

## Mechanical and Engineering

### Semester - I (Common for all B.Tech Courses)

S.No	C. Code	Course	L	T	P	C
1	MA 101	Calculus	3	1	0	8
2	PH 101	Quantum Physics and Applications	2	1	0	6
3	CH 102	Fundamental Concepts and Applications of Chemistry	3	0	0	6
4	BB 103	Introduction to Modern biology	3	0	0	6
5	PH 113	Hands on Science Laboratory - I	0	0	3	3
6	CS 101	Computer Programming	3	0	2	8
7	HS 103	Introduction to Fine Arts	0	0	1	PP/NP
8	HS 106	Design Thinking and Creativity	1	0	0	PP/NP
9	NO107/NO105	NSO/NSS	0	0	2	2
First Semester Total Credits						37

### Semester - II

S. No	Course Code	Course Name	L	T	P	C
1	MA 102	Linear Algebra (1st Half)	3	1	0	4
2	MA 103	Differential Equations - I (2nd Half)	3	1	0	4
3	ME 111	Engineering Graphics Laboratory	1	0	3	5
4	EE 101	Introduction to Electrical and Electronics Circuits	3	0	0	6
5	CS 201	Data Structures and Algorithms	3	0	0	6
6	CS 211	Data Structures and Algorithms Laboratory	0	0	3	3
7	ME 113	Hands on Engineering Laboratory	0	0	3	3
8	ME 201	Engineering Mechanics	2	1	0	6
9	NO 106/ NO 108	National Sports Organization (NSO)/National Service Scheme (NSS)	0	0	2	2
Total Credits						37

### Semester III

S.No	Course Code	Course Name	L	T	P	C
1	ME 207	Thermodynamics	2	1	0	6
2	ME 203	Fluid Mechanics	2	1	0	6
3	ME 222	Mechanics of Materials	2	1	0	6
4	ME 204	Manufacturing Processes - I	3	0	0	6
5	ME 205	Machine Drawing and 3D Modelling Laboratory	0	0	3	3
6	EE 221	Introduction to Probability (1st Half)	3	0	0	3

7	ME 212	Manufacturing processes and Metrology Laboratory	0	0	3	3
8	HS 201	Economics	3	0	0	6
Total Credits						39

### Semester IV

<b>S.No</b>	<b>Course Code</b>	<b>Course Name</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1	ME 208	Mechanical Measurements	3	0	0	6
2	ME 202	Engineering Materials	2	1	0	6
3	ME 309	Theory of Machines	2	1	0	6
4	ME 220	Heat Transfer	2	1	0	6
5	MA 407	Introduction to Numerical Linear Algebra (1st Half)	3	1	0	4
6	ME 224	Fluid Mechanics Laboratory	0	0	3	3
7	EE 226	Control Systems and Laboratory	2	0	2	6
Total Credits						37

### Semester V

<b>S.No</b>	<b>Course Code</b>	<b>Course Name</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1	ME 223	Manufacturing Processes - II	2	1	0	6
2	ME 324	Design of Machine Elements	3	0	0	6
3	ME 302	Applied Thermodynamics	3	0	0	6
4	ME 314	Heat Transfer Laboratory	0	0	3	3
5	ME 312	Solid Mechanics Laboratory	0	0	3	3
6	ME 311	Mechanical Measurements Laboratory	0	0	3	3
7	EE 227	Data Analysis (2nd Half)	3	0	0	3
8		Elective 1	3	0	0	6
Total Credits						36

### Semester VI

<b>S.No</b>	<b>Course Code</b>	<b>Course Name</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1	CE 301	Environmental Studies	3	0	0	6
2	ME 313	Kinematics and Dynamics of Machinery Laboratory	0	0	3	3
3	ME 315	Manufacturing processes Laboratory	0	0	3	3
4	ME 316	Applied Thermodynamics Laboratory	0	0	3	3
5	MA 406	Introduction to Numerical Methods (1st Half)	3	1	0	4
6		Elective Course from Physics Department	3	0	0	6
7		Elective 2	3	0	0	6
8		Elective 3	3	0	0	6

		Total Credits	37
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<b>Semester VII</b>						
<b>S.No</b>	<b>Course Code</b>	<b>Course Name</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1		Elective Course 4	3	0	0	6
2		Elective Course 5	3	0	0	6
3		Elective Course 6/ BTP	3	0	0	6
Total Credits						18

<b>Semester VIII</b>						
<b>S.No</b>	<b>Course Code</b>	<b>Course Name</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1		Elective Course 7	3	0	0	6
2		Elective Course 8 / BTP	3	0	0	6
Total Credits						12

Overall Credits Required (Minimum)	253
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