

## BACHELOR OF COMPUTER SCIENCE (HONS)

(N/481/6/0819 | (MQA/PA11417)

The Bachelor in Computer Science (Hons) programme aims to equip graduates with analytical, logical and critical thinking skills as well as scientific and engineering approach in developing and implementing robust and useful computing solutions.

This industry relevant programme is designed to meet global needs in the computing industry.

### DURATION OF STUDY

3 years

### MODE OF STUDY

Full Time

### INTAKE

January, April & August

### CAREER PROSPECT

- Network Manager
- System Analyst
- Computer Programmer & Engineer
- Software developer
- Cyber Security Manager

### ENTRY REQUIREMENTS

#### Matriculation or Foundation

\*A pass in Matriculation or Foundation studies or its equivalent with minimum CGPA of 2.0 and credit with the following 2 subjects at SPM level or its equivalent:

- a) **Additional Mathematics; OR**
- b) **Mathematics and one of Science, Technology or Engineering subjects**

Note: Candidates with b) must take Mathematics reinforcement subject with topics relevant to Computer Science and Software Engineering at the beginning of the study; **OR**

#### STPM

\*A pass in Sijil Tinggi Persekolahan Malaysia (STPM) in science stream or equivalent with a minimum Grade C (CGPA 2.00) in the following 2 subjects;

- a) **Mathematics; AND**
- b) **Science or ICT subjects**

#### Diploma

1. A Diploma in Computer Science OR Software Engineering OR Information Technology OR Information Systems or equivalent with a minimum CGPA of 2.50.
2. Any Diploma in Science and Technology with a minimum CGPA of 2.50.

Note: Candidates with CGPA below 2.50 but above 2.00 maybe admitted subject to rigorous internal assessment process.

International students must have proof of good proficiency in verbal and written English. International English Language Testing System (IELTS) score of 6.0 or its equivalent.



### PROGRAMME STRUCTURE

#### YEAR 1

- Principles of information Technology
- Discrete Mathematics
- Programming Concepts and Design
- Operating System
- Data Communication
- English For Academic Enrichment
- Programming Language Concepts & Paradigms
- Information Systems Security
- Object-Oriented Programming
- Database Management
- Tamadun Islam Dan Tamadun Asia / Malaysian Studies 3
- Hubungan Etnik / Bahasa Melayu Komunikasi 2 MPU
- Bahasa Kebangsaan A
- Knowledge Management and Engineering
- Wireless Network Planning and Design
- Malaysian Government and Public Policy

#### YEAR 2

- Computer Architecture
- Software Quality
- Concurrent and Real-time System
- Mobile Application Development
- Search Engines Technologies
- Public Speaking and Presentation Skills
- Database System Concepts
- Leadership and Professional Development
- Social and Professional Responsibilities
- Multimedia Technology
- Emerging Technologies
- AMUnited 2
- Software Requirements Analysis & Modelling
- ELECTIVE
- ELECTIVE

#### YEAR 3

- Artificial Intelligence
- System Development Tools and Techniques
- Data Structure and Algorithms
- Parallel and Distributed Computing
- Professional & Technopreneurship Development (Research method)
- Internship
- Integrated Software Development
- Computer Science Collaborative Project

#### ELECTIVE

Students to select any specialisation group by completing the 2 electives in the same group with 1 additional module

#### Network and Mobile Computing

- Human Computer Interaction
- Wireless Network & Mobile Computing

#### Network Security

- Systems Security & Protection
- Information Security & Assurance

#### Cