

**School Name: School of Engineering**  
**Department Name : Mechanical Engineering**  
**Programme Name: B.Tech in Mechanical Engineering**  
**Scheme: 2017-2021**

<b>SEMESTER I</b>						
<b>Sl. No.</b>	<b>Course Code</b>	<b>Course Title</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1	BTME1001	Introduction to Mechanical Engineering	0	0	2	1
2	BCSE1002	Computer Programming and Problem Solving	0	0	4	2
3	UHVE1001	Universal Human Values and Ethics	0	0	4	2
4	MATH1001	Multivariable Calculus	3	0	0	3
5	MATH1002	Exploration with CAS-I	0	0	2	1
6	PHYS1001	Engineering Physics	3	0	0	3
7	PHYS1002	Engineering Physics lab	0	0	2	1
8	SLBT1001	Basic English	0	0	4	2
9	JAPA1001	JAPANESE -I	0	0	2	1
0	FREN1001	FRENCH -I	0	0	0	0
0	GERN1001	GERMAN -I	0	0	0	0
10	CHEM1001	General Chemistry	3	0	0	3
11	CHEM1003	Engineering Chemistry Lab	0	0	2	1
12	BTME1002	Product Design using Graphics	0	0	4	2

<b>SEMESTER II</b>						
<b>Sl. No.</b>	<b>Course Code</b>	<b>Course Title</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1	BCSE1003	Application Oriented Programming using Python	0	0	4	2
2	PSSO1001	Psychology and Sociology	2	0	0	2
3	MATH1003	Matrices and Differential Equations.	3	0	0	3
4	MATH1004	Exploration with CAS-II	0	0	2	1
5	PHYS1003	Advance Physics (Physics of Materials)	3	0	0	3
6	PHYS 1005	Advance Physics Lab	0	0	2	1
7	SLBT1002	English Proficiency and Aptitude Building - 1	0	0	4	2
8	JAPA1002	JAPANESE -II	0	0	2	1
0	FREN1002	FRENCH -II	0	0	0	0
0	GERN1002	GERMAN -II	0	0	0	0
9	ENVS1001	Energy and Environmental Studies	3	0	0	3
10	BEEE 1002	Basic Electrical and Electronics Engineering	3	0	0	3
11	BEEE 1003	Basic Electrical and Electronics Engineering Lab	0	0	2	1
12	BTME1003	Product Manufacturing	0	0	2	1

<b>SEMESTER III</b>						
<b>Sl. No.</b>	<b>Course Code</b>	<b>Course Title</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1	BTME2001	Engineering Mechanics	3	0	0	3
2	BTME2002	Engineering Thermodynamics	3	0	0	3
3	BTME2003	Manufacturing Processes I	3	0	0	3
4	MATH2001	Functions of complex variables and Transforms	3	0	0	3
5	SLBT2001	English Proficiency and Aptitude Building – 2	0	0	4	2
6	BTME2004	Manufacturing Processes I Laboratory	0	0	2	1
7	BTME2005	Machine Drawing Laboratory	0	0	2	1
8	BTME2006	SKILL-1 (Solid Works)	0	0	2	1
9	BTME2007	PBL-1 (Machine Drawing / Mechanics)	0	0	2	1
		<b>Total</b>	<b>12</b>	<b>0</b>	<b>12</b>	<b>18</b>

<b>SEMESTER IV</b>						
<b>Sl. No.</b>	<b>Course Code</b>	<b>Course Title</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1	BTME2008	Mechanics of Material	3	0	0	3
2	BTME2009	Fluid Mechanics	3	0	0	3
3	BTME2010	Manufacturing Processes II and Metrology	3	0	0	3
4	MATH2003	Probability and Statistics	3	0	0	3
5	BBAD 1003	Microeconomics	3	0	0	3
6	UE1	Management Course (from basket)	3	0	0	3
7	SLBT2002	English Proficiency and Aptitude Building – 3	0	0	4	2
8	BTME2011	Fluid Mechanics Laboratory	0	0	2	1
9	BTME2012	Mechanics of Material Laboratory	0	0	2	1
10	BTME2013	Manufacturing Processes II and Metrology Laboratory	0	0	2	1
11	BTME2014	PBL-2 (Material microstructures)	0	0	2	1
		<b>Total</b>	<b>18</b>	<b>0</b>	<b>12</b>	<b>24</b>

