards. The assessment process of theory examination is as shown below:

Sl. No.	Assessment method	Frequency
1	Internal examinations	Two/semester
2	Learning Activities	Minimum three
3	Attendance	
4	End Semester Examination(ESE)	End of the semester

### **2.7.1 Internal examinations**

#### **Planning:**

- Two internal examinations of two-hour durations with maximum marks of 50 are conducted per semester as per university regulations and OBE standards.
- HOD council schedules internal examinations during the preparation of institute academic calendar
- Proper conduct of internal examinations is done by the exam cell.
- Principal and HODs observes the discipline and smooth conduct of internal examinations

#### **Preparation of Question Papers:**

- Course instructor prepares the question paper as per the regulation of the university in compliance with the OBE standards set by IQAC.

- Question paper is scrutinized by the PAC member and approved by HOD/Course committee chairman
- The approved question paper is sent to exam cell by the concerned HOD/CC chairperson well in advance of the commencement of examination.
- Malpractices if any in the examination is handled as per the university guidelines

#### **Evaluation of Answer Sheets:**

- The scheme of evaluation and the answer key is shared with the students immediately after the conduct of examination.
- Valuation and mark entry are to completed within one week after the examination.
- The valued scripts are returned to the students
- Course instructors should keep three sample answer sheets (Maximum marks, average marks and minimum marks) for each course.

#### **Conduct of retest:**

- Retests are conducted for genuine absentees (medical case, representing college elsewhere officially, etc.) by the concerned department as per the regulations of the university.

#### **2.7.2 Learning Activities:**

- Learning activities are conducted as home assignments, assignment tests, quizzes, course projects etc...
- Question paper of each learning activity is prepared by the course instructor as per the OBE standards.
- The question paper is reviewed by the PAC member and approved by the HOD.
- The submission of learning activities and its valuation is done as per the policy specified in Course plan.

#### **Attendance:**

Attendance is assessed based on the university norms. Full mark is awarded for 90% and above attendance. Minimum 75% attendance is the eligibility to write the ESE.

#### **2.7.3 Internal mark**

**Internal Marks for Theory Subjects:**

A sum of 50 marks is allotted for continuous assessment of students in every course. This mark is awarded to each student by course instructors based on the continuous assessment as per the university norms. The weightage of the assessments for theory and practical courses and are shown below:

**Theory Courses**

<b>Sl No.</b>	<b>Item</b>	<b>Marks</b>	<b>Weightage</b>
1	Internal Examination	25	50%
2	Learning Activities	15	30%
3	Attendance	10	20%

**Practical Courses:**

<b>Sl No.</b>	<b>Item</b>	<b>Marks</b>	<b>Weightage</b>
1	Continuous evaluation	35	35
2	Attendance	10	10
3	Internal examination	30	30

**Consolidation of Internal Marks:**

- The internal marks of all courses are consolidated in specified format and are published.
- Students can report the anomalies if any, and the same can be corrected by the concerned course instructor with the consent of HOD.
- Internal marks are to be entered in the University portal by individual course instructor and checked by Faculty advisor in the presence of HOD and the submission is made by Faculty advisor.

**2.7.4 End Semester Examination -Theory****Planning**

- University will notify the date of examination and schedule of payment of fees/submission of application form for the semester examinations.
- The students shall register for the examination through online platform along with the specified fee.
- The university issues the hall tickets of registered students to the institute before commencement of examination.

- One senior faculty of the institute is appointed as the chief superintendent by the university
- The Chief Superintendent prepares a detailed schedule that includes:
  - Halls and seating arrangements for all sessions.
  - Number of invigilators required for each session, as per university rules.
  - Number of administrative staffs required in the exam office.
- The concerned invigilators are informed about the invigilation duties through a circular by Chief Superintendent.

#### **Conduct of Examinations:**

- The examination is conducted as per the prepared schedule under the supervision of invigilators.
- Chief superintendent is responsible for the smooth conduct of examination.
- In addition to superintendent, university appointed observers from another institute for the proper conduct of examination.

#### **Dispatch of Answer Books:**

- The answer scripts are covered and sealed in the presence of the Chief Superintendent and the observer of the respective examination
- The answer books are sealed and kept safely under lock
- The university collects the same through representatives or the same may be sent to the assigned valuation camp

#### **Evaluation of answer scripts:**

- The University appoints valuers for valuing the scripts.
- The valuation is carried at centralized valuation camps as designated by the University.
- The valuation is done under the supervision of chairperson appointed by the university.

#### **Communication of Results:**

- The institute receives the exam results from the University.
- The individual students also get their copy of mark list from university through online mode

### **2.7.5 End semester practical examinations**

- End semester practical exams are conducted for all students as per the university guide lines and norms.
- The University publish the dates of examination.
- University appoints internal and external examiners.
- The external examiner is from other institute affiliated to the university
- The schedule of examination is prepared by the internal examiner with the consent of faculty in charge of laboratory, external examiner and HOD.
- Examination should be conducted as per the university guide lines and norms.

### **2.7.6 Project**

#### **Final year Projects:**

- The HoD nominates a project coordinator and an evaluation committee to monitor and assess the progress of the work.
- Project teams are formed by the students based on their area of interest.
- Normally a group of students not exceeding four are assigned to a supervisor in the respective area.
- The project can be progressed in college itself or can be industry based.
- All projects are monitored properly by the coordinator and the project supervisor
- Students should keep a project diary to record the day-to-day work and is evaluated by the supervisor on daily basis and submitted to the coordinator weekly.
- The project work is evaluated by the evaluation committee as per the rubrics and guide lines by the IQAC.
- The students submit a detailed report duly signed by the guide/guides and HOD
- Project report and other correspondences are to be retained for future reference.

