

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE
Madanapalle
(UGC-AUTONOMOUS)

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MASTER OF TECHNOLOGY
ACADEMIC REGULATIONS

For the students admitted to

Master of Technology from the academic year 2016-17 Batches onwards



M. Tech Regular Two Year P. G. Degree Course

ACADEMIC REGULATIONS (R16) (2016-2017)

Applicable for students admitted to Master of Technology from 2016-17



**MADANAPALLE INSTITUTE OF
TECHNOLOGY & SCIENCE
(AUTONOMOUS)**

Affiliated to JNTUA, Anantapur & Approved by AICTE, New Delhi
Recognised Research Center
Accredited by NBA for CSE, ECE, EEE & ME
World Bank funded Institute
Recognised by UGC under the sections 2(f) and 12(B) of the UGC act 1956
Recognised as Scientific & Industrial Research Organization by DSIR of DST

1. Eligibility for Admissions

Admission to the M.Tech program shall be made subject to the eligibility, qualifications and specialization prescribed by the University for each Program, from time to time.

Admissions shall be made either on the basis of merit rank obtained by the qualified candidates at an Entrance Test conducted by the University or on the basis of GATE/ PGECET score, subject to reservations prescribed by the University or Government policies from time to time.

2. Program pattern

- 2.1** A candidate after securing admission must pursue the M.Tech program of study for four semesters.
- 2.2** Each semester shall be for a minimum of 90 instruction days including examinations.
- 2.3** A candidate admitted to a program should complete it within a period equal to twice the prescribed duration of the program from date of admission.

3. Attendance

- 3.1** A student shall be eligible to appear for Semester End examinations if he/she acquires a minimum of 75% of attendance in aggregate of all the courses in a semester.
- 3.2** Shortage of Attendance below 65% in aggregate shall in NO case be condoned.
- 3.3** Condonation of shortage of attendance in aggregate up to 10% (65% and above and below 75%) in each semester may be granted by the College Academic Committee.
- 3.4** Students whose shortage of attendance is not condoned in any semester are not eligible to take their end examination of that class and their registration shall stand cancelled.
- 3.5** A student will not be promoted to the next semester unless he/she satisfies the attendance requirements of the present semester, as applicable. They may seek readmission for that semester when offered next.
- 3.6** A stipulated fee shall be payable towards condonation of shortage of attendance to the Institution.

4. Evaluation

The performance of the candidate in each semester shall be evaluated course wise, with a maximum of 100 marks for Theory and 100 marks for practicals, on the basis of Internal Evaluation and End Semester Examination.

- 4.1** For the theory courses 50 marks will be for the End Semester Examination.

While 30 marks will be for Internal tests, based on two Mid Term-tests held, one in the middle of the Semester (I-II units) and another immediately after the completion of instruction (III, IV & V) units with three questions to be answered out of four in 2 hours, evaluated for 30 marks. Both tests shall carry equal weightage.

Another 20 marks will be based on submission of four assignments (5marks each).

The first and second assignments are to be submitted before I Mid-Term Examination and the third and fourth assignments are to be submitted before II Mid-Term Examination.

- 4.2 For practical courses, 50 marks shall be for the End Semester Examinations and 50 marks will be for internal evaluation based on the day to day performance.
- 4.3 For Seminar there will be an internal evaluation of 100 marks. A candidate has to secure a minimum of Grade D to be declared successful. The assessment will be made by a board consisting of HOD and two internal experts at the end of IV semester instruction.
- 4.4 The minimum letter grade required for pass in each theory/practical course is “**P**” (internal evaluation + End Semester Examination). However, in the end semester examination for a course (theory/practical) it is mandatory to secure a minimum of 40% of the total marks.
- 4.5 In case the candidate does not secure the minimum academic requirement in any of the courses (as specified in 4.4.) he has to reappear for the Semester Examination either Supplementary or regular in that course, or repeat the course when next offered or do any other specified course as may be required.
- 4.6 In case any student is unable to appear at any one of the two mid-term tests in any theory course for genuine reasons (for example; medical), the Principal, Head of the department and concern faculty at their discretion may permit the conduct of one additional mid-term test after the second mid-term test in that course only after satisfying himself of the genuineness of the reason given by the student supported by appropriate documentation.

5. Evaluation of Project Work

Every candidate shall be required to submit thesis or dissertation after taking up a topic approved by the college/ institute.

- 5.1 Registration of Project work: A candidate is permitted to register for the project work after satisfying the attendance requirement of all the courses (theory and practical courses of I & II Sem).
- 5.2 An Internal Departmental Committee (I.D.C) consisting of HOD, Supervisor and one internal senior expert shall monitor the progress of the project work.
- 5.3 The work on the project shall be initiated in the penultimate semester and continued in the final semester. The duration of the project is for two semesters. The candidate can submit Project thesis with the approval of I.D.C. after 36 weeks from the date of

registration at the earliest and one calendar year from the date of registration for the project work. Extension of time within the total permissible limit for completing the programme is to be obtained from the Head of the Institution.

- 5.4** The student must submit status report at least in three different phases during the project work period. These reports must be approved by the I.D.C before submission of the Project Report.
- 5.5** A candidate shall be allowed to submit the thesis / dissertation only after passing in all the prescribed courses (both theory and practical) and then take viva voce examination of the project. The viva-voce examination may be conducted once in two months for all the candidates submitted during that period.
- 5.6** Three copies of the Thesis / Dissertation certified in the prescribed form by the supervisor & HoD shall be presented to the HoD. One copy is to be forwarded to the Principal.
- 5.7** The department shall submit a panel of three experts for a maximum of 5 students at a time. However, the thesis / dissertation will be adjudicated by one external examiner nominated by the Principal.
- 5.8** If the report of the examiner is favorable viva-voce examination shall be conducted by a board consisting of the Supervisor, Head of the Department and the examiner who adjudicated the thesis / dissertation. The board shall jointly report candidates work in terms of letter grade as follows:

Performance	Letter Grade
Outstanding	O
Excellent	A+
Very Good	A
Good	B+
Above Average	B
Average	C
Pass	P
Fail	F
Absent	Ab

If the report of the viva-voce is not satisfactory (Grade F) the candidate will retake the viva-voce examination after three months. If he fails to get a satisfactory report at the second viva-voce examination, he will not be eligible for the award of the degree unless the candidate is permitted to revise and resubmit the thesis.

6. Re-Registration for Improvement of Internal Evaluation Marks:

Following are the conditions to avail the benefit of improvement of internal evaluation marks.

- The candidate should have completed the course work and obtained examinations results for I & II semesters.
- He should have passed all the courses for which the internal evaluation marks secured are more than 50%.
- In those courses in which the student has failed in the end semester examination due to Internal evaluation marks secured being less than 50%, the candidate shall be given one chance for each Theory course and for a maximum of **three** Theory courses for Improvement of Internal evaluation marks.
- The candidate has to re-register for the chosen courses and fulfill the academic requirements.
- In the event of availing the Improvement of Internal evaluation marks, the internal evaluation marks as well as the End Examinations marks secured in the previous attempt(s) for the reregistered courses stand cancelled.

7. Program Pattern

- 7.1 The entire program of study is for two academic years. Both the two academic years shall be on semester pattern.
- 7.2 A student eligible to appear for the end semester examination in a course, but absent or has failed in the end examination may appear for that course at the next supplementary examination when offered.
- 7.3 When a student is detained due to lack of credits/shortage of attendance he may be re-admitted when the semester is offered after fulfillment of academic regulations. In such case, he/she shall be in the academic regulations into which he/she is readmitted.

8. Programmes of Study

With the approval from AICTE & JNTUA, the M. Tech. Degree programme is offered at present with the following specializations;

S.No	Specialization	Code
1	Electrical Power Systems	07
2	Solar Power Systems	95
3	Advanced Manufacturing Systems	87
4	Machine Design	15
5	Digital Electronics and Communication Systems	38
6	Very Large Scale Integration & Embedded Systems	68
7	Computer Science and Engineering	58

9. Grading System

9.1 Letter Grades

9.1.1 Based on the student's performance during a given Semester, the students are awarded a final letter grade at the end of the Semester in each course. The letter grades and the corresponding grade points are as follows:

Letter Grade	Grade points	Absolute marks
O (Outstanding)	10	90 - 100
A+ (Excellent)	9	80 - 89
A (Very Good)	8	70 - 79
B+ (Good)	7	65 - 69
B (Above Average)	6.5	60 - 64
C (Average)	6	55 - 59
P (Pass)	5.5	50 - 54
F (Fail)	0	< 50
Ab (Absent)	0	

9.1.2 A student is considered to have completed a course successfully and earned the credits if he secures a letter grade other than F / Ab in that course. A letter grade F / Ab in any course implies that the candidate is yet to clear that course.

