

B.E. in Mechanical Engineering

Semester:1

Code	Subject	Theory(Hrs)	Tutorial(Hrs)	Practical(Hrs)	Credits
3110014	Mathematics-I	3	2	0	5
3110003	Programming for Problem Solving	3	0	2	4
3110011	Physics	3	0	2	4
3110013	Engineering Graphics & Design	2	0	4	4
3110004	Basic Civil Engineering	3	0	2	4

Semester:2

Code	Subject	Theory(Hrs)	Tutorial(Hrs)	Practical(Hrs)	Credits
3110002	English	2	0	2	3
3110006	Basic Mechanical Engineering	3	0	2	4
3110007	Environmental Science	2	2	0	0
3110012	Workshop	0	0	4	2
3110015	Mathematics-II	3	2	0	5
3110005	Basic Electrical Engineering	3	0	2	5

Semester:3

Code	Subject	Theory(Hrs)	Tutorial(Hrs)	Practical(Hrs)	Credits
3130004	Effective Technical Communication	2	0	2	3
3130005	Complex Variables and Partial Differential Equations	3	2	0	5
3130007	Indian Constitution	2	0	0	0
3130008	Design Engineering - I A	0	0	2	1
3131904	Material Science and Metallurgy	3	0	2	4
3131905	Engineering Thermodynamics	4	0	2	5
3131906	Kinematics and Theory of Machine	4	0	2	5

Semester:4

Code	Subject	Theory(Hrs)	Tutorial(Hrs)	Practical(Hrs)	Credits
3140004	Essence of Indian Traditional Knowledge	2	0	0	0
3140005	Design Engineering 1 B	0	0	2	1
3141901	Mechanical Measurement and Metrology	4	0	2	5
3141906	Fluid Mechanics and Fluid Machines	4	0	2	5
3141907	Fundamentals of Machine Design	4	0	2	5
3141908	Manufacturing Processes	3	0	2	4
3141909	Organisational Behaviour	3	0	0	3

Semester:5

Code	Subject	Theory(Hrs)	Tutorial(Hrs)	Practical(Hrs)	Credits
2151903	Fluid Power Engineering	3	0	2	5
2151907	Design of Machine Elements	3	0	2	5
2151908	Control Engineering	3	0	2	5
2151909	Heat Transfer	3	0	2	5
2150001	Design Engineering - II A	0	0	3	3
2150002	Institute Elective - Cyber Security	0	1	2	3
2151902	Theory of Machines	3	0	2	5

Semester:6

Code	Subject	Theory(Hrs)	Tutorial(Hrs)	Practical(Hrs)	Credits
2161901	Dynamics of Machinery	3	0	2	5
2161902	Internal Combustion Engines	3	0	2	5
2161903	Computer Aided Design	3	0	2	5
2161907	Industrial Engineering	3	0	2	5
2161908	Refrigeration and Air-conditioning	3	0	2	5
2161909	Production Technology	3	0	2	5
2160001	Design Engineering - II B	0	0	3	3

Semester:7

Code	Subject	Theory(Hrs)	Tutorial(Hrs)	Practical(Hrs)	Credits
2170001	Project - I	0	0	4	4
2171901	Operation Research	3	2	0	5
2171903	Computer Aided Manufacturing	3	0	2	5
2171909	Machine Design	3	2	0	5
2171910	Power Plant Engineering	4	0	2	6
2171912	Oil Hydraulics and Pneumatics	3	0	2	5

Semester:8

Code	Subject	Theory(Hrs)	Tutorial(Hrs)	Practical(Hrs)	Credits
2181909	Project - II	0	0	16	16
2181910	Renewable Energy Engineering	4	0	0	4
2181913	Product Design and Value Engineering (Departmental Elective II)	3	2	0	5