#### **Seminars:**

- The HoD nominates a seminar coordinator and an evaluation committee to guide and assess the seminar.
- Every student selects a topic preferably related to their project topic and gets it approved by the respective guides.
- Seminar guides (preferably project guides) are assigned by the seminar coordinator based on their topic of presentation.
- Schedule of presentation is prepared by the coordinator preferably in the first instruction class itself and is published to the students.
- Students submit an abstract of their topic well in advance of their presentation.
- Students should submit a duly signed detailed report of the seminar before their presentation
- Presentations are evaluated as per the rubrics and guide lines by the IQAC in compliance with the university norms.

## **6. THE OBE POLICY OF THE INSTITUTE**

The institute has a well-defined strategy to implement Outcome Based Education.

### **6.1 Course outcome**

- The course instructor is responsible for setting the course outcome of the assigned courses.
- The course outcomes must state the major knowledge skills, attitude and ability that students will acquire from the course.
- Course outcome should be expressed in terms of measurable and/or observable behaviours.
- Course outcomes should begin with an action verb (incorporating Blooms Taxonomy levels).
- A detailed Course plan including the Course outcomes should be prepared well before the beginning of the semester.
- Any revision in Course outcomes in future shall be documented with justification and approval from PAC.
- Nomenclature of Course Outcome is done using the course code as provided by the University.

#### **6.1.1 CO-PO/PSO correlation matrices**

- Each course outcome should be mapped to program outcomes and program specific outcomes in the required format mentioning the various correlation levels.
  - Level 1- Slight
  - Level 2-Moderate
  - Level 3- Substantial
- If there is no correlation put ‘-‘ or keep blank.
- Justification of the mapping is to be provided by course instructor and it should be approved by PAC.
- Average of CO-PO/PSO mapping has to be taken for obtaining Course-PO correlation values.

Table 1. CO-PO correlation matrix

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	-	-	-	-	-	-	-	-	-	-
CO2	3	-	-	-	2	-	-	-	-	-	-	-
CO3	1	-	-	-	-	-	-	-	1	-	-	-
CO4	2	1	-	-	-	-	-	-	-	-	-	-
CO5	1	-	-	-	-	-	-	-	1	-	-	-
CO6	1	-	-	-	-	-	-	-	-	-	-	-
CO	2	1	-	-	1	-	-	-	1	-	-	-

Note: Similar table to be prepared for PSO also

In the above table, last row represents Course-PO correlation values.

$$\text{Course – PO correlation} = \frac{\text{Sum of individual CO correlation with that PO}}{\text{Total number of COs of the course}}$$

If the average value so obtained has decimal value in the range

- 0 to 1.4 it will be rounded to 1
- 1.5 to 2.4 will be rounded to 2
- 2.5 to 3.0 will be rounded to 3

### 6.1.2 Program Level Course-PO/PSO correlation matrix

Programme level Course-PO/PSO correlation matrix is prepared by using the Course-PO correlation values of all courses in the curriculum as shown below

Table 2 Course-PO Correlation matrix

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
MA101												
PH100												
.....												
.....												
.....												
EE492												

Similar table may be prepared for Course-PSO correlation.

### 6.1.3 Course Outcome attainment



- The course instructor describes the assessment tools used to gather the data upon which the evaluation of Course Outcome is done.
- Examples of assessment tools may include, but are not limited to
  - Specific exams
  - Multiple Learning activities
  - Continuous Evaluation in laboratory classes
  - Continuous evaluation for project/Seminar.

#### 6.1.4 CO attainment calculation

##### Assessment Tools:

The attainment of course outcomes is evaluated directly based on the performance of students in internal examinations, learning activities and end-semester examinations. The assessment tools for the CO attainment calculation of theory courses are as shown below

Table 3

Assessment Tools	Frequency of Assessment	Weightage
Internal Exam	Twice in a semester	20% each
Learning Activities Assignments, Tutorials, Term papers etc.)	As per the course plan	30%

The assessment process of course outcomes of courses other than theory courses are done as explained below.

##### Lab courses:

**Continuous internal assessment:** The CO attainment is calculated based on the continuous performance of each student in lab sessions based on their participation, conduct, record of observations, viva etc.

##### Seminar: Internal Assessment:

Seminar presentation and documentation is done as per the department policy in alignment with University. The course attainment is calculated based on the performance.

##### Main Project:

The attainment is calculated based on the rubrics defined by the IQAC

*The detailed CO- attainment calculations are given in the assessment manual of the Institute.*

#### 6.2 Attainment of Program Outcomes and Program Specific Outcomes

Program Outcomes/Program Specific Outcomes is assessed by direct assessment and indirect assessment with weightage of 80% and 20% respectively. Direct assessment is based on attainment of COs and Indirect assessment is based on student activity points, technical events and program exit surveys.

*The process of PO/PSO attainment calculation is given in the assessment manual of the institute.*

### **6.3 Continuous improvement**

- Identify the areas of weaknesses in the program based on the analysis of PO / PSO attainment with respect to the target levels.
- Action plans are formulated for rectifying short falls for the attainment of PO/PSO.
- These plans are implemented through the teaching learning process and other co-curricular and extracurricular activities.
- The quality of teaching learning process and its assessment is ensured by the internal and external academic audit system.

