

# FACULTY OF SCIENCE

## DEPARTMENT OF COMPUTER AND INFORMATION SCIENCES

### SOFTWARE ENGINEERING - Bahrain

Bachelor of Science with Honours in Software Engineering - Bahrain

Bachelor of Science in Computer Science - Bahrain

Diploma of Higher Education in Computer Science – Bahrain

Certificate in Higher Education in Natural Sciences - 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. The programme includes placement out with the University campus.

#### 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

Module Code	Module Title	Level	Credits
HF103	Academic English Skills	1	30
MM157	Mathematics 1	1	20
CS128	Computing 1	1	20
CS129	Computing 2	1	20
MM156	Graph Theory	1	20
XXXXX	Electronics	1	10

#### Second Year

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

#### Compulsory Modules

Module Code	Module Title	Level	Credits
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**

Module Code	Module Title	Level	Credits
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

### **Industrial Placement**

Between the third and the fourth years of their study each student shall spend a period of approximately one year on work approved by the Programme Director; this shall constitute the module CS472 Industrial Placement. The major part of this period will normally be spent in industry and a report on the work performed must be submitted to the Programme Director by the end of the first week of the first semester of the final year. This report shall count for 20 credits at Level 4.

### **Fourth Year**

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

#### **Compulsory Modules**

Module Code	Module Title	Level	Credits
CS467	Software Architecture and Design	4	20

CS466	Individual Project	4	40
CS465	Computer Security	4	20

Students must take 40 credits of Optional Modules from the list below.

### **Optional Modules**

Module Code	Module Title	Level	Credits
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

Such other Level 4 modules as may be approved by the Programme Director.  
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.

### **Progress**

4. In order to progress to second year, the General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level shall apply. In addition, students must have passed Academic English Skills with a mark of 60 or above by the second attempt, and to have passed the remaining 90 credits of the first year of the programme curriculum with a credit weighted average of 60 or above across those credits by the second attempt
5. In order to progress to the third year of the programme, in addition to satisfying the [General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level with credits from the programme curriculum](#), a student 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 Honours Classification**

7. The final Honours classification 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 Software Engineering - Bahrain:** In order to qualify for the award of the degree of BSc with Honours in Software Engineering, a candidate must have accumulated no fewer than 500 credits from the programme curriculum and must include CS466 Individual Project and CS472 Industrial Placement.

A candidate who withdraws or is withdrawn from the programme up to and including Year 3 may be given one of the following exit awards depending on their credit total:

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](#).
11. **Certificate of Higher Education in Natural Sciences:** See [General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level](#).

#### **Transfer**

12. **BSc with Honours in Computer Science - Bahrain:** a candidate who fails to secure an industrial placement between Year 3 and Year 4 will be transferred to BSc with Honours in Computer Science - Bahrain, see [General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level](#).