PART - A

G. PULLA REDDY ENGINEERING COLLEGE (Autonomous): KURNOOL Affiliated to Jawaharlal Nehru Technological University Anantapur, Ananthapuramu

Rules & Regulations for Two-Year Master of Technology Course (With effect from the batch admitted in 2017-2018) - Scheme – 2017

1 Minimum Qualifications For Admission

Admission to M.Tech courses is open to all candidates who have passed B.E/B.Tech course (in relevant specialization) or any other examinations recognized by Jawaharlal Nehru Technological University Anantapur, Anantapuramu/ Govt. of A.P as equivalent thereto.

Admission into M.Tech courses will be as per the guidelines of AICTE – Government of A.P – and Jawaharlal Nehru Technological University Anantapur, Ananthapuramu in force at the time of admission.

2 **Programmes of Study**

The programmes of study prescribed for M.Tech Degree are

- 1. M.Tech (Thermal Sciences & Energy Systems)
- 2. M.Tech (CAD / CAM)
- 3. M.Tech (Communications & Signal Processing)
- 4. M.Tech (VLSI & Embedded Systems)
- 5. M.Tech (Power Electronics)
- 6. M.Tech (Structural Engineering)
- 7. M.Tech (Computer Science and Engineering)
- 8. Any other course offered by the college in future
- 2.1 The duration of M.Tech program is of two academic years divided into four semesters comprising two semesters in each academic year. A student is required to choose the specialization at the time of admission. No change of the specialization shall be allowed after the admissions are closed.
- 2.2 A student is required to complete the course of study satisfying the attendance requirements in all the four semesters of the course within a period of four academic years from the year of admission, failing which he/she shall be declared ineligible to pursue M.Tech degree

Completing the course of study shall mean not only satisfying the attendance requirements but also passing of all the courses within the stipulated period.

3 Structure of the Programme

- (a) Every programme will have a curriculum with a syllabi consisting of theory, practical, dissertation work, etc., as given below:
 - i. Programme core courses in Engineering / Technology
 - ii. Elective courses of Engineering / Technology
 - iii. Dissertation work
- (b) Each course is normally assigned a certain number of credits as follows
 - (i.) One credit per lecture period per week

- (ii.) One credit for two tutorial periods per week
- (iii.) Two credits for 2 or 3 periods of laboratory practice per week
- (iv.) Twelve credits for Dissertation work

3.1 Course Work

The programmes are offered on a semester basis consisting of four semesters.

- (i) The first semester and second semester consists of Five/Six Theory courses course, Two/One Laboratory Course and One Audit Course
- (ii) During the third and fourth semesters the candidates pursue the dissertation work
- (iii) Only on completion of all the prescribed courses, the candidates will be permitted to submit the thesis/dissertation. Four copies of the dissertation certified in the prescribed form by the supervisor and concerned HOD shall be submitted to the college.
- (iv) The dissertation work will be adjudicated by one external examiner appointed by the chairman of board of studies with the approval of the Principal.
- (v) The medium of instruction for all Course work, Examination, Seminar Presentation, Project reports and all academic activities shall be English.

4 Attendance Requirement

Regular course of study means a minimum aggregate attendance of 75% in all the courses including Audit course in the semester put together. The aggregate attendance in any semester is calculated as (total number of classes attended by the student in all the courses of that semester put together divided by the total number of classes held in all the courses of that semester put together) multiplied by 100.

Condonation of shortage of attendance in genuine cases on health grounds may be recommended by the Principal, if a student puts in an aggregate attendance of at least 65%. However the student has to make an application and pay the prescribed fee.

A student who has not satisfied these requirements of attendance in any semester shall have to repeat that semester. The attendance under this clause does not include attendance at any examination/test/extra-curricular activities/co-curricular activities.

Students who represent the college in inter collegiate tournaments organized by JNTUA and those who represent University or State or nation shall be given attendance exemption as per the University/Government norms.

