

# Academic Regulations-2019 for M.Tech. Programmes

Applicable for students admitted from 2019-20 academic year onwards  
(UNDER CHOICE BASED CREDIT SYSTEM EFFECTIVE FROM 2019-20 ADMITTED BATCH)



## **GAYATRI VIDYA PARISHAD COLLEGE OF ENGINEERING (A)**

**Affiliated to JNTU Kakinada, Kakinada  
2019**

These Regulations shall be called the “GayatriVidyaParishad College of Engineering (Autonomous) Regulations- 2019 for the Award of M.Tech. Degree”.

These regulations shall be applicable for students enrolling for M.Tech. Degree programs at the Institute from Academic Year 2019-20.

Admission to the above program shall be made subject to the eligibility, qualifications and specialization as per the guidelines prescribed by the APSCHE, AICTE and JNTU-K from time to time. The medium of instruction for course work and examinations at the Institute shall be English.

The duration of the programme for the Master of Technology degree will be two academic years, with two semesters in each year. However, if a student cannot complete within 2 years, he/she can do so by taking more time but not more than 4 years from the year of first admission.

### 1. STRUCTURE OF THE PROGRAMME:

Semester	No. of courses& Corresponding Credits	Credits	
I	3 Theory + PE-I+ PE-II + Research Methodology & IPR + 1 Core Lab + 1 Core Lab (Elective)	3*3 + 3+3+2+1.5+1.5	20
II	3 Theory + PE-III+ PE-IV + Open Elective+1 Core Lab + 1 Core Lab (Elective)	3*3 + 3+3+2+1.5+1.5	20
III	Pedagogy / Industrial Training + Two Audit courses + Dissertation (Phase-I)	1*2+2*0 +10	12
IV	Dissertation (Phase-II)	16	16
<b>TOTAL</b>			<b>68</b>

**PE:** Professional Elective;

1 credit for 1 lecture period per week.

1 credit for 2 laboratory periods per week.

Audit Courses carry no credits.

### 2. REGISTRATION:

A student shall register for courses in each semester at the beginning, from I semester onwards according to the choice provided and courses offered by the concerned department.

### **3. ATTENDANCE REQUIRMENTS:**

It is desirable for a student to put up 100% attendance in the class in all the courses including Audit courses and Industrial training/Pedagogy training. However, a student shall be permitted to appear for the end semester examinations, provided he/she puts up a minimum average attendance of 75% from all the courses registered in the semester. However, condonation for shortage of attendance between 65-74% may be given on medical grounds, if a certificate to the extent is submitted to the HOD when the student first returns to the classes. The student concerned will be permitted to take the end semester examination, on payment of condonation fee. Attendance may also be condoned as per the State Government rules for those who participate in prestigious sports, co-curricular and extra-curricular activities provided their attendance is in the minimum prescribed limits for the purpose and as recommended by the authorities concerned.

Attendance against each course will be indicated in the marks memo by a letter grade as follows:

Attendance	Grade
90% and above	<b>A</b>
75% to 89%	<b>B</b>
65% to 74%	<b>C</b>
below 65%	<b>D</b>

A student who gets less than 65% attendance on an average from all the courses in any semester shall not be permitted to take the end semester examination and his/her registration for that semester stands cancelled. The student shall re-register for that entire semester when offered next and then continue the course of study from that semester onwards.

### **4. METHOD OF EVALUATION:**

The performance of a student in each semester shall be evaluated with a maximum of 100 marks.

**4.1(a) Theory:** For all the professional core, professional elective, open elective and Research Methodology & IPR courses, the assessment shall be for 40 marks through Continuous Internal evaluation and 60 marks through end-semester examination of three hours duration. For audit courses, the assessment shall be only through end-semester examination of three hours duration for 60 Marks.

**4.1(b) Continuous Internal evaluation:** One part of the internal evaluation shall be made based on the average of the marks secured in the two internal examinations of 30 marks each conducted one in the middle of the Semester and the other at the end of the semester. Each mid-term examination shall be conducted for duration of 90 minutes with 3 questions without any choice. The remaining 10 marks are awarded through an average of two assignments / seminars / any other method, as notified by the teacher at the beginning of the semester.

**4.1(c) End-semester examination:**For theory courses under Professional Electives, Open Electives,Audit courses and Research Methodology & IPR, the question paper shall be set internally and evaluation shall be totally internal. For allthe other theory courses,the question paper shall be set externally and valued both internally and externally.

