

Programme Structure

Bachelor of Engineering (Hons) Electrical Engineering (EE242/CEE242)

Semester	Code	Course	Course Type	Pre-Requisite Course	SLT Hours	
					Engineering Courses	General Education Courses
1	HEP1	Co-Curriculum I	Core			40
	MAT435	Calculus for Engineers	Core			120
	ELE412	Circuit Analysis	Core		120	
	EPO413	Electrical Engineering Laboratory I	Core		60	
	EPO400	Electrical Practices	Core		60	
	ELE422	Analogue Electronics	Core		120	
	ECE422	Digital Electronic Fundamentals	Core		120	
2	HEP2	Co-Curriculum II	Core			40
	CTU552	Philosophy and Current Issues	Core			80
	ESE461	Signals and Systems	Core		120	
	ECE431	Computer Programming	Core		140	
	ECM412	Communication Engineering Fundamentals	Core		120	
	EPO460	Power Engineering	Core		120	
	EPO423	Electrical Engineering Laboratory II	Core		60	
3	HEP3	Co-Curriculum III	Core			40
	ELC590	English for Oral Presentations	Core			80
	CTU554	Values and Civilization II	Core			80
	MAT455	Further Calculus for Engineers	Core	MAT435		120
	ECE521	Microprocessor System	Core		140	
	ESE439	Instrumentation and Control Systems	Core	ESE461	120	
	KJM442	Heat and Fluid	Core		120	
4	APB1	Third Language I	Core			80
	MAT575	Introduction to Numerical Analysis	Core	MAT455		120
	EPO525	Electromagnetic Theory for Power Engineering	Core	MAT435	120	
	EPO540	Electrical Machines	Core	EPO460	120	
	EPO520	Power System I	Core	EPO460	120	
	EPO562	Electrical Engineering Laboratory III	Core		100	
5	APB2	Third Language II	Core			80
	STA408	Statistics for Science and Engineering	Core			120
	EPO510	Power Electronics	Core		140	
	EPO522	Power System II	Core	EPO520	140	
	ESE559	Modern Control System in Electrical Engineering	Core	ESE461	120	
		Elective I	Non-Core		120	

Semester	Code	Course	Course Type	Pre-Requisite Course	SLT Hours	
					Engineering Courses	General Education Courses
6	APB3	Third Language III	Core			80
	ELC640	English for Job Applications	Core			80
	EPO563	Electrical Engineering Laboratory IV	Core		100	
	EPO640	Electric Drives	Core	EPO510	120	
	EPO630	High Voltage	Core	EPO460	140	
		Elective II	Non-Core		120	
7	EEE610	Engineer in Society	Core		140	
	EPO667	Industrial Training	Core		160	
	EPO661	Power Engineering Project I	Core		100	
	EPO662	Electrical Engineering Laboratory V	Core		100	
	EPO521	Electrical Engineering Utilization and Practice	Core	EPO460	140	
		Elective III	Non-Core		120	
8	EET699	English Exit Test	Core			0
	ENT600	Technology Entrepreneurship	Core			120
	EPO663	Power Engineering Project II	Core	EPO661	220	
	EPO666	Selected Topics for Power Engineering	Core		140	
		Elective IV	Non-Core		120	
Total SLT Hours					4120	1280
Total SLT Credits					103	32
SLT Credits for programme					135	

List of Elective Courses According to the Areas of Specialisation

Areas	Code	Course	Semester
Power System Control	ECE627	Microcontroller Applications	7
	ESE623	Computer Control Instrumentation	6
	ESE643	Modern Control Systems	8
Power System Analysis	EPO620	Artificial Intelligence in Power System	6
	EPO621	Electrical Energy Economics and Planning	7
	EPO625	Numerical Computation in Power System Reliability	6
	EPO625	Numerical Computation in Power System Reliability	7
	EPO622	Renewable Energy	8
Interdisciplinary Electrical Courses	ESE644	Programmable Logic Controller and Automation	5
	ESE563	Digital Signal Processing	5
	ECE663	Expert System	8
	ECM616	Emerging Technology	8
	ESE689	Practical Robotics	5
	ESE562	Signals and Systems: Analysis and Applications	5
	ESE690	Special Topic I in System Engineering	5
	ESE691	Special Topic II in System Engineering	6
	ESE652	Process Control	7