

S Y L L A B U S

MASTER OF TECHNOLOGY

M. Tech., (All Branches)

Examination I Year – 2015
Examination II Year- 2016



**JODHPUR NATIONAL
UNIVERSITY
JODHPUR**

C O N T E N T S

1. M.Tech., I Year, Computer Sci., & Engg., Examination 2015
2. M.Tech., II Year Computer Sci., & Engg., Examination 2016
3. M.Tech., I Year, Elect. Engg. (Power System) Examination 2015
4. M.Tech., II Year Elect. Engg. (Power System) Examination 2016
5. M.Tech., I Year Elect.,Engg.,(Control & Instru) Examination 2015
6. M.Tech.,II Year Elect.,Engg.,(Control & Instru) Examination 2016
7. M.Tech., I Year, ECE (Digital Communication) Examination 2015
8. M.Tech., II Year, ECE(Digital Communication), Examination-2016
9. M.Tech., I Year, ME (Thermal Engineering) Examination 2015
- 10.M.Tech., II Year, ME (Thermal Engineering) Examination- 2016
- 11.M.Tech., I Year, ME (Production & Industrial) Examination 2015
- 12.M.Tech., II Year, ME (Production & Industrial) Examination- 2016
- 13.M.Tech., I Year, CE (Transportation Engg.) Examination 2015
- 14.M.Tech., II Year CE (Transportation Engg.) Examination
2016
- 15.M.Tech., I Year CE (Environmental Engg.) Examination
2015
- 16.M.Tech.,II Year CE (Environmental Engg.) Examination
2016
- 17.M.Tech., I Year CE (Geotechnical Engg.,) Examination
2015
- 18.M.Tech.,II Year CE (Geotechnical Engg.,) Examination
2016
- 19.M.Tech., I Year CE (Structural Engineering) Examination
2015

Jodhpur National University, Jodhpur has been established in the year 2008. These syllabi pertain to the following batches :

Sr. No.	Class	Batch	Approved by the Academic Council in its meetings held on
01.	M.Tech., I Year to M.Tech., II Year	2008 to 2010	11.11.2008
02.	M.Tech., I Year to M.Tech., II Year	2009 to 2011	24.11.2009
03.	M.Tech., I Year to M.Tech., II Year	2010 to 2012	18.06.2010
04.	M.Tech., I Year to M.Tech., II Year	2011 to 2013	24.01.2011
05.	M.Tech., I Year to M.Tech., II Year	2012 to 2014	
06.	M.Tech.,I Year to M.Tech., II Year	2013 to 2015	
07.	M.Tech., I Year to M.Tech., II Year	2014 to 2016	

JODHPUR NATIONAL UNIVERSITY

Faculty of Engineering & Technology
M. Tech. Programme

GENERAL INFORMATION FOR STUDENTS

[A] ELIGIBILITY FOR ADMISSION

1. (a) Candidates who have passed B.E. in any of the branches 'Computer Science Engineering / Information Technology' with at least 55% marks in aggregate may be eligible for admission to **"M.Tech. in Computer Science & Engineering."**

Candidates who have obtained M.Sc. (Computer Science)/MCA degree with at least 60% aggregate marks from any recognized University or Institute recognized as equivalent may be admitted to "M.Tech.in Computer Science & Engineering." Provided the candidates passes the deficiency papers (additional papers offered by the department).

- (b) Candidates who have passed B.E. in 'Electrical Engineering/Electrical & Electronics' with at least 55% marks in aggregate from any recognized University or Institute recognized as equivalent may be eligible for admission to **"M.Tech. Programme in Electrical Engineering (Power system)/M. Tech. in Instrumentation & Control"**

- (c) Candidates who have passed B.E. in 'Electronics / Electronics & Comm. Engg. / Electronics & Instrumentation Engineering' with at least 55% marks in aggregate from any recognized University or Institute recognized as equivalent may be eligible for admission to **"M.Tech. Programme in Digital Communication"**..

- (d) Candidates who have passed B.E. in 'Mechanical Engineering' with at least 55% marks in aggregate from any recognized University or Institute recognized as equivalent may be eligible for admission to **"M.Tech. Programme in Thermal Engineering/Production & Industrial Engineering (P&I)"**.

- (e) Candidates who have passed B.E. in 'Civil Engineering/Construction Engineering/Architecture.' with at least 55% marks in aggregate from any recognized University or Institute recognized as equivalent may be eligible for admission to **"M.Tech. Programme in Transportation Engineering /Environment Engineering /Structural Engineering / Geotechnical Engineering"**.

- (f) Candidates who have passed B.E./B.Tech.,in Chemical Engineering/Electro Chemical Engineering/Petrochemical Engineering with at least 55% marks in aggregate may be eligible for admission to "M.Tech., in Chemical Engineering". Candidates who have obtained M.Sc.,(Chemical Engineering) degree with at least 60% aggregate marks from any recognized university or Institution may be admitted to "M.Tech., in "Chemical Engineering". Provided the candidates passes the deficiency papers (additional papers offered by the department).

