

MENGS (ELECTRICAL AND ELECTRONIC ENGINEERING)

Programme Requirements

Code	Title	Credits
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Students take **90** credits as follows:

Part I

Students take **60** credits - Research Report (**10** credits) and elective modules to the value of **50** credits:

Core Modules

EE6019	Research Report	10
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<i>Elective Modules</i>		50
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Students take **50** credits from the following:

Group One

Students take at least **35** credits from the following:

EE6024	Engineering Machine Learning Solutions (5)	
EE6034	Optical Communications and Optoelectronics (5)	
EE6035	Electrical Power Systems (5)	
EE6036	Design of RF Integrated Circuits (5)	
EE6041	Advanced Digital Signal Processing (5)	
EE6042	Frequency Synthesizers for Wireless and Cellular Systems (5)	
EE6043	Design of Digital Integrated Circuits (5)	
EE6044	Advanced Analogue IC Design (5)	
EE6045	Data Converter Techniques: Circuits and Architectures (5)	
EE6046	Introduction to Micro Electromechanical Systems (MEMS) (5)	
EE6048	Smart Grids (5)	
EE6049	Design of Analogue Integrated Circuits (5)	
EE6061	Industrial Automation and Control (5)	

Group Two

Students take the remaining credits from Group Two:

CS6322	Optimisation (5)	
CS6325	Network Security (5)	
CS6327	Internet of Things: Technology and Application (5)	
CS6506	Programming in Python (5)	
CS6507	Programming in Python with Applications (5)	
EE4001	Energy Systems, Power Electronics and Drives (5)	
EE4002	Control Engineering II (5)	
EE4004	Telecommunications II (5)	
EE4012	Biomedical Systems (5)	
EE4019	Photonic Signals and Systems Application (5)	
ME6008	Robotics (5)	
ME6012	Advanced Robotics (5)	
NE4008	Photovoltaic Systems (5)	
ST6030	Foundations of Statistical Data Analytics (10)	

Part II

Select one of the following Options:	30
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Core Modules

Option I

EE6023	Dissertation in Electrical and Electronic Engineering (30)
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Option II

EE6008	Research Project for Placement Students (20)
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EE6009	MEngSc Placement (10)
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Total Credits	90
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Examinations

Full details and regulations governing Examinations for each programme will be contained in the *Marks and Standards Book* and for each module in the *Book of Modules*.