

ELECTRICAL & ELECTRONIC ENGINEERING PROGRAMME STRUCTURE

	FIRST YEAR	SECOND YEAR	THIRD YEAR	FINAL YEAR
CORE COURSES	<ul style="list-style-type: none"> • Physics I • Physics II • Chemistry • Computing • Life Sciences • Materials Science • Mathematics 1 • Mathematics 2 • Laboratory 1A • Laboratory 1B 	<ul style="list-style-type: none"> • Circuit Analysis • Analog Electronics • Digital Electronics • Semiconductor Fundamentals • AC Circuits & Machines • Data Structures & Algorithms • Signals and Systems • Engineering Mathematics I • Engineering Mathematics II • Laboratory 2A • Laboratory 2B • Design & Innovation Project • Basic Engineering Mathematics • Foundation Physics • Engineering Physics 	<ul style="list-style-type: none"> • Engineering Electromagnetics • Microprocessors • Integrated Electronics • Laboratory 3 • Project <p style="text-align: center;"><u>Internships</u></p> <ul style="list-style-type: none"> • Industrial Attachment (24 weeks) or • Industrial Orientation (10 weeks; required to read an additional of 6 AUs of UEs) or • Enhanced Industrial Attachment (30 weeks) or • International Research Attachment (30 weeks) 	<ul style="list-style-type: none"> • Software Engineering+ • Final Year Project <p>+ <i>Core course for INON students only.</i></p>
MAJOR PRESCRIBED ELECTIVES			<p>THIRD YEAR ELECTIVES (Choose only 2 courses.)</p> <ul style="list-style-type: none"> • Modelling and Control • Communication Principles • Semiconductor Devices and Processing • Digital Signal Processing • Power Systems and Conversion • Computer Communications • Introduction to Photonics 	<p>FINAL YEAR OPTIONS</p> <p>[ECAL & ENIC]</p> <ul style="list-style-type: none"> • 2 Design Electives • 5 Technical Electives <p>[INON]</p> <ul style="list-style-type: none"> • 2 Design Electives • 4 Technical Electives
GENERAL EDUCATION REQUIREMENT (CORE)	<ul style="list-style-type: none"> • Effective Communications 	<ul style="list-style-type: none"> • Technical Communications 		<ul style="list-style-type: none"> • Engineers and Society • Human Resource Management • Professional Communications
GENERAL EDUCATION REQUIREMENT (PRESCRIBED ELECTIVE)	<p><u>Students Admitted to Year 1</u></p> <ul style="list-style-type: none"> • 9 AUs (Arts, Humanities and Social Sciences Group) • 3 AUs (Business and Management Group) • 3 AUs (Science, Technology and Society Group) 		<p><u>Students Admitted Directly to Year 2</u></p> <ul style="list-style-type: none"> • 3 AUs (Arts, Humanities and Social Sciences Group) • 3 AUs (Business and Management Group <u>or</u> Science, Technology and Society Group) 	
GENERAL EDUCATION REQUIREMENT (UNRESTRICTED ELECTIVE)	<p><u>Students Admitted to Year 1</u></p> <ul style="list-style-type: none"> • 9 AUs from the Unrestricted Group 			

Final Year Option Groups

- ECAL - Electrical & Systems Engineering
- ENIC - Electronic Engineering
- INON - Infocommunication Engineering

Courses to be read by Second Year Poly Direct-Entry Students only.