

N.B.K.R. INSTITUTE OF SCIENCE & TECHNOLOGY (N.B.K.R.I.S.T)
(Autonomous)
(Affiliated to J.N.T. University Anantapur)

REGULATIONS FOR

TWO YEAR MASTER OF TECHNOLOGY (M.Tech.) DEGREE PROGRAMME

(With effect from the batch admitted in the academic year 2013 – 2014)

The following regulations are applicable to the M.Tech. Degree programme offered by N.B.K.R. Institute of Science & Technology (Autonomous).

1. Minimum Qualifications for Admission

Minimum qualification is pass in B.Tech. Degree Examination from any recognized University in appropriate branch of Engineering or any other examination recognized by JNTUA, Anantapur, as equivalent thereto including AMIE and AMIETE.

2. Programme Duration

The duration of the programme is of two academic years divided into four semesters comprising of two semesters in each academic year.

3. Minimum Instruction Days

The minimum instruction days for each semester shall be 90 based on six days of instruction per week including the days allotted for tests.

4. Credits

Credit defines the quantum of contents/syllabus prescribed for a course and the number of instruction hours per week. The norms for assigning credits to a course for duration of one semester shall be as follows:

- i. One credit for every one hour lecture per week/semester
- ii. Two credits for every three hours of laboratory or practical work per week/semester
- iii. One credit for two hours of seminar per week/semester.

5. Classification of Courses

5.1 The courses of each specialization of study shall be classified into Core Courses and Elective Courses. It is mandatory for a student to complete successfully all the core courses pertaining to his / her specialization of study.

5.2 A Student shall choose elective courses from the list of elective courses provided for his/ her specialization of study. Further, he/she may earn credits not exceeding 4 by choosing courses of other specializations of study as elective courses which are exclusive of core courses of his /her specialization of study. A student shall register for elective courses at the beginning of the semester using the prescribed form.

5.3 A student shall earn a minimum of 56 credits of course work and complete successfully full-time project work to become eligible for the award of degree.

5.4 A student shall audit any course offered by the Institute with the permission of the Director/Principal. However, such credits will not be considered for including in the mandatory credits specified in clause 5.3.

6. Scheme of Instruction

The Board of studies (BOS) of each specialization shall formulate the scheme of instruction and detailed syllabi. While formulating the scheme of instruction, the BOS shall ensure to offer a minimum of 56 credits for the entire programme.

7. Evaluation

7.1 Evaluation will be done on a continuous basis during each semester. There will be two sessional tests and one End-semester examination in each theory course during every semester.

7.2 The performance of the students in each semester shall be evaluated subject wise. The distribution of marks between the sessional marks and end examination is as follows:

	Sessional Marks	End Examination Marks	Total
Theory Courses	40	60	100
Practicals	40	60	100
Seminar	100	--	100

For the award of sessional marks in semester for the theory courses, 2 tests for 40 marks shall be conducted. Each test shall be of 2 hours duration and the tests shall be evenly distributed during the semester. The *average* of the two midterm examinations shall be taken as the final sessional marks secured by each candidate in the subject.

7.3 For each theory course, there shall be one End-Semester Examination of 3 hours duration carrying 60 marks covering the entire syllabus prescribed for the course.

7.4 For each practical course, the sessional marks for a maximum of 40 shall be awarded by the teacher based on continuous assessment of practical work and one test at the end. The End-Semester Examination shall be for 60 marks.

7.5 For each seminar course, the sessional marks for a maximum of 100 shall be awarded based on the quality, depth and organization of contents, documentation, presentation and answering capability of questions from the participants of the seminar.

7.6 Question paper setting shall be undertaken by the Institute, choosing external examiners from the panels recommended by the respective Board of Studies. Evaluation of answer scripts shall also be undertaken by the Institute by choosing

external/internal examiners from the panels recommended by the respective Board of Studies.

7.7 For each practical examination, the end examination will be conducted jointly by the laboratory teacher and another examiner nominated by the Director/Principal.

8 Project Work

8.1 After completing the study of the first two semesters, a student shall undertake a Project Work for a minimum period of one academic year (two semesters) and submit its outcome in the form of a dissertation.

8.2 Normally the Project Work can be undertaken in the Institute. However, it can be undertaken in any of the recognized Educational Institutions, National Laboratories, Research Institutions, Industrial Organizations, Service Organizations or Government Organizations with the prior permission from the Guide and Head of the Department (HOD) concerned.

8.3 A Student shall be permitted to submit the dissertation only after acquiring successfully the minimum number of credits stipulated thereof in clause 5.3

8.4 The dissertation shall be evaluated by a committee consisting of the HOD concerned, one external examiner and guide where in HOD shall be the Chairman. *The external examiner shall be appointed by the Institute from among the panel of examiners recommend by the guide through the HOD concerned.*

8.5 The evaluation committee shall conduct viva – voce examination and make the following recommendations:

- (a) Dissertation is accepted
- (b) Dissertation is recommended for revision

8.6 If the dissertation is recommended for revision, the student shall revise the dissertation to the satisfaction of the guide and HOD concerned and resubmit the same for acceptance.