9.1.3 A course successfully completed cannot be repeated.

9.1.4 A Semester Grade Point Average (SGPA) will be computed for each semester.

The SGPA shall be calculated as follows:

$$SGPA = \frac{\sum_{i=1}^n c_i g_i}{\sum_{i=1}^n c_i}$$

Where 'n' is the number of courses registered and cleared for the semester, 'ci' is the number of Credits allotted to a particular course, and 'gi' is the grade points carried by the letter corresponding to the grade awarded to the student for the course. SGPA will be rounded off to the second place of decimal and recorded as such. The SGPA would indicate the performance of the student in the semester to which it refers.

Starting from the second semester at the end of each semester S, a Cumulative Grade Point Average (CGPA) will be computed for every student as follows:

$$CGPA = \frac{\sum_{i=1}^m c_i g_i}{\sum_{i=1}^m c_i}$$

Where 'm' is the total number of courses the student has registered and cleared from the first semester onwards up to and including the semester S, 'ci' is the number of Credits allotted to a particular course 'si' and 'gi' is the grade-point carried by the letter corresponding to the grade awarded to the student for the course 'si'. CGPA will be rounded off to the second place of decimal and recorded as such.

The CGPA would indicate the cumulative performance of the student from the first semester up to the end of the semester to which it refers.

The CGPA, SGPA and the grades obtained in all the courses in a semester will be communicated to every student at the end of every semester.

When a student gets the grade 'F' in any subject during a semester, the SGPA and the CGPA from that semester onwards will be tentatively calculated, taking only 'zero point' for each such 'F' grade. After the 'F' grade(s) has/have been substituted by better grades during a subsequent semester, the SGPA and the CGPA of all the semesters, starting from the earliest semester in which the 'F' grade has been updated, will be recomputed and recorded to take this change of grade into account.

9.1.5 Cumulative grade point average [CGPA] averaged over all the courses is calculated for the award of class.

9.2 Award of Class

The following Class is awarded to the student on successful completion of the M.Tech Degree. Programme depending upon the CGPA obtained;

Class	CGPA	Based on the aggregate of grades secured from the total Credits.
First Class with Distinction	7.5 & 10.0	
First Class	6.5 & < 7.5	
Second Class	5.5 & < 6.5	

9.3 In case of a specific query by students/employers regarding Semester Grade Point Average (SGPA)/ Cumulative Grade Point Average (CGPA) into percentage, the following formulae will be adopted for **notional conversion of SGPA/CGPA** into percentage.

$$\text{SGPA to Percentage} = (\text{SGPA} - 0.5) \times 10$$

$$\text{CGPA to Percentage} = (\text{CGPA} - 0.5) \times 10$$

9.4 Award of Ranks

- Ranks are awarded based on the CGPA secured by the candidates for all the courses from first to final year,

Provided the candidate has:

- Completed the entire programme in the college itself (excluding MOOCs).
- Passed all the courses in first attempt only.
- Not discontinued the programme for any period during the course of study.
- Not been awarded any punishment for being involved in malpractice or indiscipline during the course of study in the Institute.
- In case, more than one student secures same CGPA, then first rank shall be awarded based on:
- Student who secured more number of letter grade “O,” “A+” and so on in decrementing order of grades.
- After applying the above clause, if a tie still exists, then all such students shall be awarded the same rank.

- Certificate and medal/award shall be given to such students as an appreciation for their achievement.

10. Transitory Regulations

Candidates who have discontinued or have been detained for want of attendance or who have failed after having undergone the program in earlier regulations or have discontinued and wish to continue the program are eligible for admission into unfinished Semester from the date of commencement of class work with the same or equivalent courses as and when such courses are offered, subject to 4.5 and 2.3 sections. Whereas they continue to be in the academic regulations into which they get readmitted.

11. Withholding of Results

If the candidate has any dues not paid to the institution or if any case of indiscipline or malpractice is pending against him, the result of the candidate shall be withheld and he will not be allowed/ promoted to the next higher Semester. The issue of awarding degree is liable to be withheld in such cases.

12. Minimum Instruction Days

The minimum instruction days including exams for each Semester shall be 90 days.

