FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
BACHELOR OF INFORMATION TECHNOLOGY (HONS) COMPUTER ENGINEERING - UCCT110101
COURSE STRUCTURE GUIDE

Year 1

Year 1 Trimester 1

LANGXXX3	NATIONAL LANGUAGE/ OTHER LANGUAGES	Compulsory	3.0
MPWE02	MPW ELECTIVE II	Compulsory	3.0
UCCD1003	PROGRAMMING CONCEPTS AND DESIGN	Minor	3.0
UCCE1013	CIRCUIT THEORY	Major	3.0
UCCE1023	DIGITAL FUNDAMENTALS	Major	3.0
UCCM1113	MATHEMATICS I	Major	3.0
Total Credit Hours			**18.0**

LANGXXX3 CORE GROUP - Choose 1 Unit(s)
MPW2113 - BAHASA KEBANGSAAN (A)
 * FOR MALAYSIAN ONLY, WITHOUT SPM-BM CREDIT
MPW2123 - BAHASA KEBANGSAAN (B)
 ** FOR NON-MALAYSIAN ONLY
UALF1003 - INTRODUCTION TO FRENCH
 *** IF EXEMPTED FROM MPW2113
UALJ2013 - INTRODUCTION TO JAPANESE
 *** IF EXEMPTED FROM MPW2113
UALM1003 - INTRODUCTION TO TAMIL LANGUAGE
 *** IF EXEMPTED FROM MPW2113
UALT1003 - INTRODUCTION TO THAI LANGUAGE
 *** IF EXEMPTED FROM MPW2113
MPWE02 CORE GROUP - Choose 1 Unit(s)
MPW2143 - PENGAJIAN ISLAM
MPW2153 - PENDIDIKAN MORAL

Year 1 Trimester 2

BCTFE04	COMPULSORY (LIBERAL ARTS ELECTIVES)	Elective	3.0
MPW2133	PENGAJIAN MALAYSIA	Compulsory	3.0
UCCD1023	DATA STRUCTURES AND ALGORITHMS	Minor	3.0
UCCM1123	MATHEMATICS II	Major	3.0
UCCM1213	INTRODUCTORY STATISTICS	Major	3.0
UCCN1003	DATA COMMUNICATIONS AND NETWORKS	Minor	3.0
Total Credit Hours			**18.0**

BCTFE04 ELECTIVE GROUP - Choose 1 Unit(s)
UALE1083 - BASIC PROFESSIONAL WRITING
UALL3033 - PUBLIC SPEAKING AND ORAL PRESENTATION
UAMG1043 - INTERPERSONAL COMMUNICATION
UAPS2003 - INTRODUCTION TO SOCIOLOGY
UBMH1013 - ORGANISATION AND HUMAN RESOURCE
UBMM1013 - MANAGEMENT PRINCIPLES
UBMM2023 - ORGANISATIONAL BEHAVIOUR
Equivalent Unit(s) for UBMM2023
UKMM2023 - ORGANISATIONAL BEHAVIOUR
Pre-Requisite Unit(s) for UCCD1023
1. UCCD1003 - PROGRAMMING CONCEPTS AND DESIGN
Pre-Requisite Unit(s) for UCCM1123
1. UCCM1113 - MATHEMATICS I

Year 1 Trimester 3

UBMM1011	SUN ZI'S ART OF WAR AND BUSINESS STRATEGIES	Compulsory	1.0
UCCE1033	ELECTRONIC DEVICES AND CIRCUITS	Major	3.0
UCCE1043	DIGITAL CIRCUITS AND SYSTEMS	Major	3.0
USCC10X2	CO-CURRICULAR UNITS	Compulsory	2.0
Total Credit Hours			**9.0**

Pre-Requisite Unit(s) for UCCE1043
1. UCCE1023 - DIGITAL FUNDAMENTALS
USCC10X2 CORE GROUP - Choose 1 Unit(s)
USCC1012 - COMMUNICATION SKILLS (ORAL COMMUNICATION)