### **6.4 Academic audit and actions taken**

- The Internal Quality Assurance Cell (IQAC) is a body to ensure the Quality of all academic activities of the institute.
- Principal nominated one senior faculty as the chairperson of IQAC and one faculty from each department as department IQAC coordinator.
- Meetings are conducted periodically to review the academic activities and to discuss the audit system.
- Internal and external auditing is done by academic auditors as per the guidelines of the university in compliance with the OBE norms and standards.
- Academic auditors are appointed by the principal in consultation with the HODs
- Internal Audit report is submitted to the respective HODs and to the principal by IQAC
- The internal audit is closed and submitted to the principal by incorporating all the corrections specified in the report.
- External audit is done by the University once in every semester.

- The auditors are appointed by the university.
- The external audit report is submitted to the principal by the university.

## **6.5 Documentation of the Teaching learning process**

### **6.5.1 Course -File Theory**

The teaching learning process of a course is documented as a course file. Course files are prepared and maintained by course instructors for each course. The file is to be submitted for approval of HoD and should contain the following.

- Department Vision and Mission
- Course diary
- Other details
- CO-PO/PSO Mapping Justifications
- Internal Examination 1 / Internal Examination 2
- Approved Question Paper
- QP Level Analysis
- Answer Key with Scheme of
- Evaluation
- Sample Answer Sheets
- Mark List & CO Attainment
- Assignment / Tutorials / Learning Activities
- Questions with submission date
- Level Analysis
- CO Mapping of all LAs
- Answer Key
- Sample Assignment Sheet
- All Answer Sheets of Make-up / Re-Test given (if any)
- Teaching Notes
- Learning materials provided /Micro/Mini projects/Simulation work given
- Previous Year University question papers
- KTU Uploaded Internals

- University Question Paper with Valuation Scheme and Answer Key
- University Result Analysis for the Course
- Final Attainment Calculations

#### **6.5.2 Course File -Laboratory**

Laboratory/workshop course files are prepared and maintained by the course instructors should contain the following.

- Approved course plan
- Continuous Evaluation sheet
- Sample QP/Answer sheets
- Sample Record (Rough, if any and fair)
- Target setting - cut off criteria (PAC approved)
- CO attainment and impact analysis report

## **7. STUDENT SUPPORT SYSTEM**

### **7.1. Library**

The Central Library of an institute serves as a pivotal hub for academic excellence and research, providing students and faculty with a vast array of resources essential for their educational pursuits. This institute has a central library named “Tagore library”. In addition to this, all the departments have their own department library.

Tagore Library contributes to the institution’s academic endeavours by enhancing the teaching, learning, and research experiences via well curated learning materials such as Textbooks, reference materials, print and online journals and other academic databases.

- Bibliographical details of the resources along with their Table of contents can be accessed via LAN, the link is as follows:  
<http://10.90.77.1:9001/>
- The designated study area offers a quiet environment for students. (Orange Zone)
- Searching of books in LAN with Koha Library catalogue. Barcode enabled Library Gate register
- Table of contents of all the books are provided in Koha OPAC
- It supports to students for self-learning activities
- D Space institutional repository/Digital library: provides access to previous year University Question Papers, Final year projects etc. via LAN. The link is: <http://10.76.4.2:9002/jspui/>  
(<http://10.76.4.2:9002/jspui/>)
- In addition to NPTEL contents online, additional 2TB HDD storage with videos and web courses for student access via LAN is provided.

Book Bank:

Book bank facility available for First Year students.

### **7.2 Advisory Systems**

#### **7.2.1 Faculty advisory system**

- All the students of the college are coming under this system from the date of joining the college.

- The Head of departments nominates two faculty members from the corresponding branch as faculty advisors for each batch of students.
- 30 students are assigned to a faculty advisor.
- The advisors get detailed information about the students in a counselling referral form which helps in one-to-one counselling sessions with the students.
- Each faculty advisor meets and communicates with their students weekly during the mentoring hour scheduled in the timetable.
- A student record is maintained by faculty advisor for effective monitoring of student progress.
- A complete track of the student activities like academic, curricular, co-curricular, extracurricular achievements, and social activities are registered in the record.
- Any discrepancies in the student behaviour like attendance, etc. will be taken care of.

### **7.2.2 Course committee / class committee**

#### **Class Committee**

All classes have class committees for every semester constituted by the respective Heads of Departments for monitoring the progress of the class.

#### **PROCEDURE**

- The course/ class committee is constituted by the HOD with the approval from Principal.
- The course/class committee chairman shall be a senior faculty member not offering the course or not teaching in the class. All faculty members handling the courses and 4 student representatives (2 boys and 2 girls) shall be members of the class committee.
- The class committees shall meet at least thrice in a semester- the first at the beginning of the semester, the second and third after the first and the second internal examinations respectively
- This committee shall monitor the conduct of the course(s), adherence to the course plan, effectiveness of teaching learning process, time schedule, standards of internal tests and evaluation process.

- The committee will also address the difficulties faced by students and will take suitable remedial actions, if required.
- At the end of the semester, the committee should meet without the student representatives to review the conduct of the course and finalise the internal assessment marks.

Class committee meetings are properly documented by the class committee chairperson.