13. Student transfers

Student transfer shall be as per the guidelines issued by the Government of Andhra Pradesh from time to time.

14. Supplementary Examinations

At the end of each Semester there will be regular examinations for the current Semester. Those students who could not clear their courses in their previous attempt can appear for the examinations under supplementary category along with the regular students after registering themselves at the examination branch. Supplementary examinations for the all the other Semesters other than the current one will also be conducted at the same time.

15. General

- 15.1** The academic regulations should be read as a whole for purpose of any interpretation.
- 15.2** Malpractice rules nature and punishments are appended.
- 15.3** Where the words “he”, “him”, “his” occur in the regulations, they also include “she”, “her”, “hers”, respectively.
- 15.4** In case of any doubt or ambiguity in the interpretation of the above rules, the decision of the Principal is final.
- 15.5** The Institute may change or amend the academic regulations or syllabi at any time and the changes or amendments shall be made applicable to all the students on rolls with effect from the dates notified by the Institute.

Rules for Disciplinary Action for Malpractices / Improper Conduct in Examinations

	Nature of Malpractices/Improper conduct	Punishment
	<i>If the candidate:</i>	
1. (a)	Possesses or keeps accessible in examination hall, any paper, note book, programmable calculators, Cell phones, pager, palm computers, blue tooth or any other form of material concerned with or related to the course of the examination (theory or practical) in which he/she 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 course of the examination)	Expulsion from the examination hall and cancellation of the performance in that course only.
(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 examination hall in respect of any matter.	Expulsion from the examination hall and cancellation of the performance in that course only of all the candidates involved. In case of an outsider, he/she 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 course of the examination (theory or practical) in which the candidate is appearing.	Expulsion from the examination hall and cancellation of the performance in that course and all other courses the candidate has already appeared including practical examinations and project work and shall not be permitted to appear for the remaining examinations of the courses 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 for four consecutive semesters

		<p>from class work and all end examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat. The performance of the original candidate, who has been impersonated, shall be cancelled in all the courses of the examination (including practicals and project work) already appeared and shall not be allowed to appear for examinations of the remaining courses of that Semester/year. The candidate is also debarred for four consecutive Semesters from class work and all Semester end examinations if his involvement is established. Otherwise the candidate is debarred for two consecutive semesters from class work and all end 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/she will be handed over to the police and a case is registered against him.</p>
4.	<p>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.</p>	<p>Expulsion from the examination hall and cancellation of performance in that course and all the other courses the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the courses of that Semester/year. The candidate is also debarred for two consecutive Semesters from class work and all Semester end examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.</p>
5.	<p>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.</p>	<p>Cancellation of the performance in that course.</p>
6.	<p>Refuses to obey the orders of the any officer on duty or misbehaves or creates disturbance</p>	<p>In case of students of the college, they shall be expelled from examination halls and cancellation</p>

	<p>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 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.</p>	<p>of their performance in that course and all other courses the candidate(s) has (have) already appeared and shall not be permitted to appear for the remaining examinations of the courses of that Semester. If candidate physically assaults the invigilator or/ officer in charge of the examination, then the candidate is also barred and forfeit their seats. In case of outsiders, they will be handed over to the police and a police case is registered against them.</p>
<p>7.</p>	<p>Leaves the examination hall taking away answer script or intentionally tears of the script or any part thereof inside or outside the examination hall.</p>	<p>Expulsion from the examination hall and cancellation of performance in that course and all the other courses the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the courses of that Semester/year. The candidate is also debarred for two consecutive Semesters from class work and all Semester end examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.</p>
<p>8.</p>	<p>Possess any lethal weapon or firearm in the examination hall.</p>	<p>Expulsion from the examination hall and cancellation of the performance in that course and all other courses the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the courses of that Semester/year. The candidate is also debarred and forfeits the seat.</p>

M. Tech R16 Regulations

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 course and all other courses the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the courses 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 course and all other courses the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the courses 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 course and all other courses the candidate has appeared including practical examinations and project work of that Semester examinations depending on the recommendation of the committee.
12.	If any malpractice is detected which is not covered in the above clauses 1 to 11 shall be reported to the Principal for further action to award suitable punishment.	

Note: Whenever the performance of a student is cancelled in any course/ courses due to Malpractice, he has to register for the End Examination in those course/courses consequently and has to fulfill all the norms required for award of Degree.