

## Mechanical Engineering

Prog.	Year	Course Code	Course Name	Prerequisites	Category						
					X	Y	Z	M	J	K	L
Bachelor of Technology Honours in Engineering Degree	Higher Diploma in Technology	1	MPZ3231	Engineering Mathematics IA	None			6			
			MPZ3132	Engineering Mathematics IB	MPZ3231(CR)			3			
			ECX3210	Electro Techniques	MPZ3231(CR)	6					
			MEX3211	Communicating Engineering Information	None	6					
			MEX3233	Workshop technology	None	6					
			MEX3234	Engineering drawing	MEX3211(CR)	6					
			MEX3235	Thermo-fluids	None	6					
			MEX3274	Electronics, sensors and actuators	ECX3210(CR)	6					
		2	MPZ4230	Engineering Mathematics II*	MPZ3231(EL), MPZ3132(EL)			6			
			MEX4275	Strength of Materials I	MPZ3231(EL)	6					
			MEX4276	Mechanics of Machines	MPZ3231(EL)	6					
			MEX4233	Materials Engineering	MEX4275(CR)	6					
			ECX4236	Microprocessors & Interfacing	ECX3210(P), MPZ3231(P), MEX3211(P), {[ECX3233(EL) and ECX3230(EL)] or ECX3234(EL) or MEX3272(EL)} or MEX3274(EL)	6					
			<i>Minimum of two from:</i>								
			MEX4230	Production Technology	MEX3233(EL)	6					
			MEX4135	Production Management	MPZ3121(EL)	3					
			MEX4232	Automobile Technology	MEX3235(EL), [MEX4275(CR) and MEX4276(CR)]	6					
			MEX4142	Applied Automotive Electronics	MEX4232(CR), MEX3274(EL)	3					
		<b>Minimum credits for the Higher Diploma in Technology</b>				<b>90</b>	<b>60<sup>1</sup></b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>0</b>
		3	MPZ5230	Engineering Mathematics III	MPZ3231(P), MPZ3132(P), MPZ4230(EL)			6			
			MEX5231	Applied Thermodynamics	MEX3235(P), MPZ4230(EL)	6					
			MEX5232	Strength of Materials II	[MEX4275(EL), MPZ4230(EL)]	6					
			MEX5233	Dynamics of Mechanical Systems	[MEX4276(EL), MPZ4230(EL)]	6					
			MEX5277	Machine Design	{[MEX4275(EL) and MEX4276(EL)] or MEX4335(EL)} and [MEX3274(EL) or MEX4271(EL)]	6					
		4	MEX6240	Industrial Engineering	MPZ4230(P)	6					
			MEX6278	Fluid Mechanics	MEX3235(P), MPZ4230(P)	6					
			<i>Select one from:</i>								
			MEY6595	Individual Project Type B	Pass in 18 credits in X category at Level 5 or above		15				
			MEY6496	Group Project	Pass in 18 credits in X category at Level 5 or above		12				
			MEY6197	Project Identification & literature survey	Pass in 9 credits at Level 5 or above		3				
			<i>and</i>								
			MEY6498	Individual Project Type A	MEY6197(CR)		12				
			<i>Minimum of two from:</i>								
			MEX6231	Automobile Engineering	MEX4232(P), MPZ4230(P)	6					
			MEX6232	Vehicle Dynamics	MEX4232(P), MPZ4230(P), MEX5232(EL)	6					
			MEX6230	Mechanics of Materials	MPZ4230(P), MEX5232(EL)	6					
			MEX6234	Advanced Manufacturing Technology	MPZ4230(P), MEX4230(P)	6					
			MEX6235	Thermal Power Generation	MPZ4230(P), MEX3235(P)	6					
			MEX6236	New and Renewable Sources of Energy	MPZ4230(P), MEX3235(P)	6					
			MEX6270	Factory Automation	Pass in 72 Credits in X category	6					
			MEX6271	Robotics	MPZ5230(EL), [MEX3274(P) or MEX4271(P)], MEX5233(EL)	6					
		<b>Minimum credits for the Bachelor of Technology Honours in Engineering Degree</b>				<b>177<sup>5</sup></b>	<b>114<sup>2</sup></b>	<b>12<sup>3</sup></b>	<b>21<sup>4</sup></b>	<b>9</b>	<b>0</b>

<sup>1</sup> 60 credits of which at least 18 at level 4 or above <sup>2</sup> subjected to a minimum of 45 at levels 5 and 6, of which at least 18 at level 6 <sup>3</sup> subjected to a minimum of 12 at level 6 <sup>4</sup> subjected to a minimum of 6 at level 6 <sup>5</sup> subjected to a minimum of 84 at levels 5 and 6, of which at least 36 from level 6  
 \* For the Higher Diploma could be replaced with equal number of credits at Level 4 or above