



APPROVED

Awards	
Honours Bachelor Degree	
Mode of Delivery:	Full Time, ACCS
No. of Semesters :	8
NFQ Level:	8
Programme Credits:	240
Language of Instruction:	English
Department:	Aerospace, Mechanical & Electronic Engineering

Semester Schedules

Stage 1 / 60 ECTS / Semester 1

Elective Regulation

All learners must achieve a minimum mark of 40% in each assesseble element of each module.

Mandatory	
Module Code	Module Title
MATH C1611	Mathematics and Computer Applications 1
ELEC C1611	Electrical and Electronic Fundamentals
ELEC C1618	Electronic Engineering Practice 1
ENGR C1607	Engineering Science
PROG C1607	Programming Systems

Stage 1 / 60 ECTS / Semester 2

Elective Regulation

All learners must achieve a minimum mark of 40% in each assessable element of each module.

Mandatory	
Module Code	Module Title
MATH C1612	Mathematics and Computer Applications 2
TECH C1602	Technical Communications
ELEC C1612	Electrical and Electronic Circuits
ELEC C1620	Electronic Engineering Practice 2
SYST C1601	Development on GNU/Linux

Stage 2 / 60 ECTS / Semester 1

Mandatory	
Module Code	Module Title
MATH C2609	Engineering Mathematics 1
DIGT C2602	Analogue and Digital Electronics 1
COMM H2612	Electronic Communications 1
SYST C2610	System Design and Test
PROG C2605	Computer Programming

Stage 2 / 60 ECTS / Semester 2

Elective Regulation

Students may EXIT after this stage of the programme with a Higher Certificate in Electronic Engineering (Embedded Exit Award), provided they have achieved the required Level 6 learning outcomes and have achieved 120 credits. Academic regulations apply.

Mandatory	
Module Code	Module Title
MATH C2610	Engineering Mathematics 2
DIGT C2603	Analogue and Digital Electronics 2
ELEC H2605	Electronic Communications 2
SYST C2611	Embedded Systems 1
SYST H2606	Satellite and Microwave Systems

Stage 3 / 60 ECTS / Semester 1

Elective Regulation

Mandatory	
Module Code	Module Title
MATH C3604	Engineering Mathematics 3
SYST C3605	Embedded Systems 2
COMM C3601	Digital Communications
NETW C3607	Computer Networks 1
ANAL H3601	Analysis of Analogue Circuits

Stage 3 / 60 ECTS / Semester 2

Elective Regulation

Learners will complete work placement as part of this programme. In exceptional circumstances and only with formal approval by the programme board, learners may be enrolled on the elective options as a contingency. Learners may EXIT after this stage of the programme with a Bachelor of Engineering in Electronic Engineering (Embedded Exit Award), provided they have achieved the required Level 7 learning outcomes and have achieved 180 credits. Academic regulations apply.

Mandatory	
Module Code	Module Title
WKPL C3603	Work Placement
INDL C3604	Industrial Studies

Elective	
Module Code	Module Title
AUTO C3601	Network Programmability and Automation
TRON C3603	Software Defined Radio
NETW C3610	Computer Networks 2
PROJ C3603	Development Project (Engineering)

Stage 4 / 60 ECTS / Semester 1

Mandatory	
Module Code	Module Title
DSGN C4601	Microelectronic Design 1
LANG C4601	Hardware Description Language
SYST C4601	Signals and Systems 1
ELEC C4602	Artificial Intelligence and Machine Learning
PROJ C4604	Research Project (Engineering) (Part 1 of 2)

Stage 4 / 60 ECTS / Semester 2

Mandatory	
Module Code	Module Title
DSGN H4601	Microelectronic Design 2
SYST C4603	Signals and Systems 2
STUD C4601	Professional Studies
SYST C4602	Digital Systems
PROJ C4604	Research Project (Engineering) (Part 2 of 2)