# **BSC (ORD) (COMPUTER** STUDIES)

#### Overview

NFQ Level 7, Major Award

#### (Dual Degree)

The BSc (Ordinary) Computer Studies is a three year programme delivered in partnership with Beijing Information Science and Technology University (BISTU) with whom University College Cork has a bilateral agreement under statute 263 of the National University of Ireland. This programme leads to a dual degree which is awarded independently from both institutions.

The programme comprises 180 credits. Students will study for one year at BISTU, taking modules to the value of 60 credits (or ECTS equivalent) and for two years at University College Cork, taking modules to the value of 60 credits in each of Second and Third Years. When studying at UCC a student may not register for more than 60 credits in any one academic

## First Year - Computer Studies

This year is spent pursuing a BSc Computer Science related degree such as Network Engineering, Computer Science and Technology (computer applications), or Software Engineering in BISTU with whom UCC signs a bilateral agreement.

#### **Examinations**

The First Year of this programme will be in examined in accordance with examination regulations governed by the Chinese Education Authority

## **Second Year - Computer Studies**

In order to be admitted to the Second University Examination in Computer Studies a student must have satisfactorily attended prescribed modules amounting to 60 credits comprising core modules to the value of 50 credits, and elective modules to the value of 10 credits.

## Third Year - Computer Studies

In order to be admitted to the Third University Examination in Computer Studies a student must have satisfactorily attended prescribed modules amounting to 60 credits comprising core modules to the value of 50 credits, and elective modules to the value of 10 credits.

## **Programme Requirements**

For information about modules, module choice, options and credit weightings, please go to Programme Requirements (p. 1).

## **Programme Requirements**

| Code   | Title   | Credits |
|--|---|---------|
| Year 1   |   |         |
| Students sele  | ect <b>60</b> credits (or ECTS equivalent) at BITSU | 60      |
| Year 2   |   |         |
| Students take <b>60</b> credits as follows – all listed core modules ( <b>50</b> credits) and <b>10</b> credits of elective modules: |   |         |
| ,  | o credits of elective modules.                      |         |
| Core Modules   |   |         |
| CS1106   | Introduction to Relational Databases                | 5       |
| CS1110   | Computer Hardware Organization                      | 5       |

| CS1111                       | Systems Organisation   | 5  |  |  |  |
|------------------------------|--|----|--|--|--|
| CS1112                       | Foundations of Computer Science I  | 5  |  |  |  |
| CS1113                       | Foundations of Computer Science II   | 5  |  |  |  |
| CS1115                       | Web Development 1  | 5  |  |  |  |
| CS1116                       | Web Development 2  | 5  |  |  |  |
| CS1117                       | Introduction to Programming  | 15 |  |  |  |
| Elective Modules             |  |    |  |  |  |
| Students take mo             | odules to the value of <b>10</b> credits from the following:                               | 10 |  |  |  |
| EC1202<br>plus EC1203        | Economic Reasoning for Business (10)  plus Macroeconomic Context and Business ()           |    |  |  |  |
| FR1105                       | Threshold French (10)  |    |  |  |  |
| <i>plus</i> FR1107           | plus French for Reading Purposes I ()  |    |  |  |  |
| GE0005<br><i>plus</i> GE0008 | German Language (CEFR-Level A2.1) (10)<br><b>plus</b> German Language (CEFR-Level A2.2) () |    |  |  |  |
| HS0028                       | Spanish Language (Beginner Level) (10)   |    |  |  |  |
| IT1102                       | Non-Beginners' Written and Spoken Italian (10)   |    |  |  |  |
| IT1109                       | Introduction to Written and Spoken Italian (10)  |    |  |  |  |
| MA1001                       | Calculus for Science Part 1 (5)  |    |  |  |  |
| MA1002                       | Calculus for Science Part 2 (5) 1  |    |  |  |  |
| MA1059                       | Calculus (5)   |    |  |  |  |
| MA1060                       | Introduction to Analysis (5)   |    |  |  |  |
| Year 3                       |  |    |  |  |  |

Students take 60 credits as follows - all listed core modules (50 credits) and 10 credits of elective modules:

|  | Core Modules     |                                       |   |
|--|------------------|---------------------------------------|---|
|  | CS2208           | Information Storage and Management I  | 5 |
|  | CS2209           | Information Storage and Management II | 5 |
|  | CS2503           | Operating Systems 1                   | 5 |
|  | CS2505           | Network Computing                     | 5 |
|  | CS2506           | Operating Systems II                  | 5 |
|  | CS2507           | Computer Architecture                 | 5 |
|  | CS2513           | Intermediate Programming              | 5 |
|  | CS2514           | Introduction to Java                  | 5 |
|  | CS2515           | Algorithms and Data Structures I      | 5 |
|  | CS2516           | Algorithms and Data Structures II     | 5 |
|  | Flective Modules |                                       |   |

Elective Modules

|   | MA1057<br><i>plus</i> MA1058 | Introduction to Abstract Algebra (5) <i>plus</i> Introduction to Linear Algebra () |    |
|---|------------------------------|--|----|
|   | HS0128                       | Spanish Language (Improver [01] Level) (10)  |    |
|   | FR2105<br><i>plus</i> FR2107 | Towards Vantage French (10)<br>plus French for Reading Purposes II ()              |    |
|   | FR1105<br><i>plus</i> FR1107 | Threshold French (10)<br>plus French for Reading Purposes I () $^2$                |    |
|   | CS2511                       | Usability Engineering (5)  |    |
|   | CS2502                       | Logic Design (5)   |    |
| S | tudents take mo              | odules to the value of <b>10</b> credits from the following:                       | 10 |

**Total Credits** 180

Note: Not all elective modules may be offered in a particular year.

Students wishing to take MA1002 must also take MA1001. FR1105 and FR1107 may only be taken if not already taken in Second

# **Examinations**

Full details and regulations governing Examinations for each programme will be contained in the *Marks and Standards Book* and for each module in the *Book of Modules*.

# **Programme Learning Outcomes**

Programme Learning Outcomes for BSc (Ord) (Computer Studies) (NFQ Level 7, Major Award)

On successful completion of this programme, students should be able to:

- Formulate and solve problems using the mathematical principles which underlie electronic computation;
- Analyse real-world applications in the light of these mathematical principles, in order to identify the most appropriate computational approach;
- Identify the most appropriate technologies for implementing the chosen computational approach to solving a real-world application;
- Use a range of computing technologies and programming languages to implement appropriate computational approaches to real-world applications.