### **Course Committee**

A Course Committee for all common courses is to be constituted for monitoring the progress of the courses. This committee is formulated by the course committee chair person with other faculty members taking the course and two representatives from each class offering the course. One senior faculty among the course faculty is appointed as the course committee chairperson. Course committee details are properly documented by the respective chair person.

### **Mentoring/Individual Development Plan**

Individual Development Plan (IDP) is a continuous mentoring process through which one faculty is assigned to mentor a group of 15 students. It relates primarily to identifying and nurturing potential for the whole person. It can be a long-term relationship, where the goals may change but are always set by the learner. The learner owns both the goals and the process. Feedback comes from within the mentee – the mentor helps them to develop insight and understanding through intrinsic observation. This takes the students to continuously evaluate their academic and career goals while seeking help from their mentors. The objective of IDP is to make students job/industry-ready. The college is providing training in some identified areas which will help students achieve their long-term and short-term goals created by them during their IDP mentoring sessions.

The main areas identified are:

- Self-assessment
- Academic Development
- Goal Setting
- Soft Skills/English language proficiency

- Aptitude
- Coding/Programming language

### **7.2.3 Anti-Ragging Committee**

The Anti-Ragging Committee of the institute plays a pivotal role in fostering a safe and conducive learning environment for all students. Established in accordance with regulations set forth by educational authorities, the committee is dedicated to preventing and addressing instances of ragging, which can adversely affect the mental and emotional well-being of newcomers. Comprised of faculty members, students, and administrative representatives, the committee emphasizes awareness, mentorship, and strict adherence to anti-ragging norms.

- Principal appoints one senior faculty as convenor of anti-ragging committee.
- The convenor constitutes a committee with all faculty and supporting staff to monitor the activities of students
- A schedule is prepared by the convener for all interval durations and evening time till 4.30pm
- This committee monitor the students as per the schedule and a report is submitted to the principal
- Actions are taken properly, for any issues reported.

In hostels

- Separate floors are provided for first year students in the hostel.
- Surveillance is kept by the manager/matron and wardens so as to ensure no ragging incidents occur.

In College Buses:

- A staff-in-charge is assigned to each college bus to ensure discipline. The staff members travelling in college buses are also directed to check the discipline in the bus.

### **7.2.4 Students Grievance Redressal Committee**

Students Grievance and Redressal Cell is a committee constituted by the principal for one year, for facilitating the resolution of student grievances fairly and impartially.

Objectives of Grievance Redressal Committee



- To ensure a fair, impartial and consistent way for redressal of issues faced by the students.
- To develop a responsive and positive attitude among the stakeholders to maintain a harmonious atmosphere in the college campus.
- To ensure that grievances are resolved with complete confidentiality.

#### Procedure for lodging complaint

The students may put up a grievance in writing and drop it in the Grievance Box or hand it to the members of the Cell. The Grievance Cell will ensure that the grievance has been properly solved within a stipulated time limit. The grievance cell shall find the facts and evolve a solution which is submitted to the principal for further action.

The students can report their grievances in the online portal

<http://www.mits.edugrievance.com/>

#### **7.2.5 Internal Compliance Committee(ICC)**

The Internal Compliance Committee is a committee among faculty and students constituted by the Principal as per the direction of the university for a period of one year to facilitate the resolution of grievances in a fair and impartial manner. As per Gazette notification No.F.91-1/2023(TFGS) dated 2.5.2016 of UGC directs affiliated institutes to form Internal Complaints committee for the prevention, prohibition and redressal of sexual harassment of women employees and students. The committee aims at fair and impartial redressal of issues faced by students. Constituted by a senior faculty as chairperson and two other faculty as members.

The institute has an efficient ICC with a senior faculty as the chairperson with faculty and students as members as per the norms.

#### **7.2.6 Staff Grievance Redressal Committee**

A staff grievance redressal committee is also constituted in the college to look into matters involving faculty and other non-teaching staff working in the institution. It is vital in maintaining a healthy and productive work environment. The committee addresses conflict resolution and achieve employee satisfaction.

### **7.2.7 Student's wellness and welfare centre**

To assist students in their academic, emotional, social and cognitive development.

An exclusive full-time faculty with designated qualification (PhD in psychology) is appointed as students' counsellor

- Facility for one-to-one interaction is provided in first year
- Special hours are allotted in first year time table to interact with the students.
- Special care is given to needy students of all semesters
- In addition to these sessions, invited talks are conducted for anti-drugs, professional ethics to make awareness among students
- Parental counselling sessions are also conducted for the needy cases.
- Counselling service for the staff is also provided.

### **7.2.8 Ethics Committee**

Ethics Committee is functioning in this campus in order to promote Ethical awareness and culture among students, faculty and staff. The core objective of Ethics Committee is to disseminate human values in the campus hence to empower the budding engineers to become promoters of value-based behaviour in their personal and professional life.

### **7.2.9 Disciplinary action committee (DAC)**

A Disciplinary Action Council (DAC) plays a crucial role in maintaining academic integrity, discipline, and ethical conduct within the institution.

Composed of a senior faculty member as chairperson and two other faculty as members. The committee is responsible for addressing violations of the institute's code of conduct. These violations can include academic misconduct, such as plagiarism or cheating, malpractices in internal examinations as well as behavioral issues like harassment or vandalism. The DAC investigates reported incidents, holds hearings, and determines appropriate actions ranging from warnings to suspension or expulsion, ensuring that fairness and due process are followed. Through its efforts, the council helps uphold the reputation of the institution and fosters a positive and productive learning environment.

