

**Bachelor of Technology in Mechanical Engineering (Automotive Design)**

**School of Mechanical Engineering**

Programme Credit Structure		Credits							
<b>University Core Courses</b>		<b>80</b>			MEC2005	Fundamentals of Manufacturing Processes	3	2	4
<b>Programme Core Courses</b>		<b>40</b>			MEC3002	Theory of Machines	3	2	4
<b>Programme Elective / Spl. Elective</b>		<b>20</b>			MEC3001	Heat and Mass Transfer	3	2	4
<b>University Elective</b>		<b>20</b>			MEC3004	Machine Design	3	2	4
<b>Total Graded Credit Requirement</b>		<b>160</b>			MEC2018	Thermal Engineering Systems	3	2	4
<b>University Core</b>		<b>80</b>			MEC 3029	Machining Processes and Workshop Technology	3	2	4
		<b>T</b>	<b>P</b>	<b>C</b>	<b>Programme Electives</b>				<b>20</b>
	Science Basket			20	MEC2017	Vehicle Dynamics	4	0	4
MAT1001	Calculus for Engineers	3	2	4	MEC***	Electric Vehicles	4	0	4
MAT1002	Applications of Differential and Difference Equations	3	2	4	MEC***	Automotive Electricals & Electronics	4	0	4
MAT1011	Applied Statistics	3	2	4	MEC***	Automotive Pollution and Control	3	2	4
PHY1008	Modern Physics	3	2	4	MEC***	Fuels and Lubricants	3	0	3
CHY1009	Chemistry and Environmental Studies	3	2	4	MEC2008	Product Design and Development	3	0	3
	Engineering Foundation			16	MEC3006	Fluid Dynamics and Hydraulic Machines	3	2	4
CSE1012	Problem Solving using Python	3	2	4	MEC4003	Internal Combustion Engines	3	2	4
CSE2005	Object Oriented Programming using JAVA	3	2	4	MEC4008	Automobile Engineering	3	2	4
CSE2001	Data Structures and Algorithms	3	2	4	MEC4004	Refrigeration and Air-conditioning	3	0	3
ECE1002	Fundamentals of Electrical and Electronics Engineering	3	2	4	MEC4005	Power Plant Engineering	3	0	3
	Humanities and Management			18	MEC3010	Renewable Source of Energy	3	0	3
ENG1001/ ENG1002	English for Essential Communication/ English for Effective Communication	2	2	3	MEC3011	Operations Research	3	0	3
ENG1002/ ENG2001	English for Effective Communication / English for Professional Communication	2	2	3	MEC2014	Production Planning and Inventory Control	3	0	3
FRLxxxx	Foreign Language	2	0	2	<b>University Electives</b>				<b>20</b>
MGT1040	Entrepreneurship	3	2	4	Engineering   Sciences   Humanities   Social Sciences   Liberal arts   Economics   Finance   Management				
MGT1001	Ethics and Values	2	0	2	<b>Honours Degree (20 credits)</b> - 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				
	Indian Studies	2	0	2	<b>Minors Degree (20 credits)</b> - 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				
STSxxxx	Qualitative and Quantitative Skills Practice I	3	0	1	<b>Double Major Degree (40 credits)</b> -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.				
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					
<b>Programme Core</b>		<b>40</b>							
MEC1008	Engineering Mechanics	4	0	4					
MEC2002	Thermodynamics	4	0	4					
MEC2003	Strength of Materials	3	2	4					
MEC2004	Fluid Mechanics	3	2	4					