- (g) In general, the candidates who have passed B.E. in Computer Science Engineering/Electrical Engineering/ Electronics & Communication Engineering/Information Technology/ Mechanical Engineering/Civil

- Engineering with at least 55% marks in aggregate from any recognized university or institute recognized as equivalent may be eligible for admission to **M.Tech. Programme in the subject of his B.E./B.Tech.**
2. Candidates who have passed the section 'A' & 'B' examinations of the Institution of Engineers (India) shall be eligible apply for admission to the M.Tech Courses in respective branch of Engineering.
 3. On admission, candidate may be required to offer and pass additional courses to make up the deficiency, if any.
 4. For the admission to *M.Tech. Programme* candidate shall be screened and/or interviewed by the selection committee constituted under the chairmanship of concerned Head Of the Department.
 5. The Faculty reserves the right to admission to any candidate and, the decision of the authorities shall be final in all the cases subject to the approval of Jodhpur National University, Jodhpur.
 6. Teachers / Research Scholars / Engineers employed in engineering/scientific organization/self-employed fulfilling the eligibility criteria specified in point 1-4 above may be admitted to the *M.Tech. Programme*.
 7. The number of students to be admitted to a particular branch of study shall be decided by the Jodhpur National University in consultation with the Head of the Department concerned.
 8. 5% relaxation is provided to candidate belonging to SC/ST category.

[B] DURATION OF THE COURSE

1. The normal duration of *M.Tech. Programme* will be 2 academic years (4 semesters). The maximum period of completion of the programme shall be 5 academic years.
2. In no case a candidate, who has not passed finally after 5 academic years from the date of enrollment, be allowed to continue the course and his/her admission will automatically be cancelled.
 - a. Provided that the Vice-Chancellor in consultation with the Head of the Department may waive this limit of 5 years only in the case of candidates who could not complete their M.Tech. programme at one stretch due to genuine reasons. The reasons for granting exemption shall be recorded in writing. Such extension shall not exceed one year.
3. Candidate shall be required to attend regular lecture classes, complete the prescribed course work including the practicals and sessionals.

[C] EXAMINATION & RESULT

1. There shall be an examination at the end of each semester.
2. The examination shall be conducted by means of written papers, practicals including sessionals, viva-voce as per scheme of examination specified in the syllabus
3. A candidate who has undergone regular course of study for the first semester shall be eligible to appear at the First Semester Examination for the M. Tech. Programme.
4. A candidate appearing at the First Semester Examination for the M. Tech. Programme shall be required to show competent knowledge of the subjects mentioned in the teaching and examination scheme for the respective branch of study.

5. A candidate appearing at the Second Semester Examination for the M. Tech. Degree shall be required to show competent knowledge of the subjects mentioned in the teaching and examination scheme of respective branch of study.
6. A candidate appearing at the Third Semester Examination for the M. Tech. Degree shall be required to show competent knowledge of the subjects mentioned in the teaching and examination scheme of respective branch of study.
7. A candidate who fails in any elective subject may be permitted by the Head of the Department to change the elective subject. He shall be required to undergo a regular course of study for the new elective subject.
8. For a pass, candidate should obtain 40 % marks in each theory paper, 50 % marks in each course work (Laboratory) and 50 % marks in Seminar. Both the theory & sessional marks will be considered independent of each other. Aggregate pass percentage will be 50% in each subject.
9. On satisfactory completion of the course and after passing the final examination, a candidate shall be awarded M.Tech. Degree in the respective specialization, in respective branch.
10. The division shall be awarded to the M.Tech. students as follows:
 - a. The students who obtain in first attempt 75% or more of the aggregate marks in both theory and sessionals and also if the thesis has been adjudged to merit distinction are awarded **Honours**.
 - b. The students who obtain 60% or less than 75% of the aggregate marks in all theory papers including thesis and the sessionals are awarded **First Division**.
 - c. The students who obtain less than 60% of the aggregate marks in all the theory papers and the sessionals but not less than 40% in each theory paper and 50% in the sessionals will be awarded **Second Division**.
11. The student who obtains in first attempt the highest aggregate marks in both theory and sessional and also in thesis, has been adjudged to merit distinction will be awarded University Gold Medal for the respective discipline provided –
 - a) The student must obtain at least 60% or more of the aggregate marks in all the theory and practical papers including thesis and the sessionals.
 - b) The student must be a regular student of the Faculty of Engineering & Technology, Jodhpur National University, Jodhpur and have full filled the criteria of attendance of Jodhpur National University (as notified by the University).
 - c) The nomination for award of University Gold Medal will be approved by the Chairperson, Jodhpur National University, Jodhpur and his decision will be the final.
12. Examination fees, Re-appear examination fees, Extension of period etc. shall be charged separately as prescribed by the Jodhpur National University, Jodhpur. Separate examination forms are to be submitted with the Jodhpur National University for all the examinations.

[D] SEMINAR / DISSERTATION:

1. Each candidate shall submit for examination a report embodying literature survey along with a critical review of the latest developments / work carried out in a subject related to M.Tech. programme.
2. Four copies of the seminar/dissertation report printed or type written shall be submitted to the Head of the Department along with a certificate or originality of the work recommendation from his/her supervisor.
3. Students can do their seminar/dissertation work under supervision/guidance of any external supervisor/guide. In that case, supervisor must be registered at university before start of the work.

[E] SCHEME OF STUDY

1. The Medium of instruction and examination shall be **English**
2. Candidate for the M.Tech course shall be instructed & examined as per the Teaching and Examination scheme and course content of respective semester.