## Year 1

### Year 1 Trimester 1

<table>
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<th>Course Code</th>
<th>Course Title</th>
<th>Type</th>
<th>Credit Hours</th>
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<tr>
<td>LANGXXX</td>
<td>NATIONAL LANGUAGE/OTHER LANGUAGES</td>
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<tr>
<td>UCCD106</td>
<td>PROGRAMMING CONCEPTS AND DESIGN</td>
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<tr>
<td>UCCD101</td>
<td>ANALYSIS AND DESIGN OF INFORMATION SYSTEMS</td>
<td>Major</td>
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<td>UCCD129</td>
<td>DATABASE DEVELOPMENT AND APPLICATIONS</td>
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<td>UCCM131</td>
<td>INTRODUCTORY DISCRETE MATHEMATICS</td>
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<td>UCCM135</td>
<td>BASIC ALGEBRA</td>
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**Total Credit Hours**: 18.0

**LANGXXX3 ELECTIVE GROUP - Choose 1 Unit(s)**
- MPW2113 - BAHASA KEBANGSAAN (A) * FOR MALAYSIAN ONLY, WITHOUT SPM-BM CREDIT
- MPW2123 - BAHASA KEBANGSAAN (B) ** FOR NON-MALAYSIAN ONLY
- UALC1003 - INTRODUCTION TO CHINESE LANGUAGE I *** WITHOUT KNOWLEDGE OF CHINESE LANGUAGE
- UALC1013 - INTRODUCTION TO CHINESE LANGUAGE II **** HAVE CREDIT FOR CHINESE LANGUAGE IN UPSR AND PMR
- UALC1023 - INTRODUCTION TO CHINESE LANGUAGE III ***** HAVE CREDIT FOR CHINESE LANGUAGE IN SPM, STPM OR UEC
- UALF1003 - INTRODUCTION TO FRENCH
- UALL2013 - INTRODUCTION TO JAPANESE
- UALLT1003 - INTRODUCTION TO THAI LANGUAGE
- UALM1003 - INTRODUCTION TO TAMIL LANGUAGE
- UALL1003 - INTRODUCTION TO MALAY LANGUAGE

### Year 1 Trimester 2

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<td>DATA STRUCTURES AND ALGORITHMS</td>
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<td>UCCD113</td>
<td>INTRODUCTION TO COMPUTER ORGANISATION AND ARCHITECTURE</td>
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<td>UCCM110</td>
<td>CALCULUS I AND APPLICATIONS</td>
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<td>UCCM223</td>
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<td>UCCN100</td>
<td>DATA COMMUNICATIONS AND NETWORKS</td>
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<td>USCC10X</td>
<td>CO-CURRICULAR UNITS</td>
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**Pre-Requisite Unit(s) for UCCD1023**
1. UCCD1003 - PROGRAMMING CONCEPTS AND DESIGN
2. UCC1003 - PROGRAMMING CONCEPTS AND DESIGN

### Year 1 Trimester 3

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<td>MPW213</td>
<td>PENGAYIAN MALAYSIA</td>
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<td>UCCN120</td>
<td>FUNDAMENTALS OF COMPUTER SECURITY</td>
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**Total Credit Hours**: 6.0

**Year 2**

Pre-Requisite Unit(s) for UCCD1023
1. UCCD1003 - PROGRAMMING CONCEPTS AND DESIGN
2. UCC1003 - PROGRAMMING CONCEPTS AND DESIGN

### USCC10X2 CORE GROUP - Choose 1 Unit(s)
- USCC1012 - COMMUNICATION SKILLS (ORAL COMMUNICATION)
- USCC1022 - COMMUNICATION SKILLS (WRITTEN COMMUNICATION)
- USCC1032 - CRITICAL THINKING
- USCC1042 - TEAMBUILDING AND LEADERSHIP SKILLS
- USCC1052 - EMOTIONAL INTELLIGENCE AT THE WORKPLACE
- USCC1062 - PROFESSIONAL ETHICS AND MANNERS
- USCC1072 - THEATRE
- USCC1082 - DEBATE
- USCC1092 - MARTIAL ARTS
- USCC1102 - MUSIC
- USCC1112 - DANCE
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<td>UCCD2043</td>
<td>OBJECT-ORIENTED PROGRAMMING PRACTICES</td>
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<tr>
<td>UCCD2103</td>
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<td>UCCD2113</td>
<td>CALCULUS II AND APPLICATIONS</td>
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<td>UCCD2203</td>
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**Total Credit Hours:** 19.0

### Year 2 Trimester 1

**BCSF04 CORE GROUP - Choose 1 Unit(s)**
- UAMG1043 - INTERPERSONAL COMMUNICATION
- UAMG1055 - MANAGEMENT PRINCIPLES

**Pre-Requisite Unit(s) for UCCD2003**
1. UCCD1013 - ANALYSIS AND DESIGN OF INFORMATION SYSTEMS
2. UCCD1023 - DATA STRUCTURES AND ALGORITHMS

