



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY: KAKINADA ACADEMIC REGULATIONS 2009 FOR M.Tech (Regular) DEGREE COURSE

(Effective for the students admitted into first year from the academic year 2009-2010)

The M.Tech Degree of Jawaharlal Nehru Technological University Kakinada shall be conferred on candidates who are admitted to the program and fulfill all the requirements for the award of the Degree.

1.0 ELIGIBILITY FOR ADMISSIONS:

Admission to the above program shall be made subject to the eligibility, qualifications and specialization prescribed by the University from time to time.

Admissions shall be made on the basis of merit rank obtained by the qualifying candidate at an Entrance Test conducted by the University or on the basis of any other order of merit approved by the University, subject to reservations prescribed by the university from time to time.

2.0 AWARD OF M. TECH. DEGREE:

2.1 A student shall be declared eligible for the award of the M.Tech degree, if he/she pursues a course of study and completes it successfully for not less than two academic years and not more than four academic years.

2.2 A student, who fails to fulfill all the academic requirements for the award of the degree within four academic years from the year of his/her admission, shall forfeit his/her seat in M.Tech course.

2.3 The minimum instruction for each semester 95 clear instruction days.

3.0 ATTENDANCE

3.1 A candidate shall be deemed to have eligibility to write End Semester examinations if he/she has put in a minimum of 75% of attendance in aggregate of all the subjects.

3.2 Condonation of shortage of attendance up to 10% i.e. 65% and above, and below 75% may be given by the College academic committee.

3.3 Condonation of shortage of attendance shall be granted only on genuine and valid reasons on representations by the candidate with supporting evidence.

3.4 Shortage of attendance below 65 % shall in **NO** case be condoned.

3.5 A candidate shall not be promoted to the next semester unless he/she fulfills the attendance requirements of the previous semester.

3.6 A stipulated fee shall be payable towards condonation of shortage of attendance

4.0 COURSES OF STUDY:

The following specializations are offered at present for the M.Tech course of study.

1	CAD/CAM
2	Machine Design
3	Digital Electronics and Communication Systems
4	Digital Systems and Computer Electronics
5	Electronics and Communication Engineering
6	VLSI Design
7	Embedded Systems
8	VLSI Systems Design
9	Systems & Signal Processing
10	VLSI – Embedded Systems
11	Digital Image Processing
12	Instrumentation & Control Systems
13	Computers and Communications
14	Power Systems
15	Power& Industrial Drives
16	Power Electronics
17	Power Electronics and Electric Drives
18	Power Systems Control &Automation
19	Power Systems with Emphasis H.V. Engineering
20	Power Electronic Drives
21	Computer Science and Engineering
22	Computer Science
23	Information Technology
24	Software Engineering
25	Neural Networks
26	Bio technology
27	Geotechnical Engineering
28	Structural Engineering
29	Transportation Engineering

and any other course as approved by the authorities of the University from time to time.

5.0 EVALUATION:

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

- 5.1 For the theory subjects 60 marks shall be awarded based on the performance in the End Semester Examination, 40 marks shall be awarded based on the Internal Evaluation. The internal evaluation shall be made based on the **average** of the marks secured in the two Mid Term-Examinations conducted, one in the middle of the Semester and the other immediately after the completion of instruction. Each midterm examination shall be conducted for duration of 120 minutes with 4 questions to be answered out of 4 questions.
- 5.2 For practical subjects. 60 marks shall be awarded based on the performance in the End Semester Examinations, 40 marks shall be awarded based on the day-to-day performance in Laboratory as Internal Marks.
- 5.3 There shall be a seminar presentation during 3rd semester. For seminar, a student under the supervision of a faculty member, shall collect the literature on a topic and critically review the literature and submit it to the Department in a report form and shall make an oral presentation before the Departmental Committee. The Departmental Committee consists of Head of the Department, supervisor and two other senior faculty members of the department. For Seminar there will be only internal evaluation of 50 marks. A candidate has to secure a minimum of 50% to be declared successful.
- 5.4 A candidate shall be deemed to have secured the minimum academic requirement in a subject if he secures a minimum of 40% of marks in the End Examination and a minimum aggregate of 50% of the total marks in the End Semester Examination and Internal Evaluation taken together. If a candidate secures a minimum of 40% of marks in the End Examination and 40% -49% of the total marks in the End Semester Examination and Internal Evaluation taken together and secures an overall aggregate of 50% in the total semester he may be passed in those subjects also.
- 5.5 In case the candidate does not secure the minimum academic requirement in any subject (as specified in 5.4) he has to reappear for the End Examination in that subject. A candidate shall be given one chance to re-register for each subject provided the internal marks secured by a candidate are less than 50% and he has failed in the end examination. In such case candidate must re-register for the subject(s) and secure required minimum attendance. The attendance in the re-registered subject(s) shall be calculated separately to decide upon the eligibility for writing the end examination in those subject(s). In the event of taking another chance, the internal marks and end examination marks obtained in the previous attempt are nullified. At a given time a candidate is permitted to re-register for a maximum of two subjects in addition to the subjects of regular semester subjects.