### **7.2.10 Career Development Centre**

To provide placement and higher studies related activities to the students. The Career Development Centre has a full time Training & Placement officer and a Senior Assistant Professor for training and internal coordination of activities. A vibrant team is constituted with two faculty and student coordinators each from all departments to coordinate all activities related with training and placements. The team has developed an internal training curriculum and system for training interventions with much emphasis on employability skills

### **Career Guidance and Counselling for Higher Studies**

Career Guidance and Counselling is a structured developmental plan designed to assist students in making and implementing higher educational and career choices. The program aims to develop an individual's competencies in self-knowledge, educational and occupational exploration and career planning. Career Guidance and Career Planning impact the students mainly in two ways:

- To help them understand the basic interests and aptitude and thereby choose appropriate career opportunities pertaining to stream of study.
- Guide them with appropriate skills training to access better career opportunities.

The CDC centrally invites resource persons from different field of engineering to deliver expert talks on career options to students and faculties through guidance and career counselling seminars and workshops. The faculty team is an integral part of personal counselling exercises in helping:

- To identify academic roadmaps for their future.
- To get them acquainted with various career options through workshops, seminars and expert lectures.

### **Pre-Placement Training**

The key focus of the Career Development Centre is to prepare students for placements and internships. The students are expected to excel not only in technical knowledge but also in leadership, interpersonal skills and other attributes. The emphasis goes beyond soft skills, as the process follows a multifaceted and structured curriculum. The potential skill set requirements are identified early, and starting from the second year, MITS have a module at

par with industry standards to ensure that they evolve to be future ready. Training at MITS is a continuous process, having a dedicated internal team and not just limited to external interventions. The CDC in association with the faculty team handling communication skills has developed a year-long plan for assessment and in improving the language skills. Also, aptitude and programming skills are given equal weightage and a process flow is defined to ensure that the students attending the campus schedule in the final year will be acquainted with the process from early stages of the course. The technical skill evaluation is conducted in different phases and is made mandatory for all students appearing for the job placements.

### **Placement Procedure: Process & Support**

#### **Phase I**

- List of potential employers are prepared sector wise (IT, ITES, Core, Manufacturing, Analytics etc) much before the placement season.
- Company liaison process is streamlined based on the potential list based on sectors.
- Students register with the CDC as per the placement policy and norms stipulated.
- Placement cell sends the invitation, containing the relevant information to the companies/organizations through Email or personal visits.
- Companies/organization reverts with the confirmation to the invitation made by CDC with details of the profile.
- The CDC prepares a schedule for the placement process based on the credentials of the firm visiting, job profile and package offered by the company is a major point of consideration.
- The job description is made available to the students in addition to other information and details furnished by the company/organization.
- The company can send their confirmation on the campus drive with preferred dates.
- Suitable dates for Pre-Placement Talk (PPT) and recruitment are decided after discussions between the company and the CDC.

#### **Phase II**

- After confirmation from the company, students are notified about the date of the campus event.
- Interested students sign their willingness by registering for the company.
- The company stipulates the basic arrangements and facilities for the cordial conduct of the recruitment. Especially with virtual modes of hiring, basic IT infrastructure requirements are communicated in advance.

### **Phase III**

- Companies visit the campus on the given date and conduct the technical/aptitude test, group discussion/personal interview as part of their selection procedure.
- Video conferencing facilities at the campus can be availed for the purpose of interviewing candidates in case the company is unable to visit the campus.
- The company is required to furnish the final list of selected students as soon as possible after the final completion of procedure. They shall send the offer letters to the CDC office which would be handed over to the students or through direct mail responses to particular candidates.
- Jobs are registered against the selected students as per the placement policy.

#### **7.2.11 Entrepreneurship Cell**

The institute have multiple bodies to encourage and support entrepreneurship initiatives like:

- Centre for Industrial Consultancy, Inter disciplinary Research, Innovation & Entrepreneurship (CIDRIE)
- Institute of Electrical and Electronics Engineers (IEEE)
- Research and Consultancy cell (R & C Cell)
- MITS IPR Cell

#### **7.2.12 Centre for Industrial Consultancy, Inter disciplinary Research, Innovation & Entrepreneurship (CIDRIE)**

The centre will help to bring faculty and students together to develop, refresh and exercise their research skills by helping to solve real world

problems facing businesses, government and the community in general. The centre would primarily be having the following four goals:

- To teach applied research methods to students and interested faculty.
- To provide faculty with applied research opportunities.
- To produce high-quality low-cost information for the local stakeholders (the Institute, Muthoot Group, Small & Medium Industries and Businesses, Government Bodies, Social Welfare Workers, NGOs).
- Be an incubation centre for start-ups and help guide entrepreneurs.

The Centre is composed of the following functional units:

- Research Centre Advisory Board
- Research Centre Core Team
- Centres of excellence and Laboratories
- IT, Secretarial and Laboratory Staff
- Legal Counsel: Intellectual Property.

#### **7.2.13 Research and Consultancy cell (R & C Cell)**

The R&C Cell is pivotal in transforming the institution into centers of excellence, driving innovation and fostering meaningful contributions to science, technology, and society.

The R & C cell is pursued with the following objectives:

- To promote undergraduate research
- To establish the research culture among faculty and there by design and develop new technologies in their respective areas.

