



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 subjects are mandatory. Modules may require that students participate in class work, practical work & project work per assessment criteria. A minimum of 40% may be required in each of these elements to satisfy the module learning outcomes.

Mandatory	
Module Code	Module Title
AVIO C1602	Avionics Fundamentals 1
DSGN C1608	Aircraft Anatomy and Design 1
MATH C1605	Engineering Mathematics 1
MGMT C1602	Management Fundamentals and Communications
SCIE C1605	Aviation Science 1

Stage 1 / 60 ECTS / Semester 2

Elective Regulation

All subjects are mandatory. Modules may require that students participate in class work, practical work & project work per assessment criteria. A minimum of 40% may be required in each of these elements to satisfy the module learning outcomes.

Mandatory	
Module Code	Module Title
AVIO C1605	Avionics Fundamentals 2
DSGN C1609	Aircraft Anatomy and Design 2
MATH C1608	Engineering Mathematics 2
PRAC C1604	Aviation Engineering Practice
SCIE C1606	Aviation Science 2

Stage 2 / 60 ECTS / Semester 1

Mandatory	
Module Code	Module Title
MATH C2607	Engineering Mathematics 3
AVIO H2601	Avionics 1
SYST H2602	Propulsion Systems 1
AVIA H2603	Human Factors in Aviation
PROJ H2609	Project 1 (Avionic)

Stage 2 / 60 ECTS / Semester 2

Elective Regulation

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

Mandatory	
Module Code	Module Title
MATH C2608	Engineering Mathematics 4
PRTC H2602	Aviation Maintenance Practices
AVIA H2605	Aviation Construction Materials and Hardware
MECH H2607	Mechanics of Materials 1
PROJ H2610	Project 2 (Mechanical)

Stage 3 / 60 ECTS / Semester 1

Mandatory	
Module Code	Module Title
MATH C3603	Engineering Mathematics 5
ELEC H3604	Electrical Propulsion
ENGR H3603	Introduction to Space Engineering
AVIO H3604	UAS Technology
MECH H3602	Mechanics of Materials 2

Stage 3 / 60 ECTS / Semester 2

Elective Regulation

Learners will complete Work Placement as part of this Level 8 programme. In exceptional circumstances, and only with formal approval by the Programme Board, learners may be enrolled on the elective options as a contingency for not being in a position to take the Work Placement module. Students may EXIT at this stage of the programme with a Bachelor of Engineering (Ordinary) in Aircraft Systems (Embedded Exit Award), provided they have achieved the required Level 7 learning outcomes and have accumulated 180 credits. Academic regulations apply.

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

Elective	
Module Code	Module Title
STRU H3603	Aircraft Structures
PROJ C3603	Development Project (Engineering)
AVIA H3604	Aircraft Systems

Stage 4 / 60 ECTS / Semester 1

Elective Regulation

Students are expected to attend laboratories for each project module for a minimum of 4 hours per week.

Mandatory	
Module Code	Module Title
PROJ C4604	Research Project (Engineering) (Part 1 of 2)
COAP H4601	Aerodynamics and Computational Analysis
AVIA H4601	Flight Mechanics
DSGN H4602	Conceptual Design
SYST H4605	Embedded Systems

Stage 4 / 60 ECTS / Semester 2

Elective Regulation

Students are expected to attend laboratories for each project module for a minimum of 4 hours per week.

Mandatory	
Module Code	Module Title
STRU H4601	Aircraft Structural Mechanics and Analysis
AVIA H4604	Aircraft Stability and Control
COMP H4603	Computer Networks for Aircraft
TECH C1606	Technical Aircraft Leasing and Management
PROJ C4604	Research Project (Engineering) (Part 2 of 2)