

APPROVED



Institiúid Teicneolaíochta Chorcaí  
Cork Institute of Technology

<b>Awards</b>					
BEng					
<b>Programme Code:</b>	CR_EELXE_7	<b>Mode of Delivery:</b>	Full Time, Part Time, ACCS	<b>No. of Semesters:</b>	6
<b>NFQ Level:</b>	7				
<b>Embedded Award:</b>	No	<b>Programme Credits:</b>	180		
<b>programmeReviewDate:</b>	May 2025				
<b>Department:</b>	ELECTRICAL & ELECTRONIC ENGINEERING				
<b>Field of Study:</b>	Electronic Engineering				

## Programme Outcomes

Upon successful completion of this programme the graduate will be able to demonstrate... :

<b>PO1</b>	Knowledge - Breadth
(a)	A detailed knowledge of electronic circuit and system design. A knowledge of mathematics, ICT, design, business and engineering practice relevant to the electronic engineering technologist.
<b>PO2</b>	Knowledge - Kind
(a)	The ability to apply knowledge of electronic systems, mathematics, design, ICT, business and engineering practice to the solution of common electronic engineering technology problems.
<b>PO3</b>	Skill - Range
(a)	The ability to use techniques, skills and modern computer-based engineering tools and packages necessary for engineering practice.
<b>PO4</b>	Skill - Selectivity
(a)	The ability to contribute to the design of a system, component or process to meet specified needs and to carry out an assessment of the safety and technical performance of the design.
<b>PO5</b>	Competence - Context
(a)	The ability to identify and solve commonly encountered engineering problems in electronic engineering.
<b>PO6</b>	Competence - Role
(a)	The ability to work effectively as an individual, in teams and in multidisciplinary settings within her/his allocated responsibility, and to supervise staff in well-defined work settings. The ability to communicate effectively, using the appropriate communication tools and methods, with the engineering community and society at large.
<b>PO7</b>	Competence - Learning to Learn
(a)	The ability to identify and address learning needs at the personal and professional levels and an awareness of the need for continued professional development.
<b>PO8</b>	Competence - Insight
(a)	An understanding of the wider social, political, business and economic context within which engineering operates and the need for high ethical standards in the practice of engineering, including the responsibilities of the engineering profession towards people and the environment

## Semester Schedules

### Stage 1 / Semester 1

Mandatory	
Module Code	Module Title
ELTR6002	<a href="#">Analogue Electronics 1</a>
ELEC6018	<a href="#">Electrical DC Principles</a>
MATH6014	<a href="#">Technological Mathematics 1</a>
ELTR6005	<a href="#">Digital Systems Fundamentals</a>
ELTR6011	<a href="#">Electronics Applications</a>
CMOD6001	<a href="#">Creativity Innovation&amp;Teamwork</a>

### Stage 1 / Semester 2

Mandatory	
Module Code	Module Title
ELTR6003	<a href="#">Analogue Electronics 2</a>
ELEC6019	<a href="#">Electrical AC Principles</a>
MATH6045	<a href="#">Technological Maths 2 (Elec)</a>
ELTR6006	<a href="#">Digital Systems: Logic Apps</a>
INTR6002	<a href="#">Embedded Programming</a>

  

Elective	
Module Code	Module Title
ELTR6022	<a href="#">Electronic Design Automation</a>
FREE6001	<a href="#">Free Choice Module</a>

Stage 2 / Semester 1

Mandatory	
Module Code	Module Title
ELTR6025	<a href="#">Mixed Signal Digital</a>
INTR6022	<a href="#">Computing System Technology</a>
MATH6041	<a href="#">Technological Mathematics 220</a>
ELTR6016	<a href="#">Microprocessor Systems</a>
INTR6017	<a href="#">Electronic Systems Programming</a>
Elective	
Module Code	Module Title
INTR6020	<a href="#">Mobile Robotics</a>
FREE6001	<a href="#">Free Choice Module</a>

Stage 2 / Semester 2

Mandatory	
Module Code	Module Title
ELTR6026	<a href="#">Mixed Signal Analogue</a>
ELTR6027	<a href="#">Telecomms and Networking</a>
MATH6043	<a href="#">Technological Mathematics 221</a>
ELTR6017	<a href="#">Microprocessor Systems I/O</a>
ELTR6028	<a href="#">Electronic System Test</a>
ELTR6024	<a href="#">Electronic Project</a>

Stage 3 / Semester 1

Mandatory	
Module Code	Module Title
ELTR7007	<a href="#">Wireless Comms Principles</a>
MATH7031	<a href="#">Transform Methods for E.Eng.</a>
ELTR7010	<a href="#">HDL Digital System Design</a>
ELTR7011	<a href="#">Electronic Engineering</a>
ELTR7019	<a href="#">Microcomputer Applications</a>
ELTR7023	<a href="#">Project Development</a>

Stage 3 / Semester 2

Mandatory	
Module Code	Module Title
ELTR7008	<a href="#">Digital Comms Principles</a>
INTR7033	<a href="#">Modelling and Control</a>
INTR7021	<a href="#">Interface Programming</a>
INTR7032	<a href="#">Engineering Work Placement</a>