# Course Structure Guide

**FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY**  
**BACHELOR OF INFORMATION TECHNOLOGY (HONS) COMMUNICATIONS AND NETWORKING - UCCN111001**

## COURSE STRUCTURE GUIDE

### Year 1

<table>
<thead>
<tr>
<th>Year 1 Trimester 1</th>
<th>Year 1 Trimester 2</th>
<th>Year 1 Trimester 3</th>
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</table>
| **LANXXX3**  
NATIONAL LANGUAGE/ OTHER LANGUAGES  
Compulsory 3.0 | **MPW21X3**  
LAN SUBJECT  
PROGRAMMING CONCEPTS AND PRACTICES  
Compulsory 3.0 | **UALE1113**  
ENGLISH FOR INFORMATION TECHNOLOGY  
Compulsory 3.0 |
| **MPW2133**  
PENGAJIAN MALAYSIA  
Compulsory 3.0 | **UCCD1203**  
DATABASE DEVELOPMENT AND APPLICATIONS  
Major 3.0 | **UBMM1011**  
FUND IT’S ART OF WAR AND BUSINESS STRATEGIES  
Compulsory 1.0 |
| **UCCN1213**  
FUNDAMENTALS OF COMPUTER AND INFORMATION SECURITY  
Major 3.0 | **UCCM1363**  
DISCRETE MATHEMATICS  
Major 3.0 | **UCCD1013**  
ANALYSIS AND DESIGN OF INFORMATION SYSTEMS  
Major 3.0 |

**Total Credit Hours 9.0**

**LANXXX3 CORE GROUP - Choose 1 Unit(s)**

**MPW2113** - BAHASA KEBANGSAAN (A)  
* FOR MALAYSIAN ONLY, WITHOUT SPM-BM CREDIT  
** MPW2133 - BAHASA KEBANGSAAN (B)  
** FOR NON-MALAYSIAN ONLY

**UALC1003** - INTRODUCTION TO CHINESE LANGUAGE I  
*** IF EXEMPTED FROM MPW2113

**UALF1003** - INTRODUCTION TO FRENCH  
*** IF EXEMPTED FROM MPW2113

**UALI2013** - INTRODUCTION TO JAPANESE  
*** IF EXEMPTED FROM MPW2113

**UAM1003** - INTRODUCTION TO TAMIL LANGUAGE  
*** IF EXEMPTED FROM MPW2113

**UAT1003** - INTRODUCTION TO THAI LANGUAGE  
*** IF EXEMPTED FROM MPW2113

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<tr>
<th>Year 2 Trimester 1</th>
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<th>Year 2 Trimester 3</th>
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</table>
| **UCCD1013**  
OPERATING SYSTEMS  
Compulsory 3.0 | **UCCC2044**  
OBJECT ORIENTED CONCEPTS AND PROGRAMMING  
Major 4.0 | **UCCD2502**  
INTRODUCTION TO INVENTIVE PROBLEM SOLVING AND PROPOSAL WRITING  
Major 2.0 |
| **UCCD3033**  
TECHNOPRENEURSHIP  
Elective 3.0 | **UCCC2004**  
ELECTIVES  
Elective 3.0 | **UCCN-02**  
DATA STRUCTURE AND ALGORITHMIC PROBLEM SOLVING  
E elective 4.0 |
| **USCC102X**  
CO-CURRICULAR UNITS  
Elective 2.0 | **UCCN04**  
LIBERAL ARTS ELECTIVES  
Elective 3.0 | **UCDN-04**  
LIBERAL ARTS ELECTIVES  
Elective 3.0 |

**Total Credit Hours 8.0**

**USCC102X CORE GROUP - Choose 1 Unit(s)**

**USCC1012** - COMMUNICATION SKILLS (ORAL COMMUNICATION)

**USCC1022** - COMMUNICATION SKILLS (WRITTEN COMMUNICATION)

**USCC1033** - 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

<table>
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</table>
| **UCCC2044**  
OBJECT ORIENTED CONCEPTS AND PROGRAMMING  
Major 4.0 | **UCCN03**  
ELECTIVES  
Elective 3.0 | **UCCN2502**  
MINI PROJECT  
Major 3.0 |
| **UCCC2004**  
ELECTIVES  
Elective 3.0 | **UCCN04**  
LIBERAL ARTS ELECTIVES  
Elective 3.0 | **UCCN2023**  
FUNDAMENTALS OF WIRELESS COMMUNICATIONS  
Major 3.0 |
| **UCCN02**  
TCP/IP INTERNETWORKING  
Major 3.0 | **UCCN02**  
FUNDAMENTALS OF WIRELESS COMMUNICATIONS  
Major 3.0 | **UCCN2233**  
COMPUTER SYSTEM AND NETWORK SECURITY  
Major 3.0 |
| **UCCN02**  
FUNDAMENTALS OF WIRELESS COMMUNICATIONS  
Major 3.0 | **UCCN02**  
FUNDAMENTALS OF WIRELESS COMMUNICATIONS  
Major 3.0 | **UCCN2513**  
MINI PROJECT  
Major 3.0 |