At Muthoot Institute of Technology and Science, above initiatives are to motivate the students and the faculty/staff of the institute, to update the knowledge mapping with the emerging technology trends and to handhold them towards research aspects. This kind of effort has been put in order to adapt with the dynamic growth of science or technology. With this, everyone is encouraged to do academic or industrial research thus involving in innovation or development, and to use the knowledge for consultancy with the industries. Research and Consultancy cell of all disciplines are working together to achieve this goal. The R & C cell of this college also takes initiatives in publications in conferences/journals organizing conferences, seminars and workshops.

Research and Consultancy cell has the additional responsibility of recommending and forwarding the requests for attending workshops/STTPs/Seminars/FDPs to the higher authorities and also the recommendation for the reimbursement of fee for presenting papers/attending conferences.

#### **7.2.14 IPR Cell**

The Intellectual Property Rights (IPR) Cell at Muthoot Institute of Technology and Science (MITS) was established to nurture innovation, creativity and the protection of intellectual assets within the institution. Recognizing the pivotal role of intellectual property in the advancement of technology and entrepreneurship, the IPR Cell serves as a catalyst for creating awareness, facilitating knowledge dissemination and offering support for filing and managing intellectual property rights. The major objectives are:

- Awareness Creation: Organize workshops, seminars and training programs to educate stakeholders on various aspects of intellectual property, including patents, copyrights, trademarks and industrial designs.
- Support for IPR Processes: Assist in the identification of patentable research, conducting prior-art searches and drafting patent applications.
- Promote Innovation: Encourage faculty and students to undertake cutting-edge research and translate their innovative ideas into intellectual property assets.

Governance: The MITS IPR Cell is overseen by an IPR Committee comprising internal and external members.

#### **7.3 Students Council**

A Student Council serves as an essential platform for student representation and engagement within an engineering institute. It embodies the principles of democracy, leadership, and collaboration among students, ultimately enhancing the educational experience and fostering a sense of community.

The Student Council elections are typically held annually, adhering to a democratic voting process. Different office bearers are elected through the class representatives, elected by the class.

Students' council is responsible for all the student activities of the institute.

### **7.3.1 Technical, Cultural and other Clubs**

Various efficient clubs are constituted to enhance the overall talents in students. The constitution of the clubs is formulated as per the following policy.

- Senior faculty is nominated as the convenor of the clubs
- Student coordinators are appointed by the convenor
- The activities of the clubs are executed as per the institute academic calendar

### **Tech Fest and Arts Fest**

Tech fest of the college called Shrestha; it includes both technical as well as inter college cultural events. There will be participation from multiple colleges for the inter college cultural events as well. Arts fest of the college called "VARNAM" is conducted in the college with various off stage and on-stage competitions among students. On stage events are conducted over a span of two days to the maximum. off stage events like essay writing, story writing, poetry writing etc., are conducted over a span of 3-4 days before the on-stage events begins. On-stage events organized during the arts fest include: Mr/Ms MITS, Voice of MITS, Thiruvathirakali, Nostalgia, Margamkali, Group Dance, and Theme Show etc. All the students of the college are assigned to any one of the four houses (red, green, yellow and blue) irrespective of their branch and year. Two faculty members are in charge of each house for their coordination.

Anti-Drug Awareness Campus club namely Vimukthi Club is functioning in the campus under the Centre for Student Wellness and Welfare (CSWW). The objective of the Club is to educate the students about the importance of drug free life and empower them to eradicate substance use for their overall wellness and wellbeing. In addition, this club having a good strength of student representatives, two students each from all the B. Tech and first year MCA classes.

### **Math Club of MITS**

The Math Club of MITS was constituted during the academic year 2016- 2017 to inculcate and enhance the mathematical skills for the student community



of MITS. The club activities are framed in a manner to rejuvenate the students in different angles namely to strengthen their thinking ability, exhibit their knowledge on Mathematics, efficiency in smart solving of problems etc. The students are given insight to new dimensions of Mathematics through various talks by eminent mathematicians, conducted by the club.

The club is constituted by a committee headed by a faculty convener and student representatives. The student representatives are annually elected by the committee. The student representatives and co-ordinator organize the events of the club. The enrolment to the club is made during the first semester and they continue to be the members through their entire academic course.

### **Quiz Club**

Quiz club at MITS aims at enhancing quizzing activities among students. It facilitates exposure to students who are passionate about quizzing and provides opportunity to revel in various sections of knowledge. Quiz Club activities include a vibrant array of various programmes like:

Induction or Orientation on quizzing for newly registered quiz club members at the beginning of every academic year.

Theme based quizzing activities like General Quiz, Quiz on Science and Technology, Literary Quiz, Movie Quiz, Sports Quiz etc. helps to explore the realms of knowledge in students whose areas of interest vary.

Annual conduct of Inter- Collegiate Quiz on “Trends in Science and Technology” on the birth anniversary of Late President of India, Dr. A P J Abdul Kalam.

### **Coding Club**

The coding club is a dynamic platform to students passionate about programming problem solving and technology. It fosters a collaborative environment where members can enhance their coding skills, algorithmic skills by learning new technologies.

The coding club successfully organized a highly engaging and challenging coding competition on 13

August 2024 called CODE CLASH, which aimed at participant’s problem solving and programming skills. The competition was held offline using Hacker-rank Platform where participants tackled a series of coding problems.

