

RULES AND REGULATIONS
(Applicable from the academic year 2011-12)
M. Tech. Programmes
(After 15th Senate meeting of 13th August 2011)



S.G.G.S. Institute of Engineering and Technology,
Vishnupuri, Nanded, 431606

Registration and Performance Requirements for the award of the M. Tech. Programme

Academic Programmes of the Institute are governed by Rules and Regulations as approved by the Senate, which is the highest Academic body of this Institute. The Senate continuously monitors these programmes and makes appropriate modifications / improvements from time to time.

The academic system is semester based and hence the students are required to follow certain procedures and meet certain academic requirement each semester. It is in the interest of the students that he/she should be fully familiar with the academic systems of this Institute.

Particular attention should be paid to the assessment procedure, rules governing the systems and academic performance. The academic performance is monitored by **Post Graduate Academic Performance Evaluation Committee (PGAPEC)**, which also reviews status of individuals after reviewing their performance.

Program Committees: The following sections provide the details of the programmes and set of rules governing them. In order to keep pace with the rapid developments in science and technology and also to keep in view the requirements of the nation and the aspirations of students, it is imperative that the academic programmes of the Institute are reviewed continuously.

The PGAPEC is entrusted with this responsibility. It deliberates upon academic proposals received from the various Departmental Postgraduate Committees (DPGCs) and makes suitable recommendations to the Senate for its approval. The Table 1 gives the various programmes and specializations, which are available presently at the Institute.

Table 1: PG Programmes

Sr. No.	PG programs	Specialization
1	Civil Engg.	Water Management
2	Electronics Engg.	
3	Instrumentation Engg	
4	Mechanical	CAD/CAM
5	Product Life Cycle Management	
6	Information Technology	
7	Computer network and information security	

M. TECH. PROGRAMMES

These programmes are of four-semester duration. The total minimum credit requirement for the entire programme varies from one programme to another. The total number of credits for a hypothetical programme is shown in Table 2.

The total credits are divided between course credits and the project credits, and as specified by the individual DPGCs.

Course credits include theory courses, laboratory courses, seminars and other academic work like practical training,

field visits, etc. as specified. A programme may have a mix of compulsory and elective courses.

Table 2 gives, as an example, the structure of the M. Tech. Programme for the hypothetical Department. The credits are distributed over four semesters.

1. Admission and Registration

Admissions to the various Programmes are made as per the AICTE rules and regulations. The details are given in admission brochure of respective department. Once a candidate is selected for M. Tech. Programme, he/she has to register for first semester immediately. Registration is compulsory at the start of each semester as per the schedule announced in the academic calendar. Late registration with late fees is permitted only for valid reasons excluding the first semester. It is compulsory to clear all dues before the registration. A student has to register for the courses (Core and Elective as given in the courses of study booklet of the department)

Minimum number of students required for an elective course: There should be at least four registrations in an elective course.

Table 2: A General Programme Structure

Credits	Credits in Semester				Total
	I	II	III	IV	
Course Work					
Core Courses	8	8			16
Elective	12	12			24
Lab Course	5	5			10
Seminar	2	2			04
Project	-	-	24	24	48
Total	27	27	24	24	102

2. Withdrawals and Dismissals from the Institute

- 2.1 A student may be permitted to withdraw on medical/very exceptional reasons during the semester. A student who wants to withdraw from a course(s) shall apply through the Chairman, DPGC, to the Dean (Acad.), on a prescribed form within one week from the end of the Minor Examination and it will be recorded in the registration record of the student. The concerned Course Coordinator(s) will be informed about it. The student will be awarded a withdrawal grade at the end of the semester.
- 2.2 If a student does not register for a regular semester his/her name will be struck off from the rolls of the Institute.
- 2.3 The student will have to leave the Institute if he/she is found guilty of malpractice in examinations, involvement in ragging and overall misconduct during

his /her tenure in the institute. The action regarding the above would be taken as per the recommendations of the Disciplinary Committee constituted.

3. Examination Scheme

A student shall be evaluated for his/her academic performance in a course through tutorials, practicals, home work as assignments, term papers, field work, seminars, quizzes, Minor Examinations, and the End-Semester Examination (Major), as applicable according to the guidelines formulated for this purpose.