Year 2

Year 2 Trimester 1

BCTFE04	COMPULSORY (LIBERAL ARTS ELECTIVES)	Compulsory	3.0
UCCC2013	OBJECT-ORIENTED PROGRAMMING	Minor	3.0
UCCE2033	ANALOGUE CIRCUIT FUNDAMENTALS	Major	3.0
UCCE2043	BASIC MICROPROCESSOR	Major	3.0
UCCM2133	MATHEMATICS III	Major	3.0

Year 2 Trimester 2

BCTFE03	MINOR ELECTIVE	Minor	3.0
BCTFE03	MINOR ELECTIVE	Minor	3.0
UCCD3043	COMPUTER LAW AND ETHICS	Major	3.0
UCCE2023	DIGITAL SYSTEMS DESIGN	Major	3.0
UCCE2063	INTEGRATED CIRCUIT FUNDAMENTALS	Major	3.0
UCCE3033	EMBEDDED SYSTEMS DESIGN	Major	3.0
Total Credit Hours			**18.0**

BCTFE03 ELECTIVE GROUP - Choose 1 Unit(s)
UCCC2053 - OBJECT-ORIENTED MODELLING

Year 2 Trimester 3

UCCE2013	SIGNALS AND SYSTEMS	Major	3.0
UCCE2053	COMPUTER ORGANISATION AND ARCHITECTURE	Major	3.0
Total Credit Hours			**6.0**

UCCN2003	TCP/IP INTERNETWORKING	Minor	3.0
Total Credit Hours			**18.0**

BCTFE04 ELECTIVE GROUP - Choose 1 Unit(s)
UALE1083 - BASIC PROFESSIONAL WRITING
UALL3033 - PUBLIC SPEAKING AND ORAL PRESENTATION
UAMG1043 - INTERPERSONAL COMMUNICATION
UAPS2003 - INTRODUCTION TO SOCIOLOGY
UBMH1013 - ORGANISATION AND HUMAN RESOURCE
UBMM1013 - MANAGEMENT PRINCIPLES
UBMM2023 - ORGANISATIONAL BEHAVIOUR
Equivalent Unit(s) for UBMM2023
UKMM2023 - ORGANISATIONAL BEHAVIOUR
Pre-Requisite Unit(s) for UCCM2133
1. UCCM1123 - MATHEMATICS II
Pre-Requisite Unit(s) for UCCN2003
1. UCCN1003 - DATA COMMUNICATIONS AND NETWORKS

