### **FACULTY OF SCIENCE**

### DEPARTMENT OF COMPUTER AND INFORMATION SCIENCES

## DIGITAL AND TECHNOLOGY SOLUTIONS

Bachelor of Science with Honours in Digital and Technology Solutions with Specialisation in Business Analysis

Bachelor of Science with Honours in Digital and Technology Solutions with Specialisation in Cyber Security

Bachelor of Science with Honours in Digital and Technology Solutions with Specialisation in IT Consultant

Bachelor of Science with Honours in Digital and Technology Solutions with Specialisation in Software Engineering

**Bachelor of Science in Digital and Technology Solutions** 

Diploma of Higher Education in Digital and Technology Solutions

Certificate of Higher Education in Digital and Technology Solutions

(This programme is a Degree Apprenticeship)

These regulations are to be read in conjunction with <u>General Academic Regulations –</u>
<u>Undergraduate, Integrated Master and Professional Graduate Degree Programme Level.</u>

### **Status of the Programmes**

- 1. Admission to the programme shall normally be for applicants who hold appropriate qualifications that would allow entry into the Second Year. Students will be awarded Recognition of Prior Learning equivalent to 120 credits at Level 1.
- 2. All students are usually admitted in the first instance as potential Honours students.

# **Mode of Study**

3. The programmes are available flexibly via on campus study (Open Access) or off campus (Distance Learning) on a part-time basis.

#### Curriculum

4. All students shall undertake an approved curriculum as follows:

#### **First Year**

The First year is not taught as part of this programme.

### Second Year

All students shall undertake modules amounting to 100 credits as follows:

## **Compulsory Modules**

# Business Analysis and IT Consultant Specialisms Compulsory Modules

Module Code	Module Title	Level	Credits
CS113	Information and Data 1	1	20
CS119	Problem Solving	1	10

CS120	Introduction to Software Engineering	1	10
CS274	Work Based Learning 1	2	10
OB206	Business and Management Fundamentals	1	20

# **Optional Modules**

30 credits chosen from:

CS112	Programming 1	1	30
CS121	Programming with Python	1	30

Not all optional modules on this list will be available in each academic year.

# <u>Cyber Security and Software Engineering Specialisms</u> <u>Compulsory Modules</u>

Module Code	Module Title	Level	Credits
CS112	Programming 1	1	30
CS113	Information and Data 1	1	20
CS119	Problem Solving	1	10
CS120	Introduction to Software Engineering	1	10
CS274	Work Based Learning 1	2	10
OB206	Business and Management Fundamentals	1	20

# **Third Year**

All students shall undertake modules amounting to 100 credits as follows:

# <u>Business Analysis and IT Consultant Specialisms</u> <u>Compulsory Modules</u>

Module Code	Module Title	Level	Credits
CS273	Introduction to Databases	2	15
CS255	Professional Issues	2	10
CS276	Software Engineering Principles for Business	2	10
CS353	Fundamentals of Data Analytics	3	15
CS362	Work Based Learning 2	3	10

OB205	Foundational Principles of Business Analysis and Technology	2	20
OB304	Managing People for Innovation and Performance	3	20

# <u>Cyber Security and Software Engineering Specialisms</u> <u>Compulsory Modules</u>

Module Code	<u>Module Title</u>	Level	<u>Credits</u>
CS252	Software Engineering 2	2	20
CS253	Information and Data 2	2	20
CS255	Professional Issues	2	10
CS275	Programming: Data Structures and Algorithms	2	20
CS362	Work Based Learning 2	3	10
CS363	Principles of Computer Networks	3	10
CS364	Programming Project	3	10

# Fourth Year

All students shall undertake modules amounting to 100 credits as follows:

# Business Analysis and IT Consultant Specialisms Compulsory Modules

Module Code	Module Title	Level	Credits	
CS272	Introduction to Computer Networks	2	10	
CS365	Software Engineering Group Project	3	20	
CS423	Cyber Security	4	10	
CS460	Work Based Learning 3	4	10	
OB307	Project Management	3	40	
	Together with 10 credits from the following:			
OB403	Entrepreneurial Mindset in the Workplace	4	10	
OB405	Service Operations and Simulation	4	10	

# Cyber Security Specialism Compulsory Modules

Module Code	Module Title	Level	Credits
CS356	Group Project	3	15
CS368	Programming: Concurrency	3	10
CS369	Advanced Computer Security	3	15
CS370	Information Security Management	3	15
CS371	Security Vulnerability Testing	3	15
CS454	Fundamentals of Cyber Security	4	20
CS460	Work Based Learning 3	4	10

# Software Engineering Specialism Compulsory Modules

Module Code	Module Title	Level	<u>Credits</u>
CS351	Programming 3	3	15
CS352	Software Engineering 3	3	15
CS355	User-Centred Design	3	15
CS356	Group Project	3	15
CS423	Cyber Security	4	10
CS460	Work Based Learning 3	4	10
Together with 20 credits from the following:			
CS451	Design Patterns and Software Architecture	4	20
CS456	Cloud Computing	4	20

<u>Fifth Year</u>
All students shall undertake one of the modules amounting to 60 credits as follows depending on their specialism:

Module Code	Module Title	Level	Credits
CS461	Business Analyst Synoptic Project	4	60
CS462	Cyber Security Synoptic Project	4	60
CS463	IT Consultant Synoptic Project	4	60
CS464	Software Engineer Synoptic Project	4	60

### **Progress**

- 5. In order to progress to the third year of the course, a student must have accumulated at least 220 credits from the programme curriculum.
- 6. In order to progress to the fourth year of the course, a student must have accumulated at least 320 credits from the programme curriculum.
- 7. In order to progress to the fifth year of the course, a student must have accumulated at least 420 credits from the programme curriculum.

### **Final Honours Classification**

8. The final Honours classification will normally be based on the first assessed attempt at the level 3 and level 4 compulsory and, where appropriate, specified optional modules.

#### **Award**

- Notwithstanding the <u>General Academic Regulations Undergraduate, Integrated Master and Professional Graduate Degree Programme Level for the BSc with Honours in Digital and Technology Solutions with Specialisation in a given topic a candidate must follow the curriculum for their specialism and have undertaken 60 credits at Level 4 in subjects related to the specialisation.
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- 10. **BSc**: In order to qualify for the award of the degree of **BSc in Digital and Technology Solutions**, the <u>General Academic Regulations Undergraduate, Integrated Master and Professional Graduate Degree Programme Level</u> shall apply.
- 11. **Diploma of Higher Education**: In order to qualify for the award of a **Diploma of Higher Education in Digital and Technology Solutions**, the <u>General Academic Regulations Undergraduate</u>, <u>Integrated Master and Professional Graduate Degree Programme Level</u> shall apply.
- 12. Certificate of Higher Education: In order to qualify for the award of a Certificate of Higher Education in Digital and Technology Solutions, the General Academic Regulations Undergraduate, Integrated Master and Professional Graduate Degree Programme Level shall apply.