

## B.Tech Curriculum for Mechanical Engineering

### SEMESTER – I

Subject Name	Type	Subject Code	L-T-P	Credit	Contact Hour
Calculus and Ordinary Differential Equations	Mathematics	MA1L003	3-1-0	4	4
Environmental Science, Technology and Management	Earth, Ocean and Climate Science	ID2L003	2-0-0	2	2
English for Learning and Communication	Humanities, Social Science and Management	HS1L011	2-0-2	3	4
Programming in C	Computer Science Engineering	CS1L002	2-0-2	3	4
Physics/Chemistry (Students can choose only one theory)	Physics/ Chemistry	PH1L001	3-0-0	3	3
Physics/Chemistry Laboratory (Theory corresponding one lab)	Physics/ Chemistry	PH1P001	0-0-3	2	3
Engineering Drawing and Graphics	Infrastructure	CE1P001	1-0-3	3	4
Extra Academic Activity-1		ID1T001	0-0-3	1	-
<b>Total</b>				<b>21</b>	<b>24</b>

### SEMESTER – II

Subject Name	Type	Subject Code	L-T-P	Credit	Contact Hour
Linear Algebra and Complex Analysis	Mathematics	MA1L004	3-1-0	4	4
Introduction to Bio Science and Technology	Chemistry	ID2L002	2-0-0	2	2
Happiness and life skill	Humanities, Social Science and Management	ID1LXXX	1-0-0	1	1
Introduction to Bharatiya Knowledge Traditions	Humanities, Social Science and Management	ID1LXXX	2-0-0	2	2
Introduction to Manufacturing Process	Mechanical Sciences	ME1P001	0-0-3	2	3
Basic Electrical and Electronics Engineering	Electrical Engineering	EE1L002	3-1-0	4	4
Basic Electrical and Electronics Engineering Laboratory	Electrical Engineering	EE1P002	0-0-3	2	3
Engineering Mechanics	Mechanical Sciences	ME1L001	3-1-0	4	4
Extra Academic Activity-2		ID1T002	0-0-3	1	-
<b>Total</b>				<b>22</b>	<b>23</b>

### SEMESTER-III

Subject Name	Type	Subject Code	L-T-P	Credit	Contact Hour
	HSS 2		3-0-0	3	3
Theory of Machines - I	DC 2	ME2L001	3-1-0	4	4
Thermodynamics	DC 3	ME2L003	3-1-0	4	4
Mechanics of Solids	DC 4	ME2L004	3-1-0	4	4
Applied Partial Differential Equations	DC 5	ME2L101	2-0-0	2	2
Measurements and Instrumentation	SDC 3	ME2L102	1-0-3	3	4
Workshop Practices	Lab-4	ME2P001	0-0-3	2	3
Material Testing Laboratory	Lab-5	ME2P004	0-0-3	2	3
<b>Total</b>				<b>24</b>	<b>27</b>

SEMESTER-IV					
Subject Name	Type	Subject Code	L-T-P	Credit	Contact Hour
	HSS 3		3-0-0	3	3
Theory of Machines - II	DC 6	ME2L005	3-1-0	4	4
Fluid Mechanics	DC 7	ME2L002	3-1-0	4	4
Engineering Materials	DC 8	ME2L103	2-0-0	2	2
Applied Numerical Methods	SDC 4	ME2L104	2-0-2	3	4
Mechanisms and Vibration Laboratory	DC Lab-6	ME2P101	0-0-3	2	3
Fluid Mechanics Laboratory	DC Lab-7	ME2P002	0-0-3	2	3
	OE 1		3-0-0	3	3
<b>Total</b>				<b>23</b>	<b>26</b>
SEMESTER-V					
Subject Name	Type	Subject Code	L-T-P	Credit	Contact Hour
	HSS 4		3-0-0	3	3
Control System Engineering	DC 9	ME3L101	3-0-0	3	3
Heat Transfer	DC 10	ME3L001	3-1-0	4	4
Casting, Welding and Forming	DC 11	ME3L003	3-0-0	3	3
Fluid Machinery	SDC 5	ME3L102	2-0-2	3	4
Heat Transfer Laboratory	DC Lab-8	ME3P101	0-0-3	2	3
Casting, Welding and Forming Laboratory	DC Lab-9	ME3P002	0-0-3	2	3
	DE 1		3-0-0	3	3
<b>Total</b>				<b>23</b>	<b>26</b>
SEMESTER-VI					
Subject Name	Type	Subject Code	L-T-P	Credit	Contact Hour
Design of Machine Elements	DC 12	ME3L002	3-1-0	4	4
Energy Conversion Systems	DC 13	ME3L103	3-1-0	4	4
Machine Tools & Machining	DC 14	ME3L007	3-0-0	3	3
Industrial Engineering	DC 15	ME3L104	3-0-0	3	3
Computer Aided Machine Design	SDC 6	ME3L105	1-0-3	3	4
Applied Thermofluid Laboratory	DC Lab-10	ME3P102	0-0-3	2	3
Machining and Metrology Laboratory	DC Lab-11	ME3P103	0-0-3	2	3
<b>Total</b>				<b>21</b>	<b>24</b>
SEMESTER-VII					
Subject Name	Type	Subject Code	L-T-P	Credit	Contact Hour
DE	DE 2			3	3

DE	DE 3			3	3
OE	OE 2			3	3
Summer Internship	Industrial Training Defence			2	
BTP - 1	Project 1 /DE (against project)	xxxx/ Subject from OE/DE Basket		3	
<b>Total</b>				<b>14</b>	

#### SEMESTER-VIII

Subject Name	Type	Subject Code	L-T-P	Credit	Contact Hour
DE	DE 4			3	3
DE	DE 5			3	3
BTP - 2	Project 2 /DE (against project)	xxxx/2 subjects from OE/DE Basket		6	
<b>Total</b>				<b>12</b>	

#### SEMESTER -VII FOR SIX MONTH INTERNSHIP STUDENTS

Subject Name	Type	Subject Code	L-T-P	Credit	Contact Hour
DE	DE 2			3	3
DE	DE 3			3	3
OE	OE 2			3	3
DE	DE			3	3
Summer internship	Industrial Training Defence			2	
Six month Internship					
<b>Total</b>				<b>14</b>	

#### SEMESTER-VIII

Subject Name	Type	Subject Code	L-T-P	Credit	Contact Hour
DE	DE 4			3	
DE	DE 5			3	
Elective- B & C	DE	2 subjects from OE/DE Basket		6	
<b>Total</b>				<b>12</b>	

**Total Credit: 160**