

# FACULTY OF SCIENCE

## DEPARTMENT OF COMPUTER AND INFORMATION SCIENCES

### IT: SOFTWARE DEVELOPMENT

**Bachelor of Science with Honours in IT: Software Development**

**Bachelor of Science in IT: Software Development**

**Diploma of Higher Education in IT: Software Development**

**Certificate of Higher Education in IT: Software Development**

*These regulations are to be read in conjunction with [General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level.](#)*

#### **Status of the Programmes**

1. All students are normally admitted in the first instance as potential Honours students.

#### **Mode of Study**

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

#### **Curriculum**

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

#### **First Year**

All students shall undertake modules amounting to 120 credits as follows:

#### **Compulsory Modules**

<b>Module Code</b>	<b>Module Title</b>	<b>Level</b>	<b>Credits</b>
CS112	Programming 1 (GA)	1	30
CS113	Information and Data 1 (GA)	1	20
CS115	Integrated Project 1 (GA)	1	30
CS119	Problem Solving	1	10
CS120	Introduction to Software Engineering	1	10
OB206	Business and Management Fundamentals	2	20

#### **Second Year**

All students shall undertake modules amounting to 120 credits as follows:

#### **Compulsory Modules**

<b>Module Code</b>	<b>Module Title</b>	<b>Level</b>	<b>Credits</b>
CS251	Programming 2 (GA)	2	30
CS252	Software Engineering 2 (GA)	2	20

CS253	Information and Data 2 (GA)	2	20
CS254	Memory and Structure (GA)	2	10
CS255	Professional Issues (GA)	2	10
CS256	Integrated Project 2 (GA)	2	30

### **Third Year**

All students shall undertake modules amounting to 120 credits as follows:

#### **Compulsory Modules**

<b>Module Code</b>	<b>Module Title</b>	<b>Level</b>	<b>Credits</b>
CS351	Programming 3	3	15
CS352	Software Engineering 3	3	15
CS353	Fundamentals of Data Analytics	3	15
CS354	Computer Networks	3	15
CS355	User-Centred Design	3	15
CS356	Group Project	3	15
CS357	Integrated Project 3	3	30

### **Fourth Year**

All students shall undertake modules amounting to 120 credits as follows:

#### **Compulsory Modules**

<b>Module Code</b>	<b>Module Title</b>	<b>Level</b>	<b>Credits</b>
CS454	Fundamentals of Cyber Security	4	20
CS455	Individual Work-Based Project	4	40

Students must take 60 credits of Optional Modules from the list below.

#### **Optional Modules**

<b>Module Code</b>	<b>Module Title</b>	<b>Level</b>	<b>Credits</b>
CS451	Design Patterns and Software Architecture	4	20
CS452	Developing Cross-Platform Apps for Mobile Devices	4	20
CS453	Introduction to Artificial Intelligence	4	20

CS456	Cloud Computing	4	20
CS457	Machine Learning	4	20
CS458	Computational Approaches to Optimisation	4	20
CS459	Digital Forensics	4	20

Not all optional modules on this list will be available in each academic year. Please check your programme handbook for confirmation of which optional modules will run.

Such other modules totalling no more than 20 credits as may be approved by the Programme Director.

### Progress

4. To progress to the second year of the programme, see [General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level](#).
5. To progress to the third year of the programme, see [General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level](#) including at least 240 credits from the programme curriculum including 120 credits at Level 2 or above.
6. To progress to the fourth year of the programme, see [General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level](#) including at least 360 credits from the programme curriculum including 120 credits at Level 3 or above.

### Final Honours Classification

7. The final Honours classification will normally be based on the first assessed attempt at compulsory and, where appropriate, specified optional modules which are taken in third and fourth year of the programme.

### Award

8. **BSc with Honours:** In order to qualify for the degree of BSc with Honours in IT: Software Development, [General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level shall](#) apply and students must gain a pass for CS455 Individual Work Based Project.
9. **BSc:** In order to qualify for the award of the degree of BSc in IT: Software Development, the [General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level](#) shall apply.
10. **Diploma of Higher Education:** In order to qualify for the award of a Diploma of Higher Education in IT: Software Development, the [General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level](#) shall apply.
11. **Certificate of Higher Education:** In order to qualify for the award of a Certificate of Higher Education in IT: Software Development, the [General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level](#) shall apply.