



APPROVED

Awards	
Ordinary Bachelor Degree	
Mode of Delivery:	Full Time, ACCS
No. of Semesters :	6
NFQ Level:	7
Programme Credits:	180
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
PROG C1607	Programming Systems
ZBIO C1103	Physiology and Cell Biology 1

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
ELEC C1612	Electrical and Electronic Circuits
TECH C1602	Technical Communications
DSGN C1604	Prototyping
ZBIO C1104	Physiology and Cell Biology 2

Stage 2 / 60 ECTS / Semester 1

Mandatory	
Module Code	Module Title
MATH C2609	Engineering Mathematics 1
DIGT C2602	Analogue and Digital Electronics 1
SYST C2610	System Design and Test
PROG C2605	Computer Programming
ZBIO C2101	Fundamentals of Microbiology 1

Stage 2 / 60 ECTS / Semester 2

Elective Regulation

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

Mandatory	
Module Code	Module Title
MATH C2610	Engineering Mathematics 2
DIGT C2603	Analogue and Digital Electronics 2
SYST C2611	Embedded Systems 1
ZBIO C2103	Fundamentals of Microbiology 2
LABS C2602	Medical Devices and Instrumentation

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
ANAL H3601	Analysis of Analogue Circuits
ZBIO C3100	Molecular Biology and Immunology 1

Stage 3 / 60 ECTS / Semester 2

Elective Regulation

Learners who have successfully achieved all of the required Level 7 programme learning outcomes and have accumulated 180 credits may then apply to progress to Stage 4 of the Bachelor of Engineering (Honours) in Biomedical Electronics. Academic regulations apply.

Mandatory	
Module Code	Module Title
LAWS C3603	Medical Device Standards and Regulations
ZBIO C3104	Molecular Biology and Immunology 2
AUTO C3601	Network Programmability and Automation
TRON C3603	Software Defined Radio
PROJ C3603	Development Project (Engineering)