

# ACADEMIC REGULATIONS

for

**M.Tech(P.G)**

(w.e.f the academic year 2019-20)



## **LENDI INSTITUTE OF ENGINEERING & TECHNOLOGY**

An Autonomous Institution

Approved by AICTE & Permanently Affiliated to JNTUK, Kakinada

Accredited by NAAC with 'A Grade'

Jonnada(Vi), Denkada (Mandal), Vizinagaram-535005, Andhra Pradesh

Phone No.: 08922-241111, Fax: 08922-241112

Email: [lendi\\_2008@yahoo.com](mailto:lendi_2008@yahoo.com); [www.lendi.org](http://www.lendi.org)

## Academic Regulations for M.Tech (P.G) Courses

The following academic regulation will be applicable for the students of M. Tech (Regular) from the Academic Year 2019-20 onwards under Autonomous system. The M. Tech Degree shall be conferred on candidates who are admitted to the program and who fulfill all the requirements for the award of the Degree.

**1. Courses of Study:** The following courses of study are offered at present two years M.Tech Program

S. No	Branch	Course
01	Electrical and Electronics Engineering	Power System and Control Automation(PSCA)
02	Mechanical Engineering	Machine Design(MD)
03	Electronics and Communication Engineering	Embedded Systems & VLSI Design(ES&VD)
04	Computer Science and Engineering	Computer Science and Engineering(CSE)

**2. Eligibility For Admissions:**

The total seats available as per the AICTE approved intake are grouped into two categories (i.e) Category A and Category B in the ratio of 70:30 as per Andhra Pradesh State Council for Higher Education (APSCHE) in consonance with government reservation policy.

- Under Category A: 70% of the seats are filled through PG CET/GATE ranks through counseling conducted by APSCHE.
- Under Category B: 30% seats are filled on merit basis as per guidelines of APSCHE.

**3. Duration of the Programme:** The course duration for the award of the Degree in Master of Technology will be 2 academic years, with two semesters in each year. However, if a student is unable to complete the course within 2 years, he/she can do so by giving more attempts but within 4 consecutive academic years from the date of admission.

**4. Definition of Credit:**

1 Hr. Lecture (L) per week	1 credit
1 Hr. Tutorial (T) per week	1 credit
1 Hr. Practical (P) per week	0.5credits

**5. Award of M. Tech Degree:** A student will be declared eligible for the award of M.Tech. Degree if he/she fulfills the following academic regulations:

- a. A student pursues a course of study in not less than two and not more than four academic years.
- b. The student shall register for all 68 credits and secure all the 68 credits.

**6. Program Structure, Method of Evaluation & Distribution and Weightage of Marks**

The Outcome Based Curriculum Structure consists of courses of study viz. Theory, Practical, Comprehensive Viva-Voce, Seminar , Project stage-1, and Project stage 2 and Mandatory courses.

- a. **Theory Subject:** The performance of a student in each semester shall be evaluated subject – wise with a maximum of 100 marks for theory subject. The distribution

shall be 30 marks for Internal Evaluation and 70 marks for the Semester End - Examinations.

**(i) Internal Evaluation:**

- i. The internal evaluation shall be made based on the **average** of the marks secured in the two Mid Term-Examinations conducted-one in the middle of the Semester and the other immediately after the completion of instruction.
- ii. Each midterm examination shall be conducted for a total duration of 120 minutes with 3 questions (with internal choice) each question for 10 marks.
- iii. As the syllabus is framed for 5 units, the 1<sup>st</sup> mid examination is conducted in 1-2 ½ units and second test in 2 ½ -5 units of each subject in a semester.

**(ii) Semester End - Evaluation:**

- i. The end semester examination is conducted covering the topics of all Units for 70 marks. And the question paper contains 5 Questions with internal choice.
- ii. The question paper contains 5 Questions with internal choice. A student should be answered all Questions and each carrying 14 marks.

- b. **Practical Subject:** The performance of a student in each semester shall be evaluated subject – wise with a maximum of 75 marks for practical subject. For practical subjects there shall be continuous evaluation during the semester for 25 internal marks and 50 end semester examination marks.

**(i) Internal Evaluation:** The internal 25 marks shall be awarded as follows: day to day work - 10 marks, Record-5 marks and the remaining 10 marks to be awarded by conducting an internal laboratory test.

**(ii) External Evaluation:** The end examination shall be conducted by the teacher concerned and an external examiner nominated by the Controller of Examinations (CoE). The end examination shall be conducted by the examiners, with a breakup marks of Procedure-10, Experimentation-20, Results-10, Viva-voce-10.

- c. **Seminar:** There shall be a seminar presentation during III semester. The student shall make an oral presentation before the Project Review Committee consisting of Head of the Department and two other senior faculty members of the department. For each Seminar there will be only internal evaluation of 50 marks. A candidate has to secure a minimum of 50% of marks to be declared successful.

- d. **Mandatory Courses/Audit Courses:** Mandatory courses/Audit Courses are among the compulsory courses and do not carry any credits.

