# ACADEMIC REGULATIONS FOR M. TECH PROGRAMMES

(UNDER CHOICE BASED CREDIT SYSTEM EFFECTIVE FROM 2022-23 ADMITTED BATCH)

# **REGULATIONS 2022 (R-22)**



# **GAYATRI VIDYA PARISHAD COLLEGE OF ENGINEERING**

(Autonomous) Madhurawada, Visakhapatnam 530048 Affiliated to Andhra University, Visakhapatnam These Regulations shall be called the "Gayatri Vidya Parishad College of Engineering (Autonomous) Regulations- 2022 for the Award of M. Tech. Degree".

These regulations shall be applicable for students enrolling for M.Tech. Degree programmes at the Institute from Academic Year 2022-23.

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 Andhra University 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
	3 Theory + PE-I + PE-II + Research	3*3+3+3+2+1.5+	
Ι	Methodology & IPR + 1 Core Lab +	$3 \cdot 3 + 3 + 3 + 2 + 1.5 + 1.5$	20
	1 Core Lab (Elective)	1.5	
II	3 Theory + PE-III + PE-IV + Open Elective + 1	3*3+3+3+2+1.5+	20
11	Core Lab + 1 Core Lab (Elective)	1.5	20
	Pedagogy / Industrial Training +		
III	Two Audit courses +	1*2 + 2*0 + 10	12
	Dissertation (Phase-I)		
IV	Dissertation (Phase-II)	16	16
TOTAL			68

**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:**

- i. A student shall be eligible to appear for end semester examinations if he/she acquires a minimum of 75% of attendance in aggregate of all the subjects in a semester.
  - In the case of students who participate in activities like NSS, NCC, sports, intercollegiate tournaments conducted at National level/State Level/ University Level with prior approval

of the Principal, the candidate may be deemed to have attended the college during the actual period of such activity, solely for the purpose of attendance.

- Participating in the seminar, workshop, conference with prior approval of the Principal, the candidate may be deemed to have attended the college during the actual period of such activity, solely for the purpose of attendance permission. The maximum period of such events is limited to 10 days.
- In the case of students admitted under special circumstances (late admission / transfer etc.,), the candidate shall attend at least 50% of the total classes held during semester and shall have attended at least 75% of the total classes held from the date of admission.
- ii. Condonation for shortage of attendance in aggregate up to 10% (65% and above and below 75%) in each semester may be granted on medical grounds. A stipulated fee shall be payable to the college towards condonation of shortage of attendance.
- iii. Students whose shortage of attendance is not condoned in any semester are detained and are not eligible to take their end semester examination of that class and their registration shall stand cancelled.
- iv. A student will not be promoted to the next semester unless he/she satisfies the attendance requirements of the present semester, as applicable. They shall seek readmission and continue his course of study from that semester when offered next.
- v. Attendance against each course will be indicated in the marks memo by a letter grade as follows:

Attendance	Grade
90% and above	А
75% to 89%	В
65% to 74%	С
below 65%	D

Letter grade "E" shall be awarded in case of attendance grade for online courses / any other certificate course offered by external agency.

# 4. METHOD OF EVALUATION:

The performance of a student in each semester shall be evaluated subject-wise with a maximum of 100 marks for each theory, practical and dissertation work.

**4.1(a) Theory**: For all the professional core, professional elective, open elective and Research Methodology & IPR courses, the assessment shall be for 30 marks through Continuous Internal evaluation and 70 marks through end-semester examination of three hours duration.

**4.1(b)** Continuous Internal Evaluation: One part of the internal evaluation shall be made based on weighted average (2:1, with the higher score carrying a weightage of 2) of the marks secured in the two internal examinations of 20 marks each conducted one in the middle of the Semester and the other at the end of the semester. 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 and Audit courses, the question paper shall be set internally and valued internally through single valuation.

For all the other theory courses, the question paper shall be set externally and valued both internally and externally.

- i. If the difference between the first and second valuations is less than or equal to 10 marks (15% of 70 marks), the better of the two valuations shall be awarded.
- ii. If the difference between the first and second valuation is more than 10 marks (15% of 70 marks), the third examiner shall value the script. Out of the three valuations, the average of marks obtained in third valuation and the marks obtained nearer to third valuation out of first two valuations shall be considered.

# 4.1(d) Revaluation:

Revaluation of any theory subject / course shall be entertained within a stipulated period on payment of specified fee.

**4.2 Laboratory**: All Laboratory courses shall be evaluated for 100 marks, out of which for 50 marks through continuous internal evaluation and for 50 marks through external end semester examination. The 50 internal marks are distributed as:

25 marks for day-to-day work (day-wise performance including observation, viva and record/reports etc.) and 25 marks from two internal examinations. The internal examination shall be conducted by the teacher concerned and another faculty member once for each cycle 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:

A student shall register for the audit courses (as approved in BoS) in online (MOOCs) / offline mode and appear for examination to be conducted by the college. Pass is not mandatory. Only attendance grade shall be displayed in the marks memo.