4.1 Eligibility for appearing for the end examinations:

All the students who satisfy the attendance requirements in that semester shall register for the end examinations of that semester by paying the prescribed examination fee. However, they have to clear all the dues to the college before they collect their hall tickets. It is mandatory for all the eligible students to apply for the regular end examinations failing which they have to pay all the preceding examinations fee with fine as prescribed by the college, if they wish to appear for next examination

5 Evaluation

5.1 **End Examination**

- i.) The performance of the candidate in each semester shall be evaluated course wise, with a maximum of 100 marks for each Theory or Practical courses.
- ii.) For the theory courses 60 marks will be for the End Examination, 40 marks will be for Continuous Internal Assessment. The question paper for end examination shall consist of 8 questions for 12 marks each and the student shall answer any five questions. (5×12)
- iii.) For each practical course the end examination with duration as specified in the scheme shall be conducted for 50 marks by the faculty who has handled the practical for the class and another internal faculty with expertise in the relevant specialization

5.2 Internal Assessment

For theory courses, out of 40 marks 25 marks are awarded based on the performance of the students in two sessional examinations with the first sessional conducted in the middle of the semester and the other towards the end of the semester. There shall be two sessional exams for 40 marks each. The marks shall be finalized with a weightage of 0.75 for the better score and 0.25 for the other score and shall be reduced to 25.

The sum of marks obtained in the four assignments shall be reduced to 10 and remaining 5 marks out of 40 are allotted for seminar.

The sessional marks computed as per the above procedure will be finally rounded off to next higher integer. The question paper for sessional examinations shall consist of 6 questions and the student shall answer any four questions.

For practical courses, 50 marks are awarded based on day to day work and internal lab examination

5.3 Requirement for clearing any course

- (i) The students have to obtain a minimum of 50 % marks in the end examinations and also minimum 50% of marks in the sum of the continuous internal assessment and end examination taken together, otherwise they will be awarded grade-F in that course. F is considered as a fail grade indicating that the student has to reappear for the end examination in that course and obtain a non fail-grade for clearing that course.
- (ii) In other words to pass in a course, a student shall score 30 marks or more out of 60 marks in the end examination and also shall score 50 marks or more out of 100 in the end examination and the continuous internal assessment put together.
- (iii) Apart from the regular end examinations, the college may also schedule and conduct supplementary examinations for all courses for the benefit of students with backlogs. Such of the students writing supplementary examinations as supplementary candidates, may have to write more than one examination per day.
- (iv) There is no provision for improvement of grade in any course of any semester. A student who has already appeared for a course in a semester and passed the examination is not entitled to reappear in the same course for improvement of letter grades.

6 Distribution of weightages for End Examination and Internal Continuous Assessment

S. No.	Nature of course	Marks	Type of examination and mode of assessment	Scheme of examination
1	Theory	60	End examination	This end examination in theory courses will be for a maximum of 60 marks.
		40	Continuous Internal Assessment	There shall be two sessional exams for 40 marks each. The marks shall be finalized with a weightage of 0.75 for the better score and 0.25 for the other score and shall be reduced to 25. 10 marks shall be awarded based on
				four assignments. Remaining 5 marks are allotted for seminar.
2	Practical	50	End Examination	This end examination in practical courses will be for a maximum of 50 marks.
		50	Continuous Internal Assessment	Day to Day Performance in lab experiments / viva voce, internal practical examination and Record.
3	Dissertation	50	External examination	Quality of report, Presentation of the report, Viva Voce Examination.
		50	Continuous Internal Assessment	Dissertation Evaluation Committee comprising HOD, Senior faculty of the department and Guide / Supervisor shall assess the performance of the candidate based on four reviews, conducted at equal intervals of time during the 3 rd and 4 th semesters.
4	Audit Course			Audit Course shall not carry any credit but will be reflected in Grade sheet as "Audit" course and shall not be considered in the CGPA calculation. For calculating aggregate attendance, the attendance in the audit courses shall also be included.