- i. All the students shall complete the mandatory courses similar to other regular courses.
- ii. The weightage of Mandatory Courses for 50 consists of Descriptive examination
- iii. The Descriptive examination is for 90 minutes duration conducted for 50 marks. Each Descriptive type test question paper shall contain 3 questions and all questions need to be answered.
- iv. Marks can be calculated with for **average** of the two Mids examinations.
- v. The results will be indicated with “Satisfactory” and it will not be accounted

- for the calculation of CGPA.
- vi. Student shall be declared to have passed the Mandatory Courses/ Audit Courses only when he/she secures 40% or more in the final marks. In case, the student fails, a re-examination on descriptive shall be conducted for failed candidates every six months/semester at a mutually convenient date of the college/students.
  - vii. The internal evaluation will be conducted. No external evaluation will be conducted .

Marks Percentage	Letter Grade	Level	Grade Point
≥ 40%	SA	Satisfactory	0
<40%	US	Un-Satisfactory	0

- e. **Evaluation of Project/Dissertation Work:** Every candidate shall be required to submit a thesis or dissertation on a topic approved by the Project Review Committee.
  - i. **Project Review Committee:** A Project Review Committee (PRC) shall be constituted with Head of the Department, project co-ordinator and two other senior faculty members.
  - ii. **Registration of Project Work:** A candidate is permitted to register for the project work after satisfying the attendance requirement of all the subjects in the first year, both theory and practical.
  - iii. **Project Work Approval:** After satisfying (ii) a candidate has to submit, in consultation with his project supervisor, the title, objective and plan of action of his project work for approval. The student can initiate the Project work, only after obtaining the approval from the Project Review Committee (PRC).
  - iv. **Change Supervisor or Topic:** If a candidate wishes to change his supervisor or topic of the project, he can do so with the approval of the Project Review Committee (PRC). However, the Project Review Committee (PRC) shall examine whether or not the change of topic/supervisor leads to a major change of his initial plans of project proposal. If yes, his date of registration for the project work starts from the date of change of Supervisor or topic as the case may be.
  - v. **Project Assessment:** Continuous assessment of Dissertation-I and Dissertation-II during the Semester(s) will be monitored by the PRC.
  - vi. **Stages of Project:** A candidate shall submit his status report in two stages to the PRC, at least with a gap of 3 months between them.
  - vii. **Requirements of Project Submission:** The work on the project shall be initiated at the beginning of the II year and the duration of the project is two semesters. A candidate is permitted to submit Project Thesis only after successful completion of theory and practical course with the approval of PRC not earlier than 40 weeks from the date of registration of the project work. The candidate has to pass all the theory and practical subjects before submission of the Thesis.
  - viii. **Project Stage-1:** The curriculum offers Project Stage-1 for the students during 3<sup>rd</sup> semester and the Dissertation-I will be evaluated by a committee as nominated by HOD constituted with members.
    - a. The Internal Evaluation shall be on the basis of seminar given by each student on the topic of his project and evaluated by an internal committee.
    - b. The results will be indicated with grades: O. Outstanding, A. Excellent B. Very Good C. Good D. Satisfactory F. Unsatisfactory.

- c. In case, the student fails (F Grade), the student re-submits the project record after three months and obtain any grade other than F.
- ix. **Project Stage-2:** The curriculum offers Project Stage-2 for the students during 4<sup>th</sup> semester and the Dissertation-II will be evaluated by PRC.
- Three copies of the Project Thesis certified by the supervisor shall be submitted to the Institute.
  - The thesis shall be adjudicated by one examiner selected by the CoE. For this, the HOD shall submit a panel of 3 examiners, eminent in that field, with the help of the guide concerned.
  - If the report of the examiner is not favourable, the candidate shall revise and resubmit the Thesis, in the time frame as decided by the PRC. If the report of the examiner is unfavorable again, the thesis shall be summarily rejected. The candidate has to reregister for the project and complete the project within the stipulated time after taking the approval from the CoE.
  - If the report of the examiner is favourable, Viva-Voce examination shall be conducted by a board consisting of the Supervisor, Head of the Department, project co-ordinator and the examiner who adjudicated the Thesis. The Board shall jointly report the candidate's work for a maximum of 100 marks as one of the following: O. Outstanding, A. Excellent B. Very Good C. Good D.Satisfactory F. Unsatisfactory. The Head of the Department shall coordinate and make arrangements for the conduct of Viva-Voce examination.
  - If the report of the Viva-Voce is unsatisfactory, the candidate shall retake the Viva-Voce examination only after three months. If he fails to get a satisfactory report at the second Viva-Voce examination, the candidate has to re-register for the project and complete the project within the stipulated time after taking the approval from the CoE.
  - M.Tech students shall publish on research paper in UGC approved Journal/Peer Reviewed index Journal or present a research paper in national/internal Conferences/seminars.