Each answer script shall be evaluated by two examiners. If the difference between the first and second valuations is less than or equal to 9 marks (15% of 60 marks), the better of the two valuations shall be awarded. If the difference between the first and second valuation is more than 9 marks, the third examiner shall value the script. The marks given by the third examiner shall be final.

**4.2Laboratory:** All Laboratory courses shall be evaluated for 100 marks, out of which for 40 marks through continuous internal evaluation and for 60 marks through external end semester examination. The 40 internal marks are distributed in two cycles as 20 marks for day-to-day work and 20 marks for internal examination. The internal examination shall be conducted by the teacher concerned and another faculty member once for each cycle of instruction period and average of the two shall be considered for award of marks. 10 out of 12 to 16 experiments/exercises shall be completed in a semester.

**4.3 Audit Courses:**Attendance in audit courses is compulsory. Pass is not mandatory for award of degree. Only attendance grade shall be displayed in the marks memo.

**4.4Pedagogy training/ Industrial training** shall be for a period of atleast 4 weeks during III semester and a report has to be submitted. The assessment shall be carried out for 100 marks by an internal evaluation committee comprising Head of the Department, Faculty advisor and another faculty of the department.

**4.5 Supplementary examinations:** Supplementary examinations for the odd semester shall be conducted with the regular examinations of even semester and vice versa.

**4.6Re-registration for failed courses:** A candidate shall be given one chance to re-register for a maximum of two failed courses(s) of M.Tech. programme, where in the internal marks secured by a candidate are less than 50%. The re-registration is permitted only after completion of II semester as and when the subject(s) are offered. In the event of re-registering, the internal marks and end semester examination marks obtained in the previous attempt are nullified.

## **5. EVALUATION OF DISSERTATION WORK:**

Every candidate shall be required to submit the dissertation after taking up a topic approved by the Departmental Research Committee (DRC).

- a. A Departmental Research Committee (DRC) shall be constituted with HoD as Chairman, two senior faculty (at least one from each specialization) as members along with the supervisor to oversee the progress of the dissertation work from selection of topic to submission.
- b. A Central Research Committee (CRC) shall be constituted with a Professor as Chair Person and one representative from each department nominated by the Principal.
- c. Registration of Dissertation Work: A candidate shall register for the Dissertation work at the beginning of the second year, only after satisfying the attendance requirement of all the courses upto II semester. The duration of the dissertation work is for two semesters.
- d. After satisfying 5c, a candidate has to submit, in consultation with the supervisor, the title, objective and plan of action of dissertation work to the DRC for its approval. Only after obtaining the approval of DRC, the student can initiate the dissertation work.
- e. Change of topic of the dissertation work or supervisor, if necessary, shall be with the approval of the DRC. In such case, the date of registration for the dissertation work shall be the date of change of Supervisor or topic.
- f. Evaluation of the dissertation shall be done in two phases, one at the end of the III Semester and the other during the IV Semester.
- g. The evaluation of the dissertation (Phase-I) at the end of III semesters shall be carried out through DRC1 for 100 marks based on the presentation made by the student on the topic selected, literature survey and the progress of the work. The student shall PASS in dissertation work (Phase-I) by securing at least 50 marks. Otherwise, the student shall reappear for DRC1 with improvised work to secure PASS. Only those students who secure a PASS in dissertation work (Phase-I) shall be permitted to proceed for the dissertation work (Phase-II) in IV semester.
- h. The evaluation of the dissertation (Phase-II) during IV semester shall be carried out for a total of 100 marks through DRC2 (20 marks), DRC3 (20 marks), CRC (10 marks) and final viva-voce examination (50 marks).
- i. A candidate shall be permitted to submit his/her dissertation only after acquiring credits of all theory and practical course with the approval of CRC but not earlier than 40 weeks from the date of registration of the project work. The candidate shall make an oral presentation before the CRC and after the approval by CRC, plagiarism check shall be conducted for the Dissertation and shall submit a draft copy to the Principal through the concerned Head of the Department.
- j. Three copies of the dissertation certified by the Supervisor shall be submitted in the department after approval by the CRC.
- k. For the purpose of adjudication of the dissertation, an external examiner shall be selected by the Principal or his nominee from a panel of examiners in the program specialization proposed and approved in the BoS meeting.

