Bachelor of Technology in Mechanical Engineering
School of Mechanical Engineering

Programme Credit Structure	Credits
University Core Courses	**80**
Programme Core Courses	**40**
Programme Elective / Spl. Elective	**20**
University Elective	**20**
Total Graded Credit Requirement	**160**

University Core				**80**
		T	**P**	**C**
	Science Basket			20
MAT1001	Calculus for Engineers	3	2	4
MAT1002	Applications of Differential and Difference Equations	3	2	4
MAT1011	Applied Statistics	3	2	4
PHY1008	Modern Physics	3	2	4
CHY1009	Chemistry and Environmental Studies	3	2	4
	Engineering Foundation			16
CSE1012	Problem Solving using Python	3	2	4
CSE2005	Object Oriented Programming using JAVA	3	2	4
CSE2001	Data Structures and Algorithms	3	2	4
ECE1002	Fundamentals of Electrical and Electronics Engineering	3	2	4
	Humanities and Management			18
ENG1001/ ENG1002	English for Essential Communication/ English for Effective Communication	2	2	3
ENG1002/ ENG2001	English for Effective Communication / English for Professional Communication	2	2	3
FRLxxxx	Foreign Language	2	0	2
MGT1040	Entrepreneurship	3	2	4
MGT1001	Ethics and Values	2	0	2
	Indian Studies	2	0	2
STSxxxx	Qualitative and Quantitative Skills Practice I	3	0	1
STSxxxx	Qualitative and Quantitative Skills Practice II	3	0	1
	Projects and Internships			26
BIC4002	Industrial Internship/ Senior Design Project	0	0	12
CAP4001	Capstone	0	0	6
SIT1001	Summer Internship	0	0	2
ECS2002	Engineering Clinics - System Design	0	4	2
MEC1002	Engineering Graphics	0	4	2
EXCXXXX	Extracurricular Activities			2
Programme Core				**40**
MEC1008	Engineering Mechanics	4	0	4
MEC2002	Thermodynamics	4	0	4
MEC2003	Strength of Materials	3	2	4
MEC2004	Fluid Mechanics	3	2	4
MEC2005	Fundamentals of Manufacturing Processes	3	2	4
MEC3002	Theory of Machines	3	2	4
MEC3001	Heat and Mass Transfer	3	2	4
MEC3004	Machine Design	3	2	4
MEC2018	Thermal Engineering Systems	3	2	4
MEC 3029	Machining Processes and Workshop Technology	3	2	4
Programme Electives				**20**
MEC4002	Finite Element Method	3	2	4
MEC2008	Product Design and Development	3	0	3
MEC3005	Automation in Manufacturing	3	2	4
MEC3015	Advanced Machining Processes	3	2	4
MEC3012	Additive Manufacturing	3	2	4
MEC2020	Computer aided Design & Manufacturing	3	2	4
MEC3011	Operations Research	3	0	3
MEC2014	Production Planning and Inventory Control	3	0	3
MEC4017	Introduction to Mechanical Vibrations	3	2	4
MEC2021	Mechatronics	4	0	4
MEC3028	Robot Programming	3	2	4
MEC2015	Instrumentation and Control Basics	3	2	4
MEC 2017	Vehicle Dynamics	4	0	4
MEC***	Electric Vehicles	3	2	4
MEC***	Tribology	3	2	4
MEC3006	Fluid Dynamics and Hydraulic Machines	3	2	4
MEC4003	Internal Combustion Engines	3	2	4
MEC4001	Computational Fluid Dynamics	3	2	4
MEC4008	Automobile Engineering	3	2	4
MEC4005	Power Plant Engineering	3	0	3
MEC3010	Renewable Source of Energy	3	0	3
MEC4014	Advanced Strength of Materials	3	0	3
MEC4016	Fracture Mechanics	3	0	3
MEC***	Sensors and Control System	3	2	4
MEC***	Automotive Electricals & Electronics	3	2	4
MEC ****	Fundamentals of Robotics	4	0	4
MEC****	Kinematics & Dynamics of Robots	3	2	4

University Electives **20**

Engineering |Sciences | Humanities | Social Sciences | Liberal arts | Economics | Finance | Management

Honours Degree (20 credits) - Students can opt for an Honours Degree" in the same discipline by earning 20 credits in addition to the minimum credit requirement of the Undergraduate Degree from the courses listed in the Honours options

Minors Degree (20 credits) - Students can opt for a "Minor Degree" in other disciplines 20 credits in addition to the mini-mum credit requirement of the Undergraduate Degree from the courses listed in the Minor options

Double Major Degree (40 credits) -Students can opt for a “Double Major" in other disciplines by earning 40 credits in addition to the minimum credit requirement of the Undergraduate Degree from the courses listed in the Second Major options.