<b>SEMESTER V</b>						
<b>Sl. No.</b>	<b>Course Code</b>	<b>Course Title</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1	BTME3001	Applied Thermodynamics I	3	0	0	3
2	BTME3002	Kinematics of Machines	3	0	0	3
3	BTME3003	Heat and Mass Transfer	3	0	0	3
4	BTME3013	Machine Design	3	0	0	3
5	PE01	Program Elective - 1	3	0	0	3
6	PE02	Program Elective - 2	3	0	0	3
7	SLBT3001	English Proficiency and Aptitude Building – 4	0	0	4	2
8	MATH3010	Numerical Methods	2	0	0	2
9	MAT252	Numerical Methods Lab	0	0	2	1
10	BTME3004	Applied Thermodynamics and HMT Lab	0	0	2	1
11	BTME3005	PBL-3 (Applied Thermodynamics)	0	0	2	1
12	BTME3016	IT skill Development on OOPs and DBMS	0	0	2	1

<b>SEMESTER VI</b>						
<b>Sl. No.</b>	<b>Course Code</b>	<b>Course Title</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1	BTME3006	Applied Thermodynamics II	3	0	0	3
2	BTME3008	Dynamics of Machines	3	0	0	3
3	BTME3009	CAM and Automation	3	0	0	3
	PE03	Program Elective - 3	3	0	0	3
	PE04	Program Elective - 4	3	0	0	3
4	PE05	Program Elective - 5	3	0	0	3
7	SLBT3002	Soft Skill - 6 (Campus to Corporate)	0	0	4	2
8	BTME3019	Dynamics of Machines Laboratory	0	0	2	1
9	BTME3017	AI & Machine Learning using Python	0	0	2	1

<b>SEMESTER VII</b>						
<b>Sl. No.</b>	<b>Course Code</b>	<b>Course Title</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1	BTME4001	Energy Systems and Technologies	3	0	0	3
2	BTME4005	Optimization Techniques and Applications	2	0	0	2
3	BTME4006	Quality and Reliability Engineering	2	0	0	2
4	BTME4010	Project Management	1	0	0	1
5	BTME4004	Comprehensive Examination	0	0	2	1
6	BTME4003	Energy Systems Lab	0	0	2	1
7	BTME4009	Additive Manufacturing	0	0	2	1
8	BTME4008	Industrial Internship	0	0	0	2
9	BTME9991	Capstone Project- Phase I	0	0	0	2
		<b>Total</b>	<b>8</b>	<b>0</b>	<b>2</b>	<b>9</b>

<b>SEMESTER VIII</b>						
<b>Sl. No.</b>	<b>Course Code</b>	<b>Course Title</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1	BTME9992	Capstone Project- Phase II	0	0	0	9

<b>Elective 1</b>						
<b>Sl No</b>	<b>Course Code</b>	<b>Name of the Electives</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1	BTME3054	Welding Technology	3	0	0	3
2	BTME3051	Automobile Engineering	3	0	0	3
3	BTME3055	Supply Chain Management	3	0	0	3
4	BTME3059	Project Management	3	0	0	3
<b>Elective 2</b>						
<b>Sl No</b>	<b>Course Code</b>	<b>Name of the Electives</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1	BTME3053	Computational Fluid Dynamics	3	0	0	3
2	BTME3057	Advance Machining Processes	3	0	0	3
3	BTME3058	Mechatronics	3	0	0	3
4	BTME3062	Mechanical Measurements	3	0	0	3
<b>Elective 3</b>						
<b>Sl No</b>	<b>Course Code</b>	<b>Name of the Electives</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1	BTME3052	Robotics	3	0	0	3
2	BTME3061	Finite Element Analysis	3	0	0	3
3	BTME3066	Renewable Energy Sources	3	0	0	3
<b>Elective 4</b>						
<b>Sl No</b>	<b>Course Code</b>	<b>Name of the Electives</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1	BTME3056	Product Design	3	0	0	3
2	BTME3067	Refrigeration and Air Conditioning	3	0	0	3
3	BTME3063	Design of Transmission Systems	3	0	0	3
<b>Elective 5</b>						
<b>Sl No</b>	<b>Course Code</b>	<b>Name of the Electives</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1	BTME3060	Computer Aided Design	3	0	0	3
2	BTME3064	Fuels and Combustion	3	0	0	3
3	BTME3065	Metal Forming Theory and Practice	3	0	0	3