Course Structure

Level I Semester I

Engineering Science and Design	Credits	Mathematics, Basic Science & Computing	Credits	Complementary Studies	Credits
ENT1111: Workshop Technology I	1 (P) (45h)	TMS1113: Foundation of Mathematics	3 (T)	ENG1110: English I (teaching – 4-hours per week)	NC
ENT1121: Foundation For Technology	1 (P) (45h)	TMS1122: Chemistry of Materials	2 (T)		
		TMS1132: Computer Fundamentals and PC Applications	2 (T+P)		
		TMS1143: Physics of Mechanical Systems	3 (T)		
		TMS1152: Applied Calculus	2 (T)		
		TMS1161: Common Practical I (Mechanical systems)(physics)	1 (P) (45h)		
	02		**13**		**00**
Level I Sem. I Total credits (Additional hours given for English)					**15**

Level I Semester II

Engineering Science and Design	Credits	Mathematics, Basic Science & Computing	Credits	Multidisciplinary	Credits
ENT1213: Engineering Properties of Matter	3 (T)	TMS1212: Introduction to Ordinary Differential Equations	2 (T)	ENG1210: English II (teaching 2-hours per week)	NC
ENT1222: Electricity and Magnetism	2 (T)	TMS1223: Computer Programming Techniques	3 (T+P)		
ENT1232: Introduction to Electronics	2 (T+P)				
ENT1241: Common Practical I (Engineering properties of matter)	1 (P) (45h)				
ENT1251: Common Practical II (Electricity and Magnetism)	1 (P) (45h)				
ENT1261: Workshop Technology II	1 (P) (45h)				
	10		**05**		**00**
Level I Sem. II Total credits					**15**

Level II Semester I

Engineering Science and Design	Credits	Mathematics, Basic Science & Computing	Credits	Complementary Studies	Credits
ENT2113: Analogue Electronic Systems	03 (T2+P1)	TMS2112: Applied Numerical Methods with MATLAB	02	TCS2112: Business Economics	02 (T)
ENT2122: Electrical/Electronic and Mechanical Equipment Maintenance	02 (T1+P1)			TCS2122: Soft Skills	02 (1T+1P)
ENT2132:Computer Hardware and Network Maintenance	02 (T1+P1)			ENG2110: English III (teaching 2-hours per week)	NC
ENT2142: Technical Drawing & Computer Aided Drafting	02 (T+P)				
ENT2152: Object Oriented Programming	02 (T1+P1)				
	11		**02**		**04**
Level II Sem. I Total credits					**17**

Level II Semester II

Engineering Science and Design	Credits	Mathematics, Basic Science & Computing	Credits	Complementary Studies	Credits
ENT2211: Computer Laboratory on Operating Systems	1 (P)	TMS2213: Probability and Statistics	03	TCS2212: Fundamentals of Management	02
ENT2223: Digital Electronic Systems	03 (T+P)			TCS2221: Ethics for Technologists	01
ENT2232: Circuit Analysis & Faults Diagnosis	02 (T+P)			ENG2210: English IV (teaching 2-hours per week)	NC
ENT2242: Basic Automobile Technology	02				
ENT2252: Instrumentation and Calibration	02 (T+P)				
ENT2261:Workshop Technology III	1 (P)				
	11		**03**		**03**
				Level II Sem. II Total credits	**17**

Level III Semester I

Engineering Science and Design	**Credits**	**Mathematics, Basic Science & Computing**	**Credits**	**Complementary Studies**	**Credits**
ENT3112:Properties of Materials and Their Applications	02	TMS3112: Basic Environmental Science	02 (T)	TCS3111: Safety and Risk Management	01
ENT3122: Renewable and Alternative Energy Technology	02			TCS3122: Accounting for Technologists	02
ENT3132: Electrical Power Systems	02			TCS3131: Art and Tradition	01
ENT3142: Introduction to Robotics	02			ENG3110: English V (Teaching 2-hours per week)	NC
ENT3151: Common Practical III(Power systems)	01 (P)				
ENT3161: Common Practical IV(Properties of materials + renewable energy)	01 (P)				
ENT3171: Common Practical V(Robotics)	01 (P)				
	11		**02**		**04**
Level III Semester I - Total credits					**17**

Level III Semester II has to be released for Industrial Training

After Level III Semester I Examination to the beginning of Level IV academic year

Engineering Science and Design	**Credits**
ENT3216: Industrial Training (6-month period)	06
Total credits	**06**

Level IV Semester I

Engineering Science and Design	**Credits**	**Mathematics, Basic Science & Computing**	**Credits**	**Complementary Studies**	**Credits**
ENT4112: Welding Techniques	02				
ENT4122: Introduction to Mechatronics	02			TCS4111: Communication for Technologists	01
ENT4132: Nanotechnology	02			TCS4122: Creativity, Innovation & Entrepreneurship	02
ENT4142: Bio Medical Equipment	02			TCS4131: Industrial Sociology	01
ENT4152: Refrigeration & Air Conditioning	02				
ENT4161: Common Practical VI	01 (P)				
ENT4171: Common Practical VII	01 (P)				
ENT4181: Common Practical VIII	01 (P)				
ENT4090: Design Project	**				
	13				**04**
				Level IV Semester I Total	**17**

**** Continue in the next semester (ENT4090) - second 0 means both semesters**

Level IV Semester II

Engineering Science and Design	**Credits**	**Mathematics, Basic Science & Computing**	**Credits**	**Complementary Studies**	**Credits**
ENT4212: Nautical Technology	02			TCS4211: Human Resources Management	01
ENT4222: Hydraulic pumps and Machines	02			TCS4222: Operations Management for Technologist	02
ENT4232: Polymer Materials	02				
ENT4242: Marine Technology	02				
ENT4252: Hybrid Systems	02				
ENT4261: Common practical IX	01				
ENT4271: Common practical X	01				
ENT4083: Design project	03				
	15				**03**
Level IV Semester II Total					**18**
Total for each section	**72+06**		**24**		**18**
TOTAL CREDITS FOR THE DEGREE					**122**