- l. The final evaluation of dissertation (Phase-II), i.e., viva-voce examination, for 50 marks, shall be conducted by a board consisting of the supervisor, Head of the Department and the external examiner.
- m. A student is deemed to be passed in dissertation (Phase-II) of IV semester, if he secures at least 25 marks (50%) in the final viva-voce examination and at least 50 marks (50%) out of a total 100 marks through DRC2, DRC3, CRC, and final viva-voce examination. If a student fails in Dissertation (Phase-II), he/she shall revise and resubmit the dissertation, in a time frame prescribed by the CRC.
- n. The overall grade for dissertation shall be computed as the weighted average of the grades secured in Phase-I (III semester) and Phase-II (IV semester).

#### 6. ACADEMIC REQUIREMENTS:

- a. For all the courses (both theory and laboratory), a student is deemed to be passed if he secures at least 24 marks (40%) in the end semester examination and 50 marks (50%) from both internal and end semester examination put together.
- b. For Pedagogy Training / Industrial Training having examination / evaluation at the end, a student is deemed to be passed if he secures at least 50 marks (50%).
- c. For dissertation work, the student shall PASS in both Phase-I and Phase-II.
- d. A student shall secure a PASS in all courses (except in audit courses) and earn 68 credits to be eligible for the award of the M.Tech. degree.

#### 7. GRADING SYSTEM:

Absolute grading system shall be followed for the award of grades.

**Grade Point:** It is a numerical weight allotted to each letter grade on a 10-point scale.

**Letter Grade:** It is an index of the performance of students in a said course. Grades are denoted by letters O, A+, A, B+, B and F.

Based on the marks secured, a Letter Grade is awarded as per the following:

**Grades and Grade Points**

Marks Range	Letter Grade	Grade Point
90-100	O (Outstanding)	10
80-89	A+ (Excellent)	9
70-79	A (Very Good)	8
60-69	B+ (Good)	7
*50-59	B (Fair)	6
-	F (Fail)	0
-	Ab (Absent)	0

\* Pass mark

The award of CLASS / DIVISION is as per the following:

First class with distinction      CGPA    7.75

First class	6.75	CGPA < 7.75
Second class	6.00	CGPA < 6.75

**CGPA to Percentage of Marks Conversion:**

At the end of the Programme, Equivalent percentage of marks = (CGPA-0.75)\*10

**Computation of Semester Grade Point Average (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 in a semester, i.e

$$\text{SGPA } (S_i) = (C_i \times G_i) / C_i$$

where  $C_i$  is the number of credits of the  $i^{\text{th}}$  course and  $G_i$  is the grade point scored by the student in the  $i^{\text{th}}$  course.

The CGPA is also calculated in the same manner taking into account all the courses undergone by a student over all the semesters of a programme, i.e.

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

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.

Transcript for each semester shall be issued containing letter grades and grade points along with attendance grade, for each of the courses registered, SGPA of that semester and CGPA up to that semester. Marks will not be displayed on the transcript.

A consolidated transcript indicating the performance in all semesters shall also be issued.

**8. AWARD OF M.TECH. DEGREE:**

A student shall be declared eligible for the award of the M.Tech. degree, if he pursues the course of study and shall earn **68** credits in not less than two academic years and not more than four academic years from the year of first admission.

**9. WITHHOLDING OF GRADES:**

The Grades of a student in a semester shall be withheld and not declared if the student has disciplinary action pending against him/her.

#### **10. TRANSITORY REGULATIONS:**

- a. A candidate who has been detained for want of attendance is eligible for admission to the same or equivalent course(s) as and when course(s) is/are offered.
- b. Credit equivalences shall be drawn for the students re-admitted into 2019 regulations from the earlier regulations. A Student has to register for the substitute / compulsory / pre-requisite courses identified by the respective Boards of Studies.
- c. The student has to register for substitute courses, attend the classes and qualify in examination and earn the credits.
- d. The student has to register for compulsory courses, attend the classes and qualify in examination.
- e. All other academic requirements shall be in accordance with the regulations under which the student was first admitted.

#### **11. General:**

- i. Where the words 'he', 'him', 'his', occur, they imply 'she', 'her', 'hers', also.
- ii. The academic regulation should be read as a whole for the purpose of any interpretation.
- iii. In the case of any doubt or ambiguity in the interpretation of the above rules, the decision of the Chairman, Academic Council is final.

The college may change or amend the academic regulations or syllabi from time to time and the changes or amendments made shall be applicable to all the students with effect from the dates notified by the college.

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