**Total Credit Hours 19.0**

**Pre-Requisite Unit(s) for UCCCN2044**

1. **UCCD1004** - PROGRAMMING CONCEPTS AND PRACTICES

**Pre-Requisite Unit(s) for UCCCN2033**

1. **UCCH1004** - DATA COMMUNICATIONS AND NETWORKING

**Pre-Requisite Unit(s) for UCCCN2043**

1. **UCCH1004** - DATA COMMUNICATIONS AND NETWORKING

**Pre-Requisite Unit(s) for UCCCN2053**

1. **UCCH1004** - DATA COMMUNICATIONS AND NETWORKING

**Pre-Requisite Unit(s) for UCCCN2213**

1. **UCCH233** - STATISTICS

**UCCN-03 CORE GROUP - Choose 1 Unit(s)**

**UCCC2063** - ALGORITHMS ANALYSIS

**UCCD204** - INFORMATION TECHNOLOGY PROJECT

**Pre-Requisite Unit(s) for UCCCN3034**

1. **UCCH203** - PROGRAMMING CONCEPTS AND PRACTICES

**Pre-Requisite Unit(s) for UCCCN3034**

1. **UCCH203** - PROGRAMMING CONCEPTS AND PRACTICES

**Pre-Requisite Unit(s) for UCCCN3014**

1. **UCCH203** - TCP/IP INTERNETWORKING

**Pre-Requisite Unit(s) for UCCCN3024**

1. **UCCH203** - FUNDAMENTALS OF WIRELESS COMMUNICATIONS

**Pre-Requisite Unit(s) for UCCCN3024**

1. **UCCH203** - FUNDAMENTALS OF WIRELESS COMMUNICATIONS

**Pre-Requisite Unit(s) for UCCCN3004**

1. **UCCH203** - PARALLEL PROGRAMMING

**Pre-Requisite Unit(s) for UCCCN3004**

1. **UCCH203** - PARALLEL PROGRAMMING

**Pre-Requisite Unit(s) for UCCCN3004**

1. **UCCH203** - PARALLEL PROGRAMMING

**Pre-Requisite Unit(s) for UCCCN3004**

1. **UCCH203** - PARALLEL PROGRAMMING

**Pre-Requisite Unit(s) for UCCCN3004**

1. **UCCH203** - PARALLEL PROGRAMMING

**Pre-Requisite Unit(s) for UCCCN3004**

1. **UCCH203** - PARALLEL PROGRAMMING

**Pre-Requisite Unit(s) for UCCCN3004**

1. **UCCH203** - PARALLEL PROGRAMMING
## Year 3

### Year 3 Trimester 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Major</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>UCCN2506</td>
<td>INDUSTRIAL TRAINING</td>
<td>Major</td>
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Pre-Requisite: 54 credit hours earned for UCCN2506 (Including University Wide or LAN Subjects)

### Year 3 Trimester 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Elective</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>UCCD3053</td>
<td>INFORMATION TECHNOLOGY PROFESSIONAL ETHICS</td>
<td>Compulsory</td>
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<td>UCCN-01</td>
<td>ELECTIVES</td>
<td>Elective</td>
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<tr>
<td>UCCN-02</td>
<td>ELECTIVES</td>
<td>Elective</td>
<td>4.0</td>
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<tr>
<td>UCCN2013</td>
<td>NETWORK SWITCHING AND ROUTING</td>
<td>Major</td>
<td>3.0</td>
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<tr>
<td>UCCN3583</td>
<td>PROJECT I</td>
<td>Major</td>
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Total Credit Hours: 16.0

### Year 3 Trimester 3

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<th>Credit Hours</th>
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<tbody>
<tr>
<td>UCCD3044</td>
<td>PARALLEL PROGRAMMING</td>
<td>Elective</td>
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<tr>
<td>UCCN3596</td>
<td>PROJECT II</td>
<td>Major</td>
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</tbody>
</table>