- i. The students may be permitted to register for audit course under MOOCs ahead of the corresponding regular semester based on the start dates of course by external agencies.
- ii. If the audit course is not offered under MOOCs during the specified semester, the same or its equivalent course under MOOCs may be offered in blended mode.

**4.4 Pedagogy training** / **Industrial training:** shall be for a period of at least 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.

**4.6 Re-registration for failed courses**: A candidate shall be given one chance to re-register for a maximum of two failed courses of M.Tech. programme, the re-registration is permitted only after completion of III 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. However, the students who avail this provision are eligible for PASS / SECOND CLASS / FIRST CLASS only.

# 5. EVALUATION OF DISSERTATION WORK:

Every candidate shall be required to submit the dissertation work 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 up to 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 work 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 work (Phase-I) at the end of III semester 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 work (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 Dissertation 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 (Similarity Index shall not exceed 30%) 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.
- 1. 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 Dissertation Grade Point Average (DGPA), shall be computed based on the grade points secured in Phase-I (III semester) and Phase-II (IV semester) as:

#### $DGPA = \Sigma(C_i \times G_i) / \Sigma C_i$

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

# 6. ACADEMIC REQUIREMENTS:

- a. For all the theory courses, a student is deemed to be passed if he secures at least 28 marks (40%) in the end semester examination and 50 marks (50%) from both internal and end semester examination put together.
- b. For all the laboratory courses, a student is deemed to be passed if he secures at least 25 marks (50%) in the end semester examination and 50 marks (50%) from both internal and end semester examination put together.
- c. 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%).
- d. For dissertation work, the student shall PASS in both Phase-I and Phase-II.
- e. 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.
- f. A student shall register for the audit courses (as approved in BoS) in online / offline mode and appear for examination to be conducted by the college.

# 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 A+, A, B, C, D and F.

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

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

#### **Grades and Grade Points**

\* Pass mark

Class Awarded	CGPA Secured
First class with distinction	≥ 7.5
	(within two years and without any supplementary appearance)
First class	$\geq 6.5$
Second class	$\geq$ 6.0 and < 6.5

#### CGPA to Percentage of Marks Conversion:

At the end of the Programme, Equivalent percentage of marks = (CGPA - 0.5)\*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

#### **SGPA** (S<sub>i</sub>) = $\Sigma$ (C<sub>i</sub> x G<sub>i</sub>) / $\Sigma$ C<sub>i</sub>

where  $C_i$  is the number of credits of the i<sup>th</sup> course and  $G_i$  is the grade point scored by the student in the i<sup>th</sup> 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.

$$\mathbf{CGPA} = \Sigma(\mathbf{C}_i \mathbf{X} \mathbf{S}_i) / \Sigma \mathbf{C}_i$$

where  $S_i$  is the SGPA of the i<sup>th</sup> 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 / she pursues the course of study and satisfies the following:

- i. Earn **68** credits in not less than two academic years and not more than four academic years from the year of first admission.
- ii. Earn a minimum of 6.0 CGPA from all courses.
- iii. No disciplinary action pending against him / her.
- iv. Pay the prescribed fee for all the years.

# 9. WITHHOLDING OF RESULT:

The result 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:**

- 1. When a student is detained due to lack of credits / shortage of attendance, he / she may be re-admitted after fulfillment of academic requirements and as and when the semester is offered. In such case, he / she shall be in the academic regulations into which he / she is readmitted.
- 2. Credit equivalences shall be drawn for the students re-admitted into latest regulations from the earlier regulations. A Student has to register for the substitute / compulsory / pre-requisite courses identified by the respective Boards of Studies.
- 3. The student has to register for substitute courses, attend the classes and pass in examination and earn the credits.
- 4. The student has to register for compulsory courses, attend the classes and pass in examination.
- 5. For the subject(s) failed in earlier semesters (before re-admission), the student has to acquire credits from the supplementary examinations as and when conducted.
- 6. In case of transferred students from other University / College, an equivalent course structure shall be prepared by the BoS of the respective department considering the suitable credits already acquired at the previous institution.
- 7. The students detained in earlier Regulations (under JNTU-K affiliation) and to be readmitted into R-22 Regulations (under AU affiliation) shall also follow the above guidelines subjected to the approval from both the Universities.
- 8. The decision of the Principal is final on any other clarification in this regard.

#### 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.
- iv. 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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#### MALPRACTICES RULES DISCIPLINARY ACTION FOR / IMPROPER CONDUCT IN EXAMINATIONS

	Nature of Malpractices/Improper conduct	Suggested maximum Punishment*
	If the candidate:	
1. (a)	Possesses or keeps accessible in examination hall, any paper, note book, programmable calculators, Cell phones, pager, palm computers or any other form of material concerned with or related to the subject of the examination (theory or practical) in which he is appearing but has not made use of (material shall include any marks on the body of the candidate which can be used as an aid in the subject of the examination)	Expulsion from the examination hall and cancellation of theperformance in that subject only.
1. (b)	Gives assistance or guidance or receives it from any other candidate orally or by any other body language methods or communicates through cell phones with any candidate or persons in or outside the exam hall in respect of any matter.	Expulsion from the examination hall and cancellation of the performance in that subject only of all the candidates involved. In case of an outsider, he will be handed over to the police and a case is registered against him.
2.	Has copied in the examination hall from any paper, book, programmable calculators, palm computers or any other form of material relevant to the subject of the examination (theory or practical) in which the candidate is appearing.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted to appear for the remaining examinations of the subjects of that Semester/year. The Hall Ticket of the candidate is to be cancelled.
3.	Impersonates any other candidate in connection with the examination.	The candidate who has impersonated shall be expelled from examination hall. The candidate is also debarred and forfeits the seat. The performance of the original candidate who has been impersonated, shall be cancelled in all the subjects of the examination (including practicals and project work) already appeared and shall not be allowed to appear for examinations of the remaining subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat. If the imposter is an outsider, he will be handed over to the police and a case is registered against him.
4.	Smuggles in the Answer book or additional sheet or takes out or arranges to send out the question paper during the examination or answer book or additional sheet, during or after the examination.	Expulsion from the examination hall and cancellation of performance in that subject and all the other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.
5.	Uses objectionable, abusive or offensive language in the answer paper or in letters to the examiners or writes to the examiner requesting him to award pass marks.	Cancellation of the performance in that subject.
6.	Refuses to obey the orders of the Chief Superintendent/Assistant – Superintendent / any officer on duty or misbehaves or creates disturbance of any kind in and around the examination hall or organizes a walk out or instigates others to walk out, or threatens the officer-in charge or any person on duty in or outside the examination hall of any injury to his person or to any of his relations whether by words, either spoken or written or by signs or by visible representation, assaults the officer-in- charge, or any person on duty in or outside the	In case of students of the college, they shall be expelled from examination halls and cancellation of their performance in that subject and all other subjects the candidate(s) has (have) already appeared and shall not be permitted to appear for the remaining examinations of the subjects of that semester/year. The candidates also are debarred and forfeit their seats. In case of outsiders, they will be handed over to the police and a policecase is registered against them.

7.	examination hall or any of his relations, or indulges in any other act of misconduct or mischief which result in damage to or destruction of property in the examination hall or any part of the College campus or engages in any other act which in the opinion of the officer on duty amounts to use of unfair means or misconduct or has the tendency to disrupt the orderly conduct of the examination. Leaves the exam hall taking away answer script or intentionally tears the script or any part thereof insideor outside the examination hall.	Expulsion from the examination hall and cancellation of performance in that subject and all the other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.
8.	Possess any lethal weapon or firearm in the examination hall.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred and forfeits the seat.
9.	If student of the college, who is not a candidate for the particular examination or any person not connected with the college indulges in any malpractice or improper conduct mentioned in clause 6 to 8.	Student of the colleges expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred and forfeits the seat. Person(s) who do not belong to the College will be handed over to police and, a police case will be registered against them.
10.	Comes in a drunken condition to the examination hall.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year.
11.	Copying detected on the basis of internal evidence, such as, during valuation or during special scrutiny.	Cancellation of the performance in that subject and all othersubjects the candidate has appeared including practical examinations and project work of that semester/year examinations.
12.	If any malpractice is detected which is not covered in the above clauses 1 to 11 shall be reported to the Committee appointed by the Principal for further action and impose suitable punishment.	

Suitable punishment shall be awarded based on the recommendations of a committee constituted in this regard.

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#### Prohibition of ragging in educational institutions Act 26 of 1997

#### Salient Features

- > Ragging within or outside any educational institution is prohibited.
- Ragging means doing an act which causes or is likely to cause Insult or Annoyance of Fear or Apprehension or Threat or Intimidation or outrage of modesty or Injury to a student.





- 1. Ragging is prohibited as per Act 26 of A.P. Legislative Assembly, 1997.
- 2. Ragging entails heavy fines and/or imprisonment.
- 3. Ragging invokes suspension and dismissal from the College.
- 4. Outsiders are prohibited from entering the College and Hostel without permission.
- 5. Girl students must be in their hostel rooms by 7.00 p.m.
- 6. All the students must carry their Identity Cards and show them when demanded
- 7. The Principal and the Wardens may visit the Hostels and inspect the rooms any time.