- In the first academic year of the programme, there will be one Mid-Term Examination of 30 marks (1 hour 30 minutes duration) in every theory course during each semester (excluding summer term), which shall be held at the end of 7th week.
- At the end of the semester there would be an End-Term Examination of 70 marks (3 hours duration) in each theory course.
- The distribution of weight for each component shall be decided and announced by the Course Coordinator at the beginning of the course, subject to such stipulations as are given in the Scheme of Teaching and Examination for a given programme.
- Except summer term, the end-term examinations of theory and practicals of first and second semester will be conducted only at the end of respective semesters.
- The end-term practical examination shall be performed by panel of two examiners for each practical course. In this examination weightages will be, 50-50, for continuous evaluation in the semester and the oral, respectively.
- The Seminar shall be evaluated through the quality of work carried out, the report submission and the presentation(s). The project/Dissertation work shall be evaluated as discussed in the section 8.5.

3.1 Re-examination

If the student misses the major/end-term practical examination of odd semester, excluding summer term, due to illness or accident, his application for re-examination must be supported by proper medical certificate duly approved by medical authority. In the event of death of parent or guardian, the application should be supported by adequate evidence of the same.

Any student who fails to apply for re-examination in the prescribed manner will be declared as failed in those courses. The chairman DPGC is empowered to take decisions to handle such issues. **However, after the reexamination, in no case the highest grade awarded will exceed B+.**

3.2 Summer Term

- 3.2.1 About summer term: The student who has failed to clear theory courses/practicals in the regular two semesters of an academic year will be allowed to reappear in the Summer Term which will be held in the summer vacation, by payment of necessary fees on a specified date.
- 3.2.2 Fee for reappearing in the Summer Term is Rs. 200/- per theory course or practical.
- 3.2.3 Examinations in the Summer Term: The end summer examination of 100 marks will be held for theory courses at the end of summer term.
- 3.2.4 The end summer practical examination of 100 marks (three hours duration) will be held after theory examination. This shall be performed by panel of two examiners for each practical course. In this evaluation, weightages shall be, 50-50, for performance of the student in implementation of the practical assigned and oral, respectively.
- 3.2.5 However, in no case the highest grade awarded will exceed B in the summer term.

3.3 Re-appearing:

- ✚ Student can **reappear** in the theory and/or practicals in which he/she has secured F grade, by the payment of necessary fee and he/she can reappear for end-term examinations of theory and practicals of first and second semester, which will be conducted at the end of first and second semester, respectively.
- ✚ The theory courses for which the student is reappearing shall appear for mid-term of 30 marks (1 hour and 30 minutes duration) and the end-term examination of 70 marks (3 hours). The total marks obtained by the student out of 100 **shall be used for the calculation of new grade, which will not exceed B.**
- ✚ The end term practical examination of reappearing students shall be conducted with regular student's practical examination. This examination will be of 100 marks and the weightages shall be 50-50, for the performance of the student in the implementation of the practical assigned and the oral, respectively. However, in no case the highest grade awarded will exceed B.
- ✚ The Chairman DPGC shall submit one hard copy of result duly signed by the members of DPGC, to the controller of examinations after end-term examination and will also preserve one copy in the department.

4 Attendance

- 4.1 Attendance in classes for all the subjects is compulsory and should be 100%.
- 4.2 Relaxation of maximum 25% in attendance is permissible to the students on account of medical problems, family problems or any other reason.

- 4.3 Student not having 75% attendance in any course/ practical will not be allowed to appear in the end-term examination of that respective course/ practical and given F grade. He/she has to reregister for all such courses.

5 Student Status

There are various types of student's status:

- Full-time Student on Teaching Assistantship (GATE)
- Full-time Sponsored Student
- Full-time Self-finance Student

5.1 Full-time Student on Teaching Assistantship:

A full-time student should complete the Programme within **24 months**. A Full Time student on Teaching Assistantship will receive the Institute Assistantship for the duration of **four** semesters of the M.Tech. Programme, provided he/she has cleared GATE, Such students are awarded **Teaching** Assistantship on the following condition.