No	Course	Credits	Marks for Assessment	
			Internal	Semester End
1	Theory Course	3	30	70
2	Laboratory	2	25	50
4	Seminar	2	50	-
5	Project work stage-1	8	Grade	-
6	Project work stage-2	16	Grade	Grade
7	Mandatory Courses	0	50	-

#### 7. Attendance:

- A student shall be eligible to write semester end examinations if he acquires a minimum of 75% of attendance in aggregate of all the subjects.
- Condonation of shortage of attendance in aggregate up to 10% (65% and above and below 75%) in each semester shall be granted by the College Academic Committee. Further, he acquires a minimum of 50% of attendance in each the subject.
- Shortage of Attendance below 65% in aggregate shall not be condoned.
- Students whose shortage of attendance is not condoned in any semester are not eligible

- to write their end semester examination of that class.
- e. A prescribed fee shall be payable towards condonation of shortage of attendance.
  - f. A student shall not be promoted to the next semester unless he satisfies the attendance requirement of the present semester, as applicable. They may seek readmission into that semester when offered next. If any candidate fulfills the attendance requirement in the present semester, he shall not be eligible for readmission into the same class.

**8. Minimum Academic Requirements:** The following academic requirements have to be satisfied in addition to the attendance requirements mentioned in item no 7.

- a. A candidate shall be deemed to have secured the minimum academic requirement in a subject if he secures a minimum of 40% of marks in the End semester Examination and a minimum aggregate of 50% of the total marks in the End Semester Examination and Internal Evaluation taken together.
- b. In case the candidate does not secure the minimum academic requirement in any subject he has to reappear for the End semester Examination in that subject. A candidate shall be given one chance to re-register for each subject provided the internal marks secured by a candidate are less than 50% and has failed in the end examination. In such a case, the candidate must re-register for the subject(s) and secure the required minimum attendance. The candidate's attendance in the reregistered subject(s) shall be calculated separately to decide upon his eligibility for writing the end examination in those subject(s). In the event of the student taking another chance, his internal marks and end examination marks obtained in the previous attempt stand cancelled. For re-registration the candidates have to apply to the University through the college by paying the requisite fees and get approval from the University before the start of the semester in which reregistration is required.

**9. Cumulative Grade Point Average (CGPA)**

Marks Range Theory (Max – 100)	Marks Range Lab (Max – 75)	Letter Grade	Level	Grade Point
≥ 90	≥ 67	O	Outstanding	10
≥80 to <90	≥60 to <67	A	Excellent	9
≥70 to <80	≥52 to <60	B	Very Good	8
≥60 to <70	≥45 to <52	C	Good	7
≥50 to <60	≥37 to <45	D	Satisfactory	6
<50	<37	F	Fail	0
			Absent	0

**Computation of SGPA**

The following procedure is to be adopted to compute the Semester Grade Point Averagae. (SGPA) and Cumulative Grade Point Average (CGPA):

The SGPA is the ratio of sum of the product of the number of credits with the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student, i.e.,

$$SGPA (S_i) = \sum (C_i \times G_i) / \sum C_i$$

Where  $C_i$  is the number of credits of the  $i$ th course and  $G_i$  is the grade point scored by the student in the  $i$ th course.

**Computation of CGPA**

- The CGPA is also calculated in the same manner taking into account all the courses

undergone by a student over all the semester of a programme, i.e.

$$\text{CGPA} = \frac{\sum (C_i \times S_i)}{\sum C_i}$$

Where  $S_i$  is the SGPA of the  $i^{\text{th}}$  semester and  $C_i$  is the total number of credits in that semester.

- The SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts.
- Equivalent Percentage =  $(\text{CGPA} - 0.75) \times 10$

#### 10. Award of Degree and Class

After a student has satisfied the requirements prescribed for the completion of the program and is eligible for the award of M. Tech. Degree, he/she shall be placed in one of the following four classes:

Class Awarded	CGPA to be secured	From the CGPA secured from 68 Credits.
First Class with Distinction	$\geq 7.75$ (Without any supplementary Appearance)	
First Class	$\geq 6.75$	
Second Class	$\geq 5.75$ to $< 6.75$	
Pass Class	$\geq 5.00$ to $< 5.75$	

**11. WITHHOLDING OF RESULTS** If the student has any case of indiscipline is pending against him, the result of the student will be withheld. His degree will be withheld in such cases.

#### 12. TRANSITORY REGULATIONS

- Discontinued or detained candidates are eligible for readmission into same or equivalent subjects at a time as and when offered.
- The candidate who fails in any subject will be given two chances to pass the same subject; otherwise, he has to identify an equivalent subject as per academic regulations.

#### 13. GENERAL

- Wherever the words “he”, “him”, “his”, occur in the regulations, they include “she”, “her”, “hers”.
- The academic regulation should be read as a whole for the purpose of any interpretation.
- In the case of any doubt or ambiguity in the interpretation of the above rules, the decision of the Principal is final.
- The institute may change or amend the academic regulations or syllabi at any time and the changes or amendments made shall be applicable to all the students with effect from the dates notified by the Institution.