



BTech (Mech. Engg.) Curriculum

Course Structure

Semester - I		
Sr. No.	Course Name	Credits
1	Critical thinking/Technical Reading & Writing I	1
2	Experiential Engineering I	1
3	Free Hand Drawing	1
4	Environmental Science	3
5	Mathematics – 1	4
6	Physics for Mechanical Engineering	3
7	Physics Laboratory	1.5
8	Engineering Graphics	3.5
9	Engineering Mechanics	3
10	Engineering Mechanics Laboratory	1.5
11	Workshop Practice –I	1.5

Semester - II		
Sr. No.	Course Name	Credits
1	Critical thinking/Technical Reading & Writing II	1
2	Experiential Engineering II	1
3	Mathematics – II	4
4	Chemistry	3
5	Chemistry Laboratory	1.5
6	Strength of Material	3
7	Strength of Material Laboratory	1.5
8	Thermodynamics	4
9	Electrical Engineering	2
10	Electrical Engineering Laboratory	1.5
11	Interdisciplinary Elective	2

Semester - III

Sr. No.	Course Name	Credits
1	Critical thinking/Technical Reading & Writing III	1
2	Experiential Engineering III	1
3	Numerical Methods and Computer Programming	4
4	Numerical Methods and Computer Programming Laboratory	1.5
5	Kinematics and dynamics of Machine I	4
6	Fluid Mechanics-I	4
7	Fluid Mechanics-I Laboratory	1.5
8	Engineering Metallurgy	4
9	Engineering Measurement and Metrology	3
10	Engineering Measurement and Metrology Lab	1.5
11	Interdisciplinary Elective	2

Semester - IV

Sr. No.	Course Name	Credits
1	Critical thinking/Technical Reading & Writing IV	1
2	Experiential Engineering IV	1
3	Machine Design I	4
4	Machine Design I Laboratory	1.5
5	Fluid Mechanics-II	4
6	Fluid Mechanics-II Laboratory	1.5
7	Basic Electronics	3
8	Basic Electronics Laboratory	1.5
9	Manufacturing Technology I	4
10	Manufacturing Technology I Laboratory	1.5
11	Humanities	2

Semester - V		
Sr. No.	Course Name	Credits
1	Critical thinking/Technical Reading & Writing V	1
2	Kinematics and dynamics of Machine II	3
3	Kinematics and dynamics of Machine II Laboratory	1.5
4	Heat & Mass Transfer	4
5	Heat & Mass Transfer Laboratory	1.5
6	Energy Conversion I	4
7	Energy Conversion I Laboratory	1.5
8	Automation and Control system	3
9	Automation and Control system Laboratory	1.5
10	Manufacturing Technology II	4
11	Manufacturing Technology II Laboratory	1.5

Semester - VI		
Sr. No.	Course Name	Credits
1	Critical thinking/Technical Reading & Writing VI	1
2	Machine Design II	4
3	Machine Design II Laboratory	1.5
4	Energy Conversion II	3
5	Energy Conversion II Laboratory	1.5
6	Industrial Engineering & Operations Research	4
7	Core Elective I	3
8	Design & Manufacturing Projects	4
9	Entrepreneurship	3

Semester - VII

Sr. No.	Course Name	Credits
1	Critical thinking/Technical Reading & Writing VII	1
2	Machine Design III	3
3	Fluid Machinery	4
4	Fluid Machinery Laboratory	15
5	Quality Management	3
6	Core Elective II	3
7	BTP – I	4

Semester - VIII

Sr. No.	Course Name	Credits
1	Critical thinking/Technical Reading & Writing VIII	1
2	Core Elective III	3
3	Core Elective IV	3
4	Core Elective IV Laboratory	15
5	BTP – II	8
6	Khoj	3