

The list of M. Tech specializations are given below:

- Computer Science and Engineering
- VLSI
- Mechanical Engineering
- Chemical Engineering
- Environmental Engineering

The minimum credit requirements for a dual degree programme would be 183. The duration of the program is 10 semesters. Broadly, it consists of approximately 6 semesters of undergraduate engineering curriculum followed by approximately 2 semesters of post-graduate curriculum and last 2 semester dissertation. The curriculum for the M. Tech component will either be a continuation of the undergraduate Engineering discipline or one from the pool of MS specializations.

The program consists of Humanities and Social Sciences (HS), Basic Sciences (BS), Engineering Foundation (EF), Design and Innovation (DI), Bachelor Core (BC), Bachelor Elective (BE), Open Elective (OE), MastersCore (MC), Masters Elective (ME) and Dissertation (DS). There will be a compulsory dissertation (concerned specialization) in the last two semesters. The students can do additional credits through open choice of courses, which will allow them to develop broad inter-disciplinary knowledge base and opportunity to do their MS/ M. Tech in discipline other than B. Tech.

**3. Minimum credits for the program are 183, the overall credit structure is as follows:**

Category	Credits
Humanities and Social Sciences (HS)	10
Basic Sciences (BS)	23
Engineering Foundation (EF)	22
Design & Innovation (DI)	04
Bachelor Core (BC)	40
Bachelor Elective (BE)	18
Open Elective (OE)	12
MS Core (MC)	06
MS Elective (ME)	24
Dissertation (DS)	24
<b>Total</b>	<b>183</b>

**4. The Overall Course/Credit Structure**

Semester	Category	No. of Course	Credits	Total Credits
I	HS	2	4	19
	BS	2	7	
	EF	2	6	
	DI	1	2	
	Non-Credit	1	-	
II	HS	3	2	

	BS	3	12	20
	EF	1	4	
	DI	1	2	
	Non-Credit	1	-	
III	BS	1	4	20
	EF	1	4	
	BC	3	12	
IV	EF	2	8	22
	BC	3	12	
	HS	1	2	
V	BC	2	8	20
	BE	1	4	
	HS	1	2	
	OE	2	6	
VI	BC	2	8	18
	BE	1	4	
	OE	2	6	
VII	BE	2	10	19
	MC	2-3	6-9	
	ME	1-0	3-0	
VIII	ME	5	15	15
IX	ME	2	6	15
	DS	1	9	
X	DS	-	15	15
<b>Overall Minimum Credits</b>				<b>183</b>

## Dual Degree Programme Structure

### Semester I

	Course Name			
1.	Humanities and Social Sciences	2-0-0	2	HS
2.	Environmental Studies	2-0-2	3	BS
3.	Engineering Mathematics-I (Calculus and Transform)	4-0-0	4	BS
4.	Engineering Foundation-I (Computer Programming)	2-0-4	4	EF
6.	Introduction to Engineering-I (Lecture/Visit/Demo/Doing)	1-0-2	2	EF
7.	Engineering Drawing & Visualization	0-0-4	2	DI
8.	Principles of Economics	2-0-0	2	HS
9.	English in Practice	2-0-2	Non-credit	
		<b>Total (19)</b>		<b>HS-4, BS-7, EF-6, DI-2</b>

\*Non-credit course: need to pass Basic English course

## Semester II

	Course Name			
1.	Physics-I	3-0-2	4	BS
2.	Chemistry-I	3-0-2	4	BS
3.	Engineering Mathematics-II (Probability and Statistics)	4-0-0	4	BS
4.	Engineering Foundation-II (Data Structure)	3-0-2	4	EF
5.	Introduction to Engineering-II (Engineering Specific)	1-0-2	Non- Credit	EF
6.	Product Realization	0-0-4	2	DI
7.	IPR and Law	2-0-0	2	HS
		<b>Total (20)</b>		BS-12, EF-4, DI-2, HS-2

## Semester III

	Course Name			
1.	Engineering Foundation-III		4	EF
2.	Biology/Chemistry-II/Physics-II		4	BS
3.	BachelorCore-I		4	BC
4.	BachelorCore-II		4	BC
5.	BachelorCore-III		4	BC
		<b>Total (20)</b>		EF-4,BS-4, BC-12

## Semester IV

	Course Name			
1.	Engineering Foundation-IV (Numerical Analysis)		4	EF
2.	Engineering Foundation-V		4	EF
3.	BachelorCore-IV		4	BC
4.	BachelorCore-V		4	BC
5.	BachelorCore-VI		4	BC
6.	Professional Practice & Ethics		2	HS
7.	Optional Course-II			
		<b>Total 22</b>		EF-8, BC-12, HS-2

### Semester V

	Course Name			
1.	BachelorCore-VII		4	BC
2.	BachelorCore-VIII		4	BC
3.	BachelorElective- I		4	BE
4.	Technical Writing		2	HS
5.	Open-Elective-I		3	OE
6.	Open-Elective-II		3	OE
7.	Optional Course-III			
		<b>Total (20)</b>		HS-2, BC-8, BE-4,OE-6

### Semester VI

	Course Name			
1.	BachelorCore-IX		4	BC
2.	BachelorCore- X		4	BC
3.	Bachelor Elective- II		4	BE
4.	Open-Elective-III		3	OE
5.	Open-Elective-IV		3	OE
		<b>Total (18)</b>		BC-8, BE-4, OE-6

### Semester VII

	Course Name			
1.	Project (Engineering Specific)		6	BE
2.	Bachelor Elective -III		4	BE
3.	Master Core-I		3	MC
4.	Master Core-II		3	MC
5.	Master Core/ Master Specialization-I		3	ME
		<b>Total (19)</b>		BE- 10, MC-6, ME-3

### Semester VIII

	Course Name			
1.	Master Specialization –II		3	ME
2.	Master Specialization –III		3	ME
3.	Master Specialization –IV		3	ME
4.	Master Specialization –V		3	ME
5.	Master Specialization –VI		3	ME
		<b>Total (15)</b>		ME-15

**Semester IX**

	<b>Course Name</b>			
1.	Master Specialization-VII		3	ME
2.	Master Specialization-VIII		3	ME
3.	Dissertation		9	DS
		<b>Total (15)</b>	ME-6, DS-9	

**Semester X**

	<b>Course Name</b>			
1.	Dissertation		15	DS
		<b>Total (15)</b>	DS-15	