

# FACULTY OF SCIENCE

## DEPARTMENT OF COMPUTER AND INFORMATION SCIENCES

### COMPUTER SCIENCE - Bahrain

**Bachelor of Science with Honours in Computer Science - Bahrain**

**Bachelor of Science in Computer Science - Bahrain**

**Diploma of Higher Education in Computer Science - Bahrain**

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

#### **Mode of Study**

1. The programme is available by full-time study only.

#### **Place of Study**

2. Students will study at the University of Strathclyde - Bahrain.

#### **Curriculum**

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

#### **First Year**

All students shall undertake modules amounting to 125 credits delivered by Study Group Ltd. as follows:

#### **Compulsory Modules**

<b>Module Code</b>	<b>Module Title</b>	<b>Level</b>	<b>Credits</b>
HF103	Academic English Skills	1	30
MM152	Mathematics for Science and Engineering 1	1	15
MM153	Mathematics for Science and Engineering 2	1	15
XXXX	Lab Skills and Scientific Communication	1	5
CS126	Computing 1	1	15
CS127	Computing 2	1	15
MM151	Discrete Mathematics	1	15
	together with 15 credits chosen from the following		
CH118	Chemistry 1	1	15
PH186	Physics 1	1	15

#### **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>
CS283	Advanced Programming	2	20
CS282	Logic and Algorithms	2	20
CS281	User and Data Modelling	2	20
CS280	Computer Systems and Architecture	2	20
CS279	Professional Issues in Computing	2	10
CS278	Quantitative Methods for Computer Science	2	10
CS277	Functional Thinking	2	10
CS125	Technology in Business	1	10

### **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>
CS376	Building Software Systems	3	20
CS374	Computer Systems and Concurrency	3	20
CS375	Foundations of Artificial Intelligence	3	20
CS377	Web Applications Development	3	20
CS373	Functional Programming	3	20
CS372	Mobile App Development	3	20

### **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>
CS466	Individual Project	4	40
CS465	Computer Security	4	20

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

### Optional Modules

Module Code	Module Title	Level	Credits
CS467	Software Architecture and Design	4	20
CS469	Advanced Functional Programming	4	20
CS471	Theory of Computation	4	20
CS468	Information Access and Mining	4	20
CS470	Human Centred Security	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 Level 4 modules as may be approved by the Programme Director.

### Progress

4. In order to progress to the second year of the programme, students are required to have passed all modules with a Credit Weighted Average of 60 by the second attempt and have passed HF103 Academic English Skills at 60 or above.
5. In order to progress to the third year of the programme in addition to satisfying the requirements of the [General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level with credits from the programme curriculum](#), students must also gain a non-compensated Pass for the module CS283 Advanced Programming.
6. In order to progress to the fourth year of the programme, a student must satisfy the requirements of the [General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level with credits from the programme curriculum](#).

### Final Classification

7. The final classification for the degree of BSc with Honours in Computer Science - Bahrain will normally be based on the first assessed attempt at all modules taken at Levels 3 and 4.

**Award** Subject to the completion of additional national requirements

8. **BSc with Honours in Computer Science - Bahrain:** See [General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level](#), a candidate must have accumulated no fewer than 485 credits from the programme curriculum and must include the module CS466 Individual Project.

9. **BSc in Computer Science - Bahrain:** See [General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level](#), and must include 100 credits at Level 3.
10. **Diploma of Higher Education in Computer Science - Bahrain:** See [General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level](#).