- 5.6 The viva-voce examination shall be conducted at the end of the course work and at the end of 4th semester or later depending on the completion of the Project.
- 5.7 Laboratory examination for M.Tech courses must be conducted with two Examiners, one of them being Laboratory Class Teacher and second examiner shall be appointed by the University.

6.0 EVALUATION OF PROJECT / DISSERTATION WORK:

Every candidate shall be required to submit thesis or dissertation after taking up a topic approved by the Project Review Committee.

- 6.1 A Project Review Committee (PRC) shall be constituted with Principal as chair person , Head of the Department and two other senior faculty members of the concerned department (one will be the guide) .
- 6.2 Registration of Project Work: A candidate is permitted to register for the project work after satisfying the attendance requirement of all the subjects (theory and practical subjects).
- 6.3 After satisfying 6.2, a candidate has to submit, in consultation with his project supervisor, the title, objective and plan of action of his project work (Based on a publication in a peer Reviewed Journal)to the Project Review Committee for its approval before the second semester end examinations. After obtaining the approval of the Committee the student can initiate the Project work after the second semester end examinations.
- 6.4 Every candidate shall work on projects approved by the PRC of the College.
- 6.5 If a candidate wishes to change his supervisor or topic of the project he can do so with approval of the PRC. However, the Project Review Committee (PRC) shall examine whether the change of topic/supervisor leads to a major change of his initial plans of project proposal. If so, his date of registration for the project work starts from the date of change of Supervisor or topic as the case may be.
- 6.6 A candidate shall submit status report in two stages at least with a gap of 3 months between them.
- 6.7 The work on the project shall be initiated in the beginning of the second year and the duration of the project is for two semesters. A candidate shall be allowed to submit the project report only after fulfilling the attendance requirements of all the semesters with the approval of PRC and not earlier than 40 weeks from the date of registration of the project work. For the approval of PRC the candidate shall submit the draft copy of thesis to the Principal (through Head of the Department) and shall make an oral presentation before the PRC.

- 6.8 **The Candidate may be permitted to submit the Project Report If only the work is Published/Accepted to be Published in a Journal / International conference of repute and relevance.**
- 6.9 Three copies of the Project Thesis certified by the supervisor shall be submitted to the College / School / Institute.
- 6.10 The thesis shall be adjudicated by one examiner selected by the University. For this, Principal of the College shall submit a panel of 5 examiners, who are eminent in that field with the help of the concerned guide and head of the department.
- 6.11 The viva-voce examination shall be conducted by a board consisting of the supervisor, Head of the Department and the examiner who adjudicated the Thesis.

The Board shall jointly report candidates work as:

- A. Excellent
- B. Good
- C. Satisfactory
- D. Unsatisfactory

Head of the Department shall coordinate and make arrangements for the conduct of viva-voce examination. If the report of the viva-voce is unsatisfactory, 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, the candidate may be asked to submit a new project proposal to PRC starting with 6.5

7.0 AWARD OF DEGREE AND CLASS:

After a student has satisfied the requirements prescribed for the completion of the program and is eligible for the award of M. Tech. Degree he shall be placed in one of the following three classes:

Class Awarded	% of marks to be secured
First Class with Distinction	70% and above(Without any Supplementary Appearance)
First Class	Below 70% but not less than 60%
	70% and above (With Supplementary Appearance)
Second Class	Below 60% but not less than 50%

(The marks in internal evaluation and end examination shall be shown separately in the marks memorandum)

8.0 WITHHOLDING OF RESULTS:

If the candidate has not paid any dues to the university or if any case of in-discipline is pending against him, the result of the candidate will be withheld and he will not be allowed into the next higher semester. The issue of the degree is liable to be withheld in such cases.

9.0 TRANSITORY REGULATIONS:

Candidate who have discontinued or have been detained for want of attendance or who have failed after having undergone the course are eligible for admission to the same or equivalent subjects as and when subjects are offered, subject to 5.5 and 2.0

10.0 GENERAL:

- 10.1 The academic regulations should be read as a whole for purpose of any interpretation.
- 10.2 In case of any doubt or ambiguity in the interpretation of the above rules, the decision of the Vice-Chancellor is final.
- 10.3 The University may change or amend the academic regulations and syllabus at any time and the changes and amendments made shall be applicable to all the students with effect from the date notified by the University.
- 10.4 Wherever the word he, him or his occur, it will also include she, her and hers.

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