UCCC2063 - ALGORITHM ANALYSIS
UCCC3023 - ADVANCED ARTIFICIAL INTELLIGENCE
UCCD2033 - SOFTWARE AND PROJECT MANAGEMENT
UCCD2053 - ARTIFICIAL INTELLIGENCE
UCCD3033 - TECHNOPRENEURSHIP
UCCE2083 - EMBEDDED NETWORK DEVICES
UCCE3073 - COMPUTER VISION AND IMAGE PROCESSING
UCCM2123 - INTRODUCTORY NUMERICAL METHODS
UCCM2333 - GRAPH THEORY AND APPLICATIONS
UCCM3123 - OPERATIONS RESEARCH I
UCCM3134 - OPERATIONS RESEARCH II
UCCN2023 - FUNDAMENTALS OF WIRELSS COMMUNICATIONS
UCCN2103 - FUNDAMENTALS OF SYSTEM PROGRAMMING
UCCN3013 - WIRELESS AND MOBILE NETWORKING
UCCN3103 - NETWORK PROGRAMMING
Pre-Requisite Unit(s) for UCCE2083
1. UCCC2013 - OBJECT-ORIENTED PROGRAMMING
Pre-Requisite Unit(s) for UCCM2123
1. UCCM1123 - MATHEMATICS II
Pre-Requisite Unit(s) for UCCM3123
1. UCCM1123 - MATHEMATICS II
Pre-Requisite Unit(s) for UCCM3134
1. UCCM3123 - OPERATIONS RESEARCH I
Pre-Requisite Unit(s) for UCCN2103
1. UCCD1023 - DATA STRUCTURES AND ALGORITHMS
Pre-Requisite Unit(s) for UCCN3013
1. UCCN2023 - FUNDAMENTALS OF WIRELSS COMMUNICATIONS
Pre-Requisite Unit(s) for UCCN3103
1. UCCN2103 - FUNDAMENTALS OF SYSTEM PROGRAMMING
BCTFE03 ELECTIVE GROUP - Choose 1 Unit(s)
UCCC2053 - OBJECT-ORIENTED MODELLING
UCCC2063 - ALGORITHM ANALYSIS
UCCC3023 - ADVANCED ARTIFICIAL INTELLIGENCE
UCCD2033 - SOFTWARE AND PROJECT MANAGEMENT
UCCD2053 - ARTIFICIAL INTELLIGENCE
UCCD3033 - TECHNOPRENEURSHIP
UCCE2083 - EMBEDDED NETWORK DEVICES
UCCE3073 - COMPUTER VISION AND IMAGE PROCESSING
UCCM2123 - INTRODUCTORY NUMERICAL METHODS
UCCM2333 - GRAPH THEORY AND APPLICATIONS
UCCM3123 - OPERATIONS RESEARCH I
UCCM3134 - OPERATIONS RESEARCH II
UCCN2023 - FUNDAMENTALS OF WIRELSS COMMUNICATIONS
UCCN2103 - FUNDAMENTALS OF SYSTEM PROGRAMMING
UCCN3013 - WIRELESS AND MOBILE NETWORKING
UCCN3103 - NETWORK PROGRAMMING
Pre-Requisite Unit(s) for UCCE2083
1. UCCC2013 - OBJECT-ORIENTED PROGRAMMING
Pre-Requisite Unit(s) for UCCM2123
1. UCCM1123 - MATHEMATICS II
Pre-Requisite Unit(s) for UCCM3123
1. UCCM1123 - MATHEMATICS II
Pre-Requisite Unit(s) for UCCM3134
1. UCCM3123 - OPERATIONS RESEARCH I
Pre-Requisite Unit(s) for UCCN2103
1. UCCD1023 - DATA STRUCTURES AND

ALGORITHMS
Pre-Requisite Unit(s) for UCCN3013
1. UCCN2023 - FUNDAMENTALS OF WIRELSS
COMMUNICATIONS
Pre-Requisite Unit(s) for UCCN3103
1. UCCN2103 - FUNDAMENTALS OF SYSTEM
PROGRAMMING

Year 3

Year 3 Trimester 1

BCTFE01	MAJOR ELECTIVE	Major	3.0
BCTFE03	MINOR ELECTIVE	Minor	3.0
UCCD2103	OPERATING SYSTEMS	Minor	3.0
UCCE3053	DIGITAL SIGNAL PROCESSING	Major	3.0
UCCE3503	PROJECT I	Major	3.0
	Total Credit Hours		**15.0**