Total Credit Hours: 13.0

## Year 4

### Year 4 Trimester 1

<table>
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<tr>
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<th>Major</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>UCCN02</td>
<td>ADVANCED ELECTIVES</td>
<td>Elective</td>
<td>4.0</td>
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<tr>
<td>UCCN03</td>
<td>ICT ELECTIVES</td>
<td>Elective</td>
<td>3.0</td>
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</table>

### Year 4 Trimester 2

<table>
<thead>
<tr>
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<th>Elective</th>
<th>Credit Hours</th>
</tr>
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<tbody>
<tr>
<td>UCCD3044</td>
<td>PARALLEL PROGRAMMING</td>
<td>Elective</td>
<td>4.0</td>
</tr>
<tr>
<td>UCCN3596</td>
<td>PROJECT II</td>
<td>Major</td>
<td>6.0</td>
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### Year 4 Trimester 3

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<th>Elective</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>UCCN02</td>
<td>ADVANCED ELECTIVES</td>
<td>Elective</td>
<td>4.0</td>
</tr>
<tr>
<td>UCCN03</td>
<td>ICT ELECTIVES</td>
<td>Elective</td>
<td>3.0</td>
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Total Credit Hours: 13.0
UCCN3014 - MULTIMEDIA NETWORKING AND REAL-TIME TRANSMISSION
UCCN3024 - WIRELESS AND MOBILE NETWORKING
UCCN3034 - NETWORK PROGRAMMING
UCCN3044 - NETWORK AND SWITCH SIMULATION
UCCN3054 - WIRELESS SECURITY
UCCN3064 - EMBEDDED NETWORK DEVICES

Pre-Requisite Unit(s) for UCCD3044
1. UCCD1024 - DATA STRUCTURE AND ALGORITHMIC PROBLEM SOLVING

Pre-Requisite Unit(s) for UCCN3014
1. UCCN2003 - TCP/IP INTERNETWORKING

Pre-Requisite Unit(s) for UCCN3024
1. UCCN2023 - FUNDAMENTALS OF WIRELESS COMMUNICATIONS

Pre-Requisite Unit(s) for UCCN3034
1. UCCN2103 - FUNDAMENTALS OF SYSTEM PROGRAMMING

Pre-Requisite Unit(s) for UCCN3044
1. UCCD1024 - DATA STRUCTURE AND ALGORITHMIC PROBLEM SOLVING
1. UCCN1004 - DATA COMMUNICATIONS AND NETWORKING

Pre-Requisite Unit(s) for UCCN3054
1. UCCN1213 - FUNDAMENTALS OF COMPUTER AND INFORMATION SECURITY
1. UCCN2023 - FUNDAMENTALS OF WIRELESS COMMUNICATIONS

Pre-Requisite Unit(s) for UCCN3064
1. UCCC2014 - OBJECT ORIENTED CONCEPTS AND PROGRAMMING
1. UCCN2013 - TCP/IP INTERNETWORKING

Pre-Requisite 75 credit hours earned for UCCN3583
( Including University Wide or LAN Subjects)

Pre-Requisite Unit(s) for UCCN3054
1. UCCN1213 - FUNDAMENTALS OF COMPUTER AND INFORMATION SECURITY
1. UCCN2023 - FUNDAMENTALS OF WIRELESS COMMUNICATIONS

Pre-Requisite Unit(s) for UCCN3064
1. UCCC2014 - OBJECT ORIENTED CONCEPTS AND PROGRAMMING

UCCN-03 CORE GROUP - Choose 1 Unit(s)
UCCC2063 - ALGORITHMS ANALYSIS
UCCD2043 - INFORMATION TECHNOLOGY PROJECT MANAGEMENT
UCCD2063 - ARTIFICIAL INTELLIGENCE TECHNIQUES
UCCD2203 - DATABASE SYSTEMS
UCCD2213 - SOFTWARE ENGINEERING PRINCIPLES
UCCD3223 - MOBILE APPLICATIONS DEVELOPMENT

Pre-Requisite Unit(s) for UCCC2063
1. UCCD1024 - DATA STRUCTURE AND ALGORITHMIC PROBLEM SOLVING

Pre-Requisite Unit(s) for UCCD2063
1. UCCD1024 - DATA STRUCTURE AND ALGORITHMIC PROBLEM SOLVING

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

Pre-Requisite Unit(s) for UCCC2014
1. UCCC2014 - OBJECT ORIENTED CONCEPTS AND PROGRAMMING

Pre-Requisite Unit(s) for UCCN3596
1. UCCN3583 - PROJECT I

REMARK: BACHELOR OF INFORMATION TECHNOLOGY (HONS) COMMUNICATIONS AND NETWORKING 201110 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.

Students are required to obtain at least 12 credits of level-3 Major elective subjects from the above list