**Pre-Requisite Unit(s) for UCCD2044**
1. UCCD1013 - ANALYSIS AND DESIGN OF INFORMATION SYSTEMS
2. UCCD1023 - DATA STRUCTURES AND ALGORITHMS

**Pre-Requisite Unit(s) for UCCD2103**
1. UCCD1013 - ANALYSIS AND DESIGN OF INFORMATION SYSTEMS
2. UCCD1023 - DATA STRUCTURES AND ALGORITHMS

**Pre-Requisite Unit(s) for UCCN2003**
1. UCCD1013 - ANALYSIS AND DESIGN OF INFORMATION SYSTEMS
2. UCCD1023 - DATA STRUCTURES AND ALGORITHMS

**Pre-Requisite Unit(s) for UCCN2003**
1. UCCD1013 - ANALYSIS AND DESIGN OF INFORMATION SYSTEMS
2. UCCD1023 - DATA STRUCTURES AND ALGORITHMS

**Equivalent Unit(s) for UCCD2203**
- UCIS2203 - DATABASE SYSTEMS

### Year 2 Trimester 2

**BCSF03 CORE GROUP - Choose 1 Unit(s)**
- UCCM2113 - THEORY OF INTEREST
- UCCM2123 - INTRODUCTORY NUMERICAL METHODS
- UCCM2134 - MATHEMATICS OF INSURANCE
- UCCM2154 - MATHEMATICS OF FINANCIAL MARKETS
- UCCM2243 - CRYPTOGRAPHY
- UCCM2333 - COMBINATORICS

**Pre-Requisite Unit(s) for UCCD2203**
1. UCCD1203 - DATABASE DEVELOPMENT AND APPLICATIONS

**Equivalent Unit(s) for UCCD2203**
- UCIS2203 - DATABASE SYSTEMS

### Year 2 Trimester 3

**BCSF03 CORE GROUP - Choose 3 Unit(s)**
- UCCM3043 - PARALLEL PROCESSING
- UCCM3054 - SOFTWARE ENGINEERING PRACTICES
- UCCM3065 - COMPUTER NETWORKS AND SECURITY
- UCCM3076 - DATABASE SYSTEMS

**Pre-Requisite Unit(s) for UCCD3123**
1. UCCD1023 - DATA STRUCTURES AND ALGORITHMS

**Equivalent Unit(s) for UCCD2203**
- UCIS2203 - DATABASE SYSTEMS

### Year 3 Trimester 1

**BCSF01 MAJOR ELECTIVE**
- 9.0

**BCSF03 MINOR ELECTIVE**
- 3.0

**BCSF05 ELECTIVE II (LIBERAL ARTS)**
- 3.0

**UCCC3960 PROJECT I**
- 3.0

**Total Credit Hours:** 18.0

### Year 3 Trimester 2

**BCSF01 MAJOR ELECTIVE**
- 9.0

**BCSF03 MINOR ELECTIVE**
- 4.0

**UCCC3960 PROJECT II**
- 6.0

**Total Credit Hours:** 16.0

### Year 3 Trimester 3

**BCSF01 MAJOR ELECTIVE**
- 9.0

**BCSF03 MINOR ELECTIVE**
- 4.0

**UCCC3960 PROJECT II**
- 6.0

**Total Credit Hours:** 18.0

**Pre-Requisite Unit(s) for UCCD3123**
1. UCCD1023 - DATA STRUCTURES AND ALGORITHMS
2. UCCD3123 - SOFTWARE ENGINEERING PRACTICES
3. UCCD2023 - DISTRIBUTED COMPUTER SYSTEMS
4. UCCD2123 - MULTI-CORE PROGRAMMING
5. UCCD2223 - SOFTWARE ENGINEERING PRACTICES
6. UCCD2323 - GRAPH THEORY AND APPLICATIONS
7. UCCD3123 - OPERATIONS RESEARCH I
8. UCCD3134 - OPERATIONS RESEARCH II
METHODS
UCCM2243 - APPLIED STATISTICS
UCCM2333 - GRAPH THEORY AND APPLICATIONS
UCCM3123 - OPERATIONS RESEARCH I
UCCM3134 - OPERATIONS RESEARCH II
UCCM3143 - MATHEMATICS OF INSURANCE
UCCM3154 - MATHEMATICS OF FINANCIAL MARKETS
UCCM3233 - QUALITY CONTROL
UCCM3244 - STOCHASTIC PROCESSES
UCCM3343 - CRYPTOGRAPHY
UCCM3354 - COMBINATORICS

BCSF05 CORE GROUP - Choose 1 Unit(s)
UCM3033 - TECHNOPRENEURSHIP
UCM3043 - COMPUTER LAW AND ETHICS
Pre-Requisite 80 credit hours earned for UCCC3583
(Including University Wide or LAN Subjects)

REMARK: BACHELOR OF COMPUTER SCIENCE (HONS) 201101 Intake
NOTE: A pre-requisite group number represents one pre-requisite unit subject.
If a pre-requisite group number has more than one units, choose one unit out of a group.