BCTFE01 ELECTIVE GROUP - Choose 1 Unit(s)
UCCE3013 - INTEGRATED CIRCUIT DESIGN
UCCE3023 - ANALOGUE CIRCUIT DESIGN
UCCE3043 - EMBEDDED COMPUTING
UCCE3063 - INTELLIGENT TECHNIQUES FOR
ENGINEERING APPLICATIONS
UCCE3073 - COMPUTER VISION AND IMAGE
PROCESSING
BCTFE03 ELECTIVE GROUP - Choose 1 Unit(s)
UCCC2053 - OBJECT-ORIENTED MODELLING
UCCC2063 - ALGORITHM ANALYSIS
UCCC3023 - ADVANCED ARTIFICIAL INTELLIGENCE
UCCD2033 - SOFTWARE AND PROJECT
MANAGEMENT
UCCD2053 - ARTIFICIAL INTELLIGENCE
UCCD3033 - TECHNOPRENEURSHIP
UCCE2083 - EMBEDDED NETWORK DEVICES
UCCE3073 - COMPUTER VISION AND IMAGE
PROCESSING
UCCM2123 - INTRODUCTORY NUMERICAL METHODS
UCCM2333 - GRAPH THEORY AND APPLICATIONS
UCCM3123 - OPERATIONS RESEARCH I
UCCM3134 - OPERATIONS RESEARCH II
UCCN2023 - FUNDAMENTALS OF WIRELSS
COMMUNICATIONS
UCCN2103 - FUNDAMENTALS OF SYSTEM
PROGRAMMING
UCCN3013 - WIRELESS AND MOBILE NETWORKING
UCCN3103 - NETWORK PROGRAMMING
Pre-Requisite Unit(s) for UCCE2083
1. UCCC2013 - OBJECT-ORIENTED PROGRAMMING
Pre-Requisite Unit(s) for UCCM2123
1. UCCM1123 - MATHEMATICS II
Pre-Requisite Unit(s) for UCCM3123
1. UCCM1123 - MATHEMATICS II
Pre-Requisite Unit(s) for UCCM3134
1. UCCM3123 - OPERATIONS RESEARCH I
Pre-Requisite Unit(s) for UCCN2103
1. UCCD1023 - DATA STRUCTURES AND
ALGORITHMS
Pre-Requisite Unit(s) for UCCN3013
1. UCCN2023 - FUNDAMENTALS OF WIRELSS
COMMUNICATIONS
Pre-Requisite Unit(s) for UCCN3103
1. UCCN2103 - FUNDAMENTALS OF SYSTEM
PROGRAMMING

Year 3 Trimester 2

BCTFE01	MAJOR ELECTIVE	Major	3.0
BCTFE01	MAJOR ELECTIVE	Major	3.0
BCTFE04	COMPULSORY (LIBERAL ARTS ELECTIVES)	Elective	3.0
UCCE3506	PROJECT II	Major	6.0
	Total Credit Hours		**15.0**

BCTFE01 ELECTIVE GROUP - Choose 1 Unit(s)
UCCE3013 - INTEGRATED CIRCUIT DESIGN
UCCE3023 - ANALOGUE CIRCUIT DESIGN
UCCE3043 - EMBEDDED COMPUTING
UCCE3063 - INTELLIGENT TECHNIQUES FOR
ENGINEERING APPLICATIONS
UCCE3073 - COMPUTER VISION AND IMAGE
PROCESSING
BCTFE01 ELECTIVE GROUP - Choose 1 Unit(s)
UCCE3013 - INTEGRATED CIRCUIT DESIGN
UCCE3023 - ANALOGUE CIRCUIT DESIGN
UCCE3043 - EMBEDDED COMPUTING
UCCE3063 - INTELLIGENT TECHNIQUES FOR
ENGINEERING APPLICATIONS
UCCE3073 - COMPUTER VISION AND IMAGE
PROCESSING
BCTFE04 ELECTIVE GROUP - Choose 1 Unit(s)
UALE1083 - BASIC PROFESSIONAL WRITING
UALL3033 - PUBLIC SPEAKING AND ORAL
PRESENTATION
UAMG1043 - INTERPERSONAL COMMUNICATION
UAPS2003 - INTRODUCTION TO SOCIOLOGY
UBMH1013 - ORGANISATION AND HUMAN
RESOURCE
UBMM1013 - MANAGEMENT PRINCIPLES
UBMM2023 - ORGANISATIONAL BEHAVIOUR
Equivalent Unit(s) for UBMM2023
UKMM2023 - ORGANISATIONAL BEHAVIOUR

Year 3 Trimester 3

UCCE2506	INDUSTRIAL TRAINING	Major	6.0
	Total Credit Hours		**6.0**

Pre-Requisite 54 credit hours earned for UCCE2506
(Including Univeristy Wide or LAN Subjects)

REMARK: BACHELOR OF INFORMATION TECHNOLOGY (HONS) COMPUTER ENGINEERING 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.