## **GDG- Google Developer Groups**

The club continues to foster an inclusive, dynamic environment where students can connect, learn, and grow. With a community of 882-chapter members and 12 core team members, the club organized a wide variety of events throughout the year, including workshops, seminars, hackathons, and technical sessions. These initiatives were designed to equip members with the skills and knowledge needed to excel in the ever-evolving tech landscape. GDG focuses on expanding opportunities for students to engage with emerging technologies, collaborate on innovative projects, and further develop their technical expertise. This annual report outlines the key achievements, milestones, and impact of GDG on Campus MITS over the past year, highlighting the club's continued growth and its contributions to the tech community at MITS.

## **7.4 Sports Activities**

### **Sports Facilities**

MITS has been maintaining a high standard in almost all games during Sports and Athletic Meets among engineering colleges in Kerala. We always have strived hard to excel in the fields of sports and games as in the academic arena. The annual Athletic Meet of the college is an important event where students participate in large numbers in field and track events. The Physical Education Department is giving systematic training and coaching for players in various games throughout the year. In order to give competitive experience and exposures MITS teams participate in all the Inter Collegiate Sports and Games Tournaments. The department of physical education organizes inter-house competitions to provide competitive experience, interactions with fellow collegians, teachers, juniors and seniors to develop friendship, commandership and championship.

The college has ample facilities for major games like Basketball, Volleyball, Football, Cricket, Throw-ball, kabaddi, Kho-Kho etc. and indoor games like Badminton, Table Tennis and Caroms. It also has a very well-furnished health club with excellent facilities for developing a fine and athletic body.

- Physical director of the institute will coordinate all the sports activities.

- Student coordinators are elected by the student council
- The activities are conducted as per the Institute calendar
- The students are divided in to four houses and a staff in-charge is appointed for each group. Each house selects a captain.
- The sports and games are conducted in line with the schedule itinerary and the winners are awarded prizes.
- Physical education director maintains a list of talented sports person based on earlier performances within and outside the college.
- As and when inter-collegiate/inter university sports and games activities are announced, the physical education director initiates necessary actions for intensified coaching.

#### **Inter Collegiate Meets:**

- The pamphlets, invitation, etc., received in connection with intercollegiate meet and such other programs are forwarded to the concerned in-charges.
- The circular shall be displayed on the notice board.
- A nominal roll of participants along with the details of events in which they are participating will be forwarded to concerned organizations.
- The participants should prepare for the competitions with the guidance of the staff-in-charge.
- After the preparation has been scrutinized and refined by the concerned staff, the students are ready for the participation.

#### **7.5 National Service Scheme**

The NSS unit of MITS is a very socially active body that upholds the NSS motto of "NOT ME BUT YOU" and enables the students to remain connected with the society and updated about their problems. The main aim of the unit is personality development through social service and to nurture a group of socially committed professionals.

Several social welfare programs, such as rural camps, annual special camps, health camps, blood donation camps, various awareness programs for students and the public, marathons, etc., are organized and conducted by the NSS unit of MITS periodically.

The institutional chapters of Tinker Hub also provide access to state-of-the-art facilities such as maker spaces, fabrication labs, and design studios. These facilities are equipped with advanced tools and equipment that allow students to turn their ideas into tangible prototypes and products. Apart from providing a platform for students to explore their creativity and innovation, the institutional chapters of Tinker Hub also promote entrepreneurship and encourage students to start their own ventures. The chapters offer mentorship, guidance, and support to students.

### **7.6 Bus/Transportation Committee**

- Transportation committee consists of a Convener and a staff –in-charge for each college bus. The committee meets periodically
- This committee looks after all the anomalies related to transportation
- The Convener supervises the daily bus operation and gives necessary instructions for smooth operation of college bus service.
- Staff –in-charge of the buses should ensure the discipline in the bus
- In case of any break down or other problems, the bus staff-in-charge should take appropriate steps and inform transportation committee Convener

## **8. PROFESSIONAL BODIES & DEPARTMENT ASSOCIATIONS**

### **8.1 Professional Body student chapters**

The institute has the following student chapters of the professional bodies.

- Association of Computing Machinery (ACM)
- IEEE
- American Society of Civil Engineers (ASCE)
- Indian Green Building Council (IGBC)
- Indian Concrete Institute (ICI)
- Society of Energy Engineers and Managers (SEEM)
- American Society of Mechanical Engineers ASME

### **8.2 Departmental Associations**

- Every department has departmental associations, to organize and conduct technical programs.
- HoD nominates one faculty member as coordinator of the association.
- Student members (one student from each class) are appointed by faculty advisors with the consent of HOD.
- Student secretary is nominated from this group by the faculty coordinator.
- The programs are conducted by departmental associations as per the program calendar

### **8.3 Student Chapters of professional bodies**

- Institute has Student chapters of national /international professional bodies to provide exposure, develop personality/technical ability and to update the Technical know- how.
- The principal nominates a senior faculty as the professional body convener to coordinate all the activities of all the professional body associations.
- Student coordinators are appointed by the HOD with the consent of principal.

- Student coordinators along with the other student members conduct all the activities scheduled as per the institute /department calendar
- The records of all the activities are documented by the faculty in charge.

## **9. NEWSLETTER**

### **MITS Newsletter**

Connect 2 MITS is the official newsletter of the institute, published biannually to highlight the achievements and accolades of our academic community, including both students and faculty. The editorial board consists of faculty members and is meticulously curated with the collaboration of a dedicated team of students ensuring a thorough and engaging representation of the institute achievements.

### **Department News Letter**

- The HoD appoints one faculty as editor of the department newsletter.
- The department activities within the semester are usually reported in the department newsletter. Forth coming activities of the department may also be highlighted in the newsletter.
- It is published once in a semester.