9 Academic Requirements

9.1 A student has to secure a minimum of 40 percent of marks in End Semester Examination and 50 Percent of total marks in the course taken, to pass in that course. A candidate who has not secured marks as said above in a course shall be deemed to have failed in that course. A student cannot reappear for the End Semester Examination in a course in which he/she has passed to improve the score.

9.2 A student who has failed in a course can reappear for the End-Semester Examination as and when it is held in the normal course. The sessional marks obtained by the student will be carried over for declaring the result.

9.3 Grading, Grade Point Average (GPA), Cumulative Grade Point Average (CGPA) and Grade sheet

After each subject is evaluated for 100 marks, the marks obtained in each subject will be converted to a corresponding letter grade as given below depending on the range in which the marks obtained by the student falls.

Conversion into grades and grade points assigned

Range in which the marks in the subject fall	Grade	Grade points assigned	Performance
≥ 95	A ⁺⁺	10	Out Standing
85 - 94	A ⁺	9.0	Excellent
75 - 84	A	8.0	Very Good
65 - 74	B ⁺	7.0	Good
55 - 64	B	6.0	Fair
50- 54	C	5.0	Satisfactory
< 50	F	0.0	Fail

9.4 Grade Point Average (GPA)

The grade point average for each semester/year is calculated as follows:

$$GPA = \frac{\sum_1^n (C_i)(GP_i)}{TC}$$

where n = number of subjects in the year/semester

for each subject, i

C_i = credits for the subject

GP_i = the grade point for the subject

TC = Total number of credits in the year / semester

9.5 Cumulative Grade Point Average (CGPA)

The CGPA is computed for every student at the end of each semester. The CGPA would give the cumulative performance of a student from the first year up to the end of the semester to which it refers and is calculated as follows:

$$CGPA = \frac{\sum_1^m (GPA_j)(TC_j)}{\sum_1^m TC_j}$$

where m = number of year/semesters under consideration

for each year / semester, j

TC_j = Total number of credits for a particular year/semester

GPA_j = the grade point average of that year/semester

Both GPA and CGPA will be rounded off to the second place after decimal and recorded as such.

While computing GPA/CGPA, the course in which the candidate is awarded zero grade points will also be included.

9.6 Grade Sheet

The grade sheet (memorandum) will be issued to each student indicating his performance in all the courses taken in that semester in the form of grades, also indicating the GPA of that semester and CGPA up to that semester.

10 Award of Degree

A student who has earned a minimum of 56 credits by passing in all the core courses and the minimum number of electives prescribed for the specialization of study shall be declared to have passed the course work. A student who has also completed successfully the Viva-voce examination of Project Work shall become eligible for the award of degree.

11 Award of Class

The students who have become eligible for the award of degree are classified as follows:

Class Awarded	CGPA
First Class with Distinction	≥ 7.5
First Class	≥ 6.5 and < 7.5
Second Class	≥ 5.5 and < 6.5
Pass Class	< 5.5

12 Award of Rank

12.1 Ranks shall be awarded in each specialization for the top three students who have completed the course in the first attempt.

12.2 The students who have become eligible for the award of degree after successful completion of the course in four consecutive semesters shall only be considered for ranking.

13 Attendance Requirements

13.1 A student is required to complete the programme of study satisfying the attendance requirements in all the semesters within a period of four academic years from the year of admission failing which he/she forfeits his/her admission.

13.2 A student will be detained in a semester if he/she fails to satisfy, the attendance requirements given below:

- (i) A student shall attend for each course at least 60 percent of the maximum hours of instruction taken by the teacher.
- (ii) A student shall attend at least 75 percent of the maximum hours of instruction taken for all the courses put together in that semester.

13.3 A student who fails to satisfy the attendance requirements specified in clause 13.2 shall repeat that semester in the subsequent academic years.

13.4 A student shall not be permitted to study any semester more than two times during the programme of his/her study.

13.5 A student who satisfies the attendance requirements specified in clause 13.2 in any semester may be permitted to repeat that semester cancelling the previous attendance and sessional marks of that semester. However, this facility shall not be extended to any student not more than twice during entire programme of study within four academic years as specified in clause 13.1.

14 Conditions of Promotion

A student shall be eligible for promotion to the next semester if he/she satisfies the attendance requirements in the immediately preceding semester as specified in clause 13.

15 Transitory Regulations

15.1 A student who has been detained in the first/second semester of previous regulations for not satisfying the attendance requirements shall be permitted to join first/second semester of these regulations provided clauses 13.1 and 13.4 hold good.

15.2 End Examinations in each course of the first/second semester under the regulations that immediately precede these regulations shall be conducted two times after the conduct of last regular examination under the preceding regulations.

15.3 The students who satisfy the attendance requirements in the first/second semester under the regulations that precede immediately these regulations, but do not pass the courses shall appear for the End-Semester Examinations in equivalent courses under these regulations as specified by the BOS concerned.

16 Amendment of Regulations

N.B.K.R. Institute of Science & Technology reserves the right to amend these regulations at any time in future without any notice. Further, the interpretation of any of the clauses of these regulations entirely rests with the College Academic Committee.