



APPROVED

Awards	
Honours Bachelor Degree	
Mode of Delivery:	Full Time, Part Time, Distance Education, 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

Mandatory	
Module Code	Module Title
AGRI C1F03	Principles of Crop Production
AGRI C1F04	Mechatronics for Agriculture
MATH C1605	Engineering Mathematics 1
PHYS C1F02	Applied Physics for Agriculture 1

Stage 1 / 60 ECTS / Semester 2

Mandatory	
Module Code	Module Title
AGRI C1714	Ruminant Animal Production
DSGN C1F02	Agricultural Design and Mechanisation
MATH C1608	Engineering Mathematics 2
MGMT C1F02	AgriBusiness Management

Stage 1 Exit Only Award : Undeclared

Stage 2 / 60 ECTS / Semester 1

Mandatory	
Module Code	Module Title
MANU C2F02	Manufacturing and CAD
MATH C2607	Engineering Mathematics 3
MKTG C2F02	Agricultural Marketing I
PHYS C2F02	Applied Physics for Agriculture 2
SCIE C2F02	Concepts in Soil Science

Stage 2 / 60 ECTS / Semester 2

Mandatory	
Module Code	Module Title
ECON C2F02	Agricultural Micro Economics
ENGR C2F04	Materials Science in Engineering
MATH C2608	Engineering Mathematics 4
SYST C2F03	Sustainable Cropping Systems
SYST C2F04	Automation and PLC's for Agricultural Systems

Stage 2 Exit Only Award : Higher Certificate

Stage 3 / 60 ECTS / Semester 1

Mandatory	
Module Code	Module Title
AGRI C3F01	Precision Agriculture
AGRI C3F02	Agricultural Design, Simulation and Analysis
MATH C3603	Engineering Mathematics 5
MKTG C3F01	Agricultural Marketing II
SCIE C3F01	Applied Soil Science

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 the formal approval of the Programme Board, learners may be enrolled on the other elective modules as a contingency for not being in a position to take the Work Placement elective module. Students may apply to EXIT after this stage of the programme with a Bachelor of Engineering in Agricultural Systems Engineering (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
AGRI C3F03	Process Instrumentation
COMP C3F01	Advanced PLCs
SYST C2609	Introduction to Systems and Control
PROJ C3F01	Development Project (Engineering)

Stage 3 Exit Only Award : Ordinary Bachelor Degree

Stage 4 / 60 ECTS / Semester 1

Elective Regulation
Learners can select a maximum of one elective (5 credits) in Semester 1.

Mandatory	
Module Code	Module Title
ENGR C4F01	Materials Engineering
INDL C4F01	Industrial Networks
PROJ C4604	Research Project (Engineering) (Part 1 of 2)

Elective	
Module Code	Module Title
BUSS C4F01	Rural Entrepreneurship
HEAL C4F01	Farm Animal Health and Welfare
MGMT C4F01	Agribusiness Strategic Analysis
SCIE C4F01	Crop Protection Science

Stage 4 / 60 ECTS / Semester 2

Elective Regulation

Learners can select a maximum of one elective (5 credits) in Semester 2.

Mandatory	
Module Code	Module Title
ANAL C4F01	Dynamics Vibration Control
ENGY C4F01	Sustainable Energy
STUD C4601	Professional Studies
PROJ C4604	Research Project (Engineering) (Part 2 of 2)
Elective	
Module Code	Module Title
AGRI C4F01	Advanced Agronomy
AGRI C4F02	Arable Fodder Crops
AGRI C4F03	Animal product quality
MGMT C4F02	Agribusiness Strategic Advantage
SYST C4F01	Environmentally Sustainable Food Systems

Stage 4 Exit Only Award : Honours Bachelor Degree