7 Guidelines for Project Work

- (i) After successful completion of the second semester, the candidate shall continue the dissertation work during the third and fourth semesters under the supervision of faculty member of the department within the college or the candidate may carry out the dissertation work in any reputed R&D organization, industry etc.
- (ii) Even when the candidate opts to carry out the dissertation outside the college, he will be allotted a faculty member as a guide to coordinate the reviews. The person from the outside organization supervising the dissertation work may be called co-guide.
- (iii) The candidate preferring to carry out the dissertation at an outside organization should produce a permission letter and No Objection Certificate (NOC) from the organization along with willingness of co-guide from the organization (whose research interests are same as the thesis work) at least three weeks before the commencement of third semester and should take the approval of the HOD/Principal for the same, failing which the candidate will be deemed to be carrying out the dissertation work in the college.
- (iv) The candidate carrying out the dissertation work either in the college or at an outside organisation, is required to attend review meetings conducted by the department. The candidate is allowed to submit the dissertation work only after the review meetings.
- (v) Within 10 days of the commencement of the third semester, the candidate is required to give an undertaking in the prescribed proforma to the effect that he will not take up any job during the dissertation period. If a candidate is found to be doing a job during the third-fourth semester, his/her admission will be cancelled.
- (vi) The candidates who are eligible for drawing stipend have to assist the department in conducting the practical classes, tutorials etc. for undergraduate students. They are eligible for only 20 days of casual leave in an academic year. Any excess leave or absence without any permission will automatically attract deduction of proportionate amount from their stipend.
- (vii) One Journal paper publication (or) one conference paper presentation is desirable to submit the dissertation work.
- (viii) Student shall also submit a certificate that his/her dissertation work being submitted is free from plagiarism. Students shall not resort to plagiarism of any nature/extent. Use of material, ideas, figures, code or data without appropriate acknowledgement or permission of the original source shall be treated as cases of plagiarism. Submission of material, verbatim or paraphrased, that is authored by another person or published earlier by oneself shall also be considered as cases of plagiarism
- (ix) The candidate has to clear all the dues before submitting the dissertation work.
- (x) After completing the dissertation work the candidate should take the confirmation of project completion from the guide allotted by the department, HOD and Co-guide from the organization where applicable
- (xi) Only on completion of all the prescribed course work, the candidates will be permitted to submit the thesis/dissertation. Four copies of the thesis / dissertation certified in the prescribed form by the supervisor shall be submitted in the examination section of the college. The candidate should also submit the soft copy of the dissertation work.
- (xii) A viva-voce examination shall be conducted by a board consisting of the HOD, the supervisor and one external examiner.

8 Semester Grade Point Average(SGPA) and Cumulative Grade Point Average(CGPA):

The Semester Grade Point Average (SGPA) for each semester and Cumulative Grade Point Average (CGPA) up to any semester are calculated as follows:

(i) First the marks obtained in each course will be converted to a corresponding letter grade and the grade points will be assigned as given below.

Table – Grades conversion and Grade points assigned

Range in which the marks in the course fall	Grade	Grade points assigned
≥95	S	10
90 to 94	A1	9
85 to 89	A2	8.5
80 to 84	A3	8
75 to 79	B1	7.5
70 to 74	B2	7
65 to 69	В3	6.5
60 to 64	C1	6
55 to 59	C2	5.5
50 to 54	СЗ	5
<50	F	0
ABSENT	AAA	0

ii.) Semester Grade Point Average will be computed for each semester as follows:

$$SGPA = \frac{\sum_{i=1}^{n} C_i \ X \ GP_i}{\sum_{i=1}^{n} C_i}$$

Where C_i = Credits for the course, GP_i = the Grade Point obtained for the course and the summation is over all the courses in that semester and n is the number of courses in that semester.

iii.) Cumulative Grade Point Average (CGPA) will be computed at the end of each semester. The CGPA would give the cumulative performance index of a student from the first semester up to the end of the semester to which it refers and calculated as follows.

$$CGPA = \frac{\sum_{j=1}^{m} SGPA_{j} \times TC_{j}}{\sum_{j=1}^{m} TC_{j}}$$

Where 'm' is the number of semesters under consideration. TC_j is the total number of credits for a particular semester and $SGPA_j$ is the Grade Point Average of that semester. Both GPA and CGPA will be rounded off to the second place of decimal and recorded as such.

iv.) While computing the SGPA/CGPA, the courses in which the candidate is awarded Zero grade points will also be included.

For any academic/employment purpose the following formulae shall be used for conversion of CGPA to % of marks by the formula:

% of marks =
$$(CGPA - 0.5) \times 10$$

8.1 Grade Sheet

A grade sheet (Memorandum) will be issued to each student indicating his performance in all courses taken in that semester/year in the form of grades and also indicating the SGPA and CGPA.

8.2 *Transcripts*

After successful completion of the entire course of study, a Transcript containing performance of all semesters will be issued as a final record. Duplicate transcripts will also be issued if required after the payment of requisite fee. Partial transcript will also be issued up to any semester of the program to any student on request and on payment of the requisite fee in force.