## **10. CANTEEN COMMITTEE**

- The committee is formed with representation from staff and students. It meets at least once in a month.
- The committee looks into the complaints and grievances regarding food and services in the canteen and calls for creative suggestions.
- The committee discusses ways and means of improving the canteen service.
- The committee should ensure availability of drinking water in the canteen.
- The committee should strictly monitor the food and services especially at the peak hours. The members should inspect the canteen and kitchen frequently for ensuring general cleanliness and hygiene.



## **11. HOSTEL COMMITTEE**

Institute has two hostels, one men's hostel (Adams) and one Ladies hostel(Eves). Hostel committee monitors all the activities in the hostels. The committee is constituted with the following members

- Principal
  - Chief wardens
  - Wardens of both hostels
  - Student representatives from all semesters of both hostels
  - Matrons/managers
  - Hostel administration team
  - Maintenance and cleaning team
  - Representatives of mess contractors
- The committee meets once in every month to discuss about the issues related to hostel.
  - All the shortfalls/any maintenance can be documented properly in the register kept in hostels.
  - These anomalies will be checked and rectified on a weekly basis
  - The committee should ensure proper maintenance and decorum of hostel.
  - The regular roll call is done by face recognition system through LMS-ET labs
  - All the leaves and exit from hostel are monitored through ET labs
  - The hostel committee has the right to amend/change/make new rules whenever required for the smooth functioning of the hostel.

## **12. ALUMNI ASSOCIATION (OSAM)**

The college has an alumni association functioning with entire MITS fraternity as members of the association.

Membership:

- Membership of staff is ex-officio. Teaching staff may opt to continue as members by applying and paying a nominal admission fee at the time of leaving the College.
- Former students can become members by remitting prescribed fee.
- Members can register their email id for receipt of mass communication.

Executive Committee: An executive committee is elected by the general body for a period of one year.

Management of the association activities is affected in accordance with the 'Bye-law' formulated.

Alumni interaction through online platforms may be set up. Feedbacks from alumni can be collected online.

Alumni meetings should be conducted at least once in a year.

### **13. FACULTY PERFORMANCE AND APPRAISAL**

Faculty selection is based on the HR policy mentioned in HR manual of the institute.

- Promotions are given based on the AICTE norms.
- A well-defined centralized system is available for the faculty performance evaluation of faculty.
- This is done regularly, once in a year and corrective actions are effectively implemented
- Academic achievements of the faculty are appreciated by giving attractive incentives.
- Faculty members are encouraged to attend short term training programs/workshops/seminars

## **14. INDUSTRY INSTITUTE INTERACTIONS**

The industry-institute interaction plays a crucial role in bridging the gap between academic learning and real-world applications. Through collaborations with industries, the institute facilitates internships, industrial visits, expert lectures, joint research projects, and consultancy services, ensuring that students gain practical exposure and hands-on experience with cutting-edge technologies. Such interactions help in curriculum development aligned with industry needs, enhancing students' employability and equipping them with the skills required for innovation and problem-solving. Additionally, partnerships with industries enable faculty development, knowledge exchange, and the promotion of entrepreneurship, fostering a culture of continuous learning and technological advancement.

### **14.1 Industrial visit**

Industrial visits are an integral part of an engineering institute's curriculum, providing students with first hand exposure to real-world industrial processes, technologies, and work environments. These visits bridge the gap between theoretical knowledge and practical application by allowing students to observe manufacturing units, research facilities, and operational workflows in various industries. They also offer insights into industry standards, safety protocols, and emerging technologies, helping students understand the challenges and expectations of the professional world. Additionally, industrial visits foster interactions with industry experts, enabling students to gain valuable guidance and career inspiration, ultimately enhancing their technical knowledge and employability.

- Institute encourages industrial visit for faculty and student.
- Industrial visits are conducted once in a semester based on the courses.
- Curriculum specifies industrial visits as part of their tours.
- Students are instructed to submit detailed reports of the industrial visits

## **14.2 Industry Internships**

Students are encouraged to do internships under the following initiatives:

- **Industry Partnerships:** Institutes collaborate with leading industries, research organizations, and government agencies to create structured internship programs that offer students hands-on experience in real-world projects.
- **Dedicated Internship Cells:** Institutes has a dedicated Career Development Cell (CDC) cells that connect students with companies, facilitate application processes, and ensure smooth onboarding.
- **Mandatory Internship Policies:** Institute has a mandatory internship policy as part of the curriculum to ensure students gain practical exposure.
- **MoUs with Companies:** Memorandums of Understanding (MoUs) with industries help secure regular internship opportunities for students across various disciplines.

## 15. INFRASTRUCTURE FACILITIES

The infrastructure facilities play a crucial role in shaping the educational experience and overall success of its students. The quality of the facilities is maintained properly by providing an efficient maintenance system. By implementing comprehensive quality control measures, institutes can not only protect their investments but also empower their stakeholders towards achieving academic excellence.

To maintain the standards in infrastructure facilities, a systematic approach to quality control is implemented, comprising the following key components:  
Regular Inspections and Assessments: Scheduled inspections of buildings, equipment, and other facilities are done by the maintenance team.

**Safety audit:** Safety audit is done by the safety audit team of the institute.

**Feedback Mechanisms:** Establishing channels for feedback from stakeholders for the identification of deficiencies and areas for enhancement. Surveys and suggestion boxes can be used to gather insights on infrastructure-related issues.