- i) They should not accept any other scholarships/ employments/financial assistance/salary etc. awarded through any other sources or shall not hold any appointment, paid or otherwise.
- ii) They are not sponsored by any organization.
- iii) They do not leave the course midway or appear in any competitive examination not related to engineering/technology. They should submit the undertaking in this regard mentioning the refund of scholarship.

The scholarship and duration of teaching assistant ship will be as per AICTE(MHRD).

- (a) Students getting the assistantship will be required to assist in teaching or research, as assigned by the department, to the extent of 6 to 8 hours per week for conduct of practicals/tutorials/lab courses.
- (b) The continuation of the assistantship will be subject to satisfactory performance of the duties assigned by the Department as well as satisfactory academic performance.
- (c) Normal duration for completing M. Tech. will be 24 months. However maximum duration for completion of M.Tech. should not exceed four years.

5.2 Full-time Sponsored Students:

Sponsored candidates who are admitted to the programme should have full financial support from the concerned sponsoring agency, namely, the Govt. Department, organization, Industry, etc., for the entire duration of the programme. They can complete programme on time, depending on the nature of sponsorship.

6. Pattern of Courses

The courses offered for the PG Programmes may be Lecture Courses, Laboratory Courses, Design Courses, Seminars and Projects, and Field Visits.

6.1 The credit for a course is mentioned in the courses of study booklet of department.

6.2 Students are required to complete all the credit required for the PG programme as approved by the Senate from time to time.

6.3 Seminar

Seminar shall satisfy the following conditions:

- i) Each seminar shall carry two credits and treated as a course for purpose of registration and evaluation.
- ii) Seminar Coordinators appointed by the DPGCs shall organize the Seminars and forward the grades awarded by the panels of examiners to the Academic Office by the end of the Semester.

7. Course Credit Requirements

The total minimum credit requirement for M. Tech. programme is 102 credits including the dissertation.

8. Course Assessments and award of grades

8.1 Assessment

For every course taken by the students, he/she is assigned a letter grade on his/her combined performance in all the assessments. These grades are described by the letters and corresponding grade points. The award of grades based on absolute marks out of 100 shall be made as, A+ (10 points), A (9 points), B+ (8 points), B (7 points), C+ (6 points), C (5 points), D (4 points), F (0 points - Re-registration), E-Incomplete, and W – Withdrawal. Minimum passing grade in a course is D.

If a student does not take or fails in the re-examination, he/she will be awarded the grade **F**. A student getting an **F** grade has to reappear.

The award of grades based on absolute marks out of 100 shall be made as shown in Table 3. Note that the grade boundaries as indicated in the table may be marginally adjusted and the upper and lower limits are subject to limitations of percentage of marks.

Table 3 Grading system for M.Tceh Programme

MARKS		GRADE (Points)		MARKS
80	≤	A+ (10)	<	100
74	≤	A (9)	<	80
68	≤	B+ (8)	<	74
62	≤	B (7)	<	68
55	≤	C+ (6)	<	62
48	≤	C (5)	<	55
40	≤	D (4)	<	48
00	≤	F (0)	<	40

8.2 Seminar Grade

- 8.2.1 If a student either does not submit his seminar report by the prescribed date or he/she is absent for presentation on the scheduled date he/she shall be awarded E grade unless he/she is given extension by the coordinator under exceptional circumstances. However in no case the extension shall exceed one month.
- 8.2.3 All students who get E grade in Seminar shall be allowed to complete the evaluation during the period earmarked for re-examination and will not be given a grade better than the maximum passing grade, B+.

8.3 Dissertation

- 8.3.1. Students are required to submit final hard bound project report to the respective department.
- 8.3.2. The viva-voce will be conducted under departmental arrangements.
- 8.3.3. Forms for submission of assessed Dissertation, duly completed must be deposited to the Academic office along with the provisional clearances from Accounts Section.
- 8.3.4. Final grade reports are to be sent by the panel of examiners to the Academic office on completion of viva-voce.

