

**ME****1st Semester:**

S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	PH111	Classical Physics	BSC	3	1	0	4
2	MT111	Calculus and Ordinary Differential Equations	BSC	3	1	0	4
3	EC111	Basic Electronics	ESC	3	1	0	4
4	EC111L	Basic Electronics Lab	ESC	0	0	3	1.5
5	CS111	Programming for Problem Solving	ESC	3	0	3	4.5
6	HS111	Technical Communication in English	HSMC	2	0	2	3
7	HS112	Indian Knowledge System	MC	1	0	0	1

**A 3-week Mandatory Induction Program****Total Credits 22****2nd Semester:**

S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	HS121	Human Values and Ethics	HSMC	3	0	0	3
2	ME121	Environmental Science	MC	1	0	0	1
3	MT121	Linear Algebra and Complex Analysis	BSC	3	1	0	4
4	CS121	Data Structures and Algorithms	ESC	3	0	3	4.5
5	PH121L	UG Physics Lab	BSC	0	0	3	1.5
6	CS122	Introduction to Scripting Languages	ESC	0	0	2	1
7	ME122	Introduction to Mechanical Engineering	PC	1	0	0	1
8	ME123	Engineering Drawing and Graphics	PC	0	0	3	1.5
9	ME124	Workshop Practices	PC	0	0	3	1.5
10	ME125	Engineering Physical Metallurgy	PC	3	0	0	3

**Total Credits 22****Summer Term**

Exit option with UG Certificate by Completing 40 credits from 2 semesters and additional 6 credits from an Internship or skill based courses in the summer term

**3rd Semester:**

S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	MT211	Probability and Statistics	BSC	3	1	0	4
2	ME211	Mechanics of Solids	PC	3	0	2	4
3	ME212	Rigid Body Dynamics	PC	2	0	0	2
4	ME213	Engineering Thermodynamics	PC	3	1	0	4
5	ME214	Welding and Casting	PC	3	0	2	4
6	ME215	Electrical Technology	PC	2	0	2	3

**Total Credits 21****4th Semester:**

S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	HS221	Constitutional Studies	MC	1	0	0	1
2	ME221	Design of Machine Elements	PC	3	0	0	3
3	ME222	Fluid Mechanics and Machinery	PC	3	1	2	5
4	ME223	Machining and Metal Forming	PC	3	0	2	4
5	ME224	Mechanisms and Machines	PC	2	0	2	3
6	ME225	Introduction to Computational Methods	PC	0	0	2	1
7	ME226	Industrial Measurements	PC	3	0	2	4

**Total Credits 21**

Summer Term							
Exit option with UG Diploma by Completing 80 credits from 4 semesters and additional 6 credits from an Internship or skill based courses in the summer term							

5th Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	LN311/LN312	Summer Internship/Project	Project	0	0	8	4
2	ME311	Heat Transfer	PC	3	0	2	4
3	ME312	Design of Transmission Elements	PC	3	0	2	4
4	ME313	Digital Manufacturing	PC	3	0	2	4
5	ME314	Robotics and Control	PC	2	0	2	3
6	ME315	Mechatronics & IoT	PC	2	0	2	3
<b>Total Credits</b>							<b>22</b>

6th Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	LN321	B.Tech. Project (BTP)	Project	0	0	8	4
2	HS321	Introduction to Economics	HSMC	3	0	0	3
3	LN322	Seminar and Presentation Skills	Project	0	0	2	1
4	ME321	IC Engines	PC	3	0	2	4
5	ME322	Finite Element Methods	PC	3	0	0	3
6	ME323	Industrial Engineering and Management	PC	3	0	0	3
7		Program Elective 1	PE	3	0	0	3
<b>Total Credits</b>							<b>21</b>

Summer Term							
Exit option with B.Sc. by Completing 120 credits from 6 semesters and additional 6 credits from an Internship or skill based courses in the summer term							

7th Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	LN411	B.Tech. Project (BTP)	Project	0	0	8	4
2		Open Elective 1	OE	3	0	0	3
3		Program Elective 2	PE	3	0	0	3
4		Program Elective 3	PE	3	0	0	3
5		Program Elective 4	PE	3	0	0	3
6		Open Elective 2	PE	3	0	0	3
<b>Total Credits</b>							<b>19</b>

8th Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
Option 1	LN421	Industrial SLI	Project	0	0	24	12
Option 2	LN422	Thesis	Project	0	0	24	12
Option 3		4 Elective Courses	OE/PE	12	0	0	12
Option 4	LN423	Project	Project	0	0	12	6
		2 Elective Courses	OE/PE	6	0	0	6
Option 5	LN424	Internship	Project	0	0	12	6
		2 Elective Courses	OE/PE	6	0	0	6
<b>Total Credits</b>							<b>12</b>

<b>Total Curriculum Credits</b>							<b>160</b>
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