8.3 Award of M.Tech Degree

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

- (i) Pursue a course of study for not less than **four** semesters and not more than **eight** semesters.
- (ii) Satisfies all the minimum academic requirements in appropriate branch and specialization in each semester prescribed herein after.
- (iii) Register for all the courses and earn the credits specified.
- (iv) Has no dues to the institution, library, hostels etc
- (v) Has no disciplinary action pending against him/her.

9 Minimum Academic Requirements

9.1 A candidate shall be deemed to have satisfied the minimum academic requirement in each theory, if he/she scores not less than 50% marks in the end examinations and also minimum 50% of marks in the sum of the internal evaluation and end examination taken together. However a minimum CGPA of 5.0 is required for the award of Degree.

- 9.2 A candidate shall be declared to have satisfied the minimum academic requirements and has become eligible for the award of degree if he/she fulfills each of the following conditions.
 - (i) Satisfies minimum requirements as stated in 9.1
 - (ii) Satisfies the minimum requirement of attendance as stipulated in clause 4
 - (iii) Satisfies all other regulations, academic or otherwise stipulated by the college from time to time.

10 Award of Degree and Class

A Candidate shall be eligible for the award of respective degree if he/she satisfies the minimum academic requirements in every course and shall be awarded one of the classes given below based on CGPA obtained by him/her.

Class awarded	CGPA
First Class with Distinction	≥7.5
First Class	\geq 6.5 and < 7.5
Second Class	\geq 5.0 and < 6.5

Withholding of Results

The result of a candidate shall be withheld if:

- i) He/She has not cleared any dues to the Institution / Hostel / University
- ii) A case of disciplinary action against him/her is pending disposal.

12 Exam Hall Culture

- (i) Students are not permitted to use mobile phones in the examination halls.
- (ii) Any attempt by any student to influence the examiners, faculty and staff or Controller of Examinations for undue favours in the exams, and bribing them either for marks or attendance will be treated as malpractice cases and the student can be debarred from the college.
- (iii) When a student absents himself/herself, he/she is treated as to have appeared and obtained zero marks in that course(s) and Grading is done accordingly.
- (iv) When a student's answer book is confiscated for any kind of attempted or suspected malpractice, the decision of the examination committee is final.

13 Conditions of Promotion

A student shall be eligible for promotion to the succeeding semester if he/she satisfies the minimum attendance requirements in the current semester as given in clause 4.

14 Minimum Instruction Days:

Each semester shall consist of 15 instruction weeks excluding the days allotted for examinations

15 Transitory Regulations

Candidates who have been detained for want of attendance are eligible for readmission into the respective semester and shall be governed by the curriculum and academic regulations in force at the time of rejoining.

16 Amendment of Regulations

The college may, from time to time, revise, amend or change the regulations, scheme of examinations and syllabi.

17 Ragging

Ragging of any kind is strictly prohibited. A Student who indulges in ragging shall be punished as per the provisions of the ragging act.

18 Rules of Discipline

- 1. Use of mobile phones with camera, in the campus is strictly prohibited.
- 2. Students shall behave and conduct themselves in a dignified and courteous manner in the campus/Hostels
- 3. Students shall not bring outsiders to the institution or hostels
- 4. Students shall not steal, deface, damage or cause any loss to the institution property
- 5. Students shall not collect money either by request or coercion from others within the campus or hostels.
- 6. Use of vehicles by the students inside the campus is prohibited.
- 7. Any conduct which leads to lowering of the esteem of the organization is prohibited.
- 8. Any student exhibiting prohibited behaviour shall be suspended from the institute. The period of suspension and punishment shall be clearly communicated to the student. The student shall lose the attendance for the suspended period
- 9. Dress Code

Boys: All the boy students should wear formal dresses. Wearing T-shirts and Other informal dresses in the campus is strictly prohibited.

Girls: All the girl students shall wear saree/churidhar with dupatta

19 General

The academic regulations should be read as a whole for purpose of any interpretation.

- i.) The college reserves the right of altering the regulations as and when necessary. The regulations altered may be applicable to all the Candidates on rolls.
- ii.) Wherever the word he, him or his occur, it will also include she, her, hers.
- iii.) Whenever ambiguities arise in interpreting the regulations, the joint board of studies shall have the powers to issue clarifications and/or to make new rule for removing such ambiguities which shall be final.