8.4 Late Submission of Dissertation

In any case the student has to complete M. Tech. Programme in four years. The extensions given can exceed till the end of the last academic year. Whenever, any project stage is not submitted before the last date as specified in the academic calendar, the student is required to:

- a) Make specific request for extension with justification (without grade restriction) at least 15 days before the last date of submission as specified in the academic calendar.
- b) Pay the Institute fees and register for the **fifth/sixth/seventh/eighth** semester for the extension after forth/fifth/sixth/seventh semester, respectively

8.5 Dissertation Evaluation

- 8.5.1 The midterm assessment and pre-submission assessment of dissertation PART II, if any, will be done by a panel appointed by the PGAPEC in consultation with the supervisor(s). The panel shall consist of the supervisor(s) and two faculty members conversant with the field.
- 8.5.2 The midterm and pre-submission assessment will be done by a Board of Examiners appointed by the PGAPEC consisting of the following:

Chairman: Chairman, DPGPC or his nominee

Supervisor/co-supervisor: Supervisor(s)/ cosupervisor(s) and in their absence, another faculty member conversant with the subject.

Internal Examiner: A faculty member from the Institute conversant with the subject as internal examiner.

External Examiner: An approved examiner from other Institute/ Organization/Research Labs. The presence of external examiner is desirable. However, in case of difficulty in non-availability of external examiner in the required area, an additional internal examiner may be appointed in place of external examiner subject to the approval of PGAPEC.

- 8.5.2 The minimum passing grade in each of the dissertation assessment shall be C.
- 8.5.3 In case a student gets a fail grade in any of the project assessment he/she should carry out additional work/modifications etc. as suggested by the panel and appear for assessment within one month from the date of previous assessment. At this assessment, he/she should not be given a grade higher than B+.
- 8.5.5 A full-time/GATE student should not take up any other assignment before submitting his/her dissertation.

09. Performance Requirements

- The performance of a student in a semester is indicated by a number called the Semester Grade Point Average (SGA). The SGA is the weighted average of the grade points obtained in all the courses and projects taken by the student during the semester.
- Example: Suppose in a given semester a student has taken five courses having credits C₁, C₂, C₃, C₄, C₅ and his/her grade points in those courses are G₁, G₂, G₃, G₄, G₅ respectively. Then his/ her

$$SGA = \frac{C_1 G_1 + C_2 G_2 + C_3 G_3 + C_4 G_4 + C_5 G_5}{C_1 + C_2 + C_3 + C_4 + C_5}$$

- SGA will be calculated (after re-examination, if any) on the basis of the final grades awarded. The SGA is calculated up to two decimal places.
- An up-to-date assessment from the time the student entered the Institute is obtained by calculating a number called the Cumulative Grade point Average (CGA).
- The CGA is the weighted average of the grade points obtained in all the courses taken by the student since he/she entered the Institute. It is calculated in the same manner as the SGA. **CGA for the course credits and the project credits will be separately calculated and shown in the grade card, along with the overall CGA.**
- In case of a student clearing a failed course, or a course taken in lieu of an earlier course as approved by the Department, the earlier failed grade would be replaced by the new passing grade in calculation of the CGA.
- For continuation of a student in the Programme the minimum CGA must be 5.50. A student getting a CGA less than 5.5 will have to leave the institute.
- For CGA requirement of 5.5, if re-examination is allowed in any of the courses and is taken by the student, CGA will be calculated using the new grade obtained by the student in the re-exam.

10. Leave Rules

The students getting teaching assistantship are entitled for a leave in an academic year - maximum of 30 days (including medical leave of 10 days) but they are not entitled for any vacation during summer/winter.

11. Disposal of answer sheets

The answer sheets of all examinations during any academic year shall be preserved till the conduct of first semester examination of subsequent academic year. After the conduct of first semester examination, in any academic year, the process of disposal of answer sheets of previous academic year shall be initiated and carried out under the supervision of Controller of Examinations.

12. Showing of answer sheets to the students

- Teachers will show assessed papers of only mid term examination to the students in their theory classes before submitting to the academic section. The assessed answer sheets will be shown to the student and not to the friends or relatives. While showing the assessed papers teachers will clear all the doubts of the students and shall check unchecked questions, if any. All the course coordinators shall submit the assessed answer scripts to the academic section as per the date mentioned in the academic calendar.
- After end term/summer examination the assessed answer sheets will not be shown to the students before the

declaration of result. A student may apply for showing the answer sheets to the controller of examinations, by paying the necessary fee, within three days after the declaration of the result. A committee consisting of the Chairman, DPGPC, the concerned Chairman of the Grade Moderation Committee and the course coordinator shall show the answer sheet to the student and re-evaluate if necessary.

- The results of this reevaluation may lead to either a change in grade due to mistake(s) in any of the aspects or the grade may remain unchanged.

Scheme for scrutiny of marks:

Preamble: To double check the assessed answer sheet there is need of scrutiny procedure to verify that all questions attempted by candidate are checked by examiner and addition of marks is done correctly.

Appointment of Scrutinizer: The scrutinizers for the Central Assessment Programme shall be appointed amongst the faculty/ staff member of the institute by the Controller of Examinations with permission of honourable Director.

Role of Scrutinizer: After assessment, scrutiny of every manuscript shall be done by the staff member appointed as a scrutinizer. During Scrutiny of each

manuscript scrutinizer will be responsible for verifying:

- Whether all the questions attempted by candidate are checked by examiner or not?
- Whether marks given to respective question are correctly entered in the table given on first page of answer sheet?
- Whether the addition of marks entered in the table on the first page of manuscript is correct and examiner has signed that manuscript after evaluation?

If there is any mistake, scrutinizer will brought to the notice of concerned examiner and will get it rectified immediately. If there is any mistake found in scrutiny work after rechecking of manuscript, the concerned scrutinizer will be penalized with the penalty of Rs.50 per mistake.

Remuneration for Scrutiny: Scrutinizer will be entitled to get remuneration as per Swami Ramanand Teerth Marathwada University norm for scrutiny work.

13 Improvement of Grade/CGA:

Eligibility: A candidate who has passed the M.Tech. degree examination (autonomous) in any discipline from SGGSI& T Nanded and who wishes to improve his/ her grade points and whose CGA is less than 6.75 will be permitted to reappear.

Registration: The candidate is permitted to register under reappear category for improving the performance in regular First/ Second Semester or Summer Term along with regular student of respective branch

as per the schedule given in Academic Calendar of the institute. Registration in stipulated period is must for improvement examination. Candidate will have to pay Rs. 1000/- per subject for grade improvement in particular subject.

Rules:

- Candidate will be allowed to reappear for the Examination for improvement of grade within a period of three years from the date of his/her passing the Masters Degree examination.
- A candidate will be allowed to re-appear for maximum of five theory courses.
- A candidate will be allowed maximum two attempts for the improvement of his/her grade within the stipulated period of three years.
- No candidate will be permitted to improve the grades in practical/ term work/ internal assessment/ seminar or project.
- No additional classes/ counseling will be entertained for such candidates.
- Examination of candidates registered for improvement in particular subject will be carried out along with regular student' s examination. Question paper will be same for both category students. There will not be any separate question paper or an arrangement for candidates registered for improvement in particular subject.
- M. Tech candidates are allowed to register for only first year subject, which are offered in the respective semester for regular student. Candidate will have to appear for midterm and end term examination along with regular student.
- In the summer term examination student can register for any five subjects from first year of M.Tech.
- If the candidate fails to appear for the improvement examination after registration, or if there is no up gradation in the grade after availing the improvement chance, the grade obtained in the first appearance will be retained.
- If the grade secured by the student at the improvement examination is improved, it will be taken as the final grade. For such candidates new grade card with improved grades will be issued and will be marked as "Improvement examination" at the top of the grade card indicating that the grade was obtained after "Improvement Examination".
- A candidate appearing for the improvement of grade shall not be entitled to get benefit of any prize/medal/scholarship/award etc.

14 Proposed Norms and Procedure for Extra Credit Benefit for Participation in Sports:

The following table shows the grades along with the grade points to be given to the students participating in the sports activities

		Grades to be given to the participants		
		Level of Achievements		
Sr. No.	Level of Competition	Participation in the Event	Rank: II /III/ IV	Champion/Winner
1	Inter Collegiate (ICT) zone #	C+(6)	B(7)	B+(8)
2	District Level Tournaments *	C+(6)	B(7)	B+(8)
3	Inter Collegiate (ICT) Inter-zone #	B(7)	B+(8)	A(9)
4	Divisional Level *	B(7)	B+(8)	A(9)
5	Ashwamedh IUT # / State Level *	A(9)	A+(10)	A+(10)
6	Inter University (IUT) Zone #/ All India IUT#	A(9)	A+(10)	A+(10)
7	Inter University (IUT) Inter-zone #	A+(10)	A+(10)	A+(10)
8	Combined University #	A+(10)	A+(10)	A+(10)
9	National *	A+(10)	A+(10)	A+(10)
10	International #*	A+(10)	A+(10)	A+(10)

Possible Sequence of Competitions

Route 1: ICT zone→ICT- IZ→IUTzone/AshwamedhIUT→IUT- IZ→CU→INT

* Route 2: Dist.→Divi.→State→National→International

- The total credit available per year for participation in sport(s) competitions is equal to two (02) irrespective of participation in one or more sports. The maximum secured grade will be considered as per the above table.
- A candidate can earn a maximum total of eight (08) credit during the course of his/her studies provided he/she participates in competitions as mentioned in the above table.
- A bona-fide candidate/student is only eligible to avail this benefit.
- The candidate who desires to avail this benefit should submit the documentary evidence about their participation in sport(s) competitions through the sports department to the COE office before the commencement of the 2nd semester examination of that year.
- These credits are useful to improve the overall CGA of the respective candidates. If a candidate's CGA is marginally falling short of the required passing CGA for the award of degree, then his/her acquired CGA through sports will be considered for passing and award of degree.

The grade and credit earned by a candidate through participation in sports competition will be added to the total credit earned by him/her and should be considered over and above at the end of every academic year. The total credit of the candidates as decided by the departments will not be changed. The CGA of the student should not exceed 10 even after adding sports incentive credit and grade.

For example, a candidate earns a CGA of 8.50 and completes 44 credit at the end of first year examination and has also earns 2 credit in sports in the same year with a grade of B+ (8). In such a case his/her CGA at the end of first year will be CGA (Modified) = $(8.5 \times 44 + 8 \times 2) / 44 = 8.86$. Likewise the benefit of increase or elevation in CGA will be given to the candidates as and when participated. Here, the denominator is the sum of the credits excluding the credits of sports earned by the student. This ensures improvement in CGA.

Justification:

Sports help to develop certain human qualities such as team work, team building, organizing, coordinating, strength to face challenges/defeat and overall good health which are absolutely essential in any field of activities. This is in fact the basic philosophy which will be inculcated amongst the students through these incentives. In SSC out of 650 marks 25 (3.84% of the total) and HSC out of 600 marks 25 (4.16% of the total) is given as over and above marks. We propose a maximum of 8 credits out of 176 credits which is 4.54% of the total. Hence, we feel that this weightage is justified.

15. Scheme for scrutiny of Marks:

Preamble: To double check the assessed answer sheet there is need of scrutiny procedure to verify that all

questions attempted by candidate are checked by examiner and addition of marks is done correctly.

Appointment of Scrutinizer: The scrutinizers for the Central Assessment Programme shall be appointed amongst the faculty/ staff member of the institute by the Controller of Examinations with permission of honourable Director.

Role of Scrutinizer: After assessment, scrutiny of every manuscript shall be done by the staff member appointed as a scrutinizer. During Scrutiny of each manuscript scrutinizer will be responsible for verifying:

- Whether all the questions attempted by candidate are checked by examiner or not?
- Whether marks given to respective question are correctly entered in the table given on first page of answer sheet?
- Whether the addition of marks entered in the table on the first page of manuscript is correct and examiner has signed that manuscript after evaluation?

If there is any mistake, scrutinizer will brought to the notice of concerned examiner and will get it rectified immediately. If there is any mistake found in scrutiny work after rechecking of manuscript, the concerned scrutinizer will be penalized with the penalty of Rs.50 per mistake.

Remuneration for Scrutiny: Scrutinizer will be entitled to get remuneration as per Swami Ramanand Teerth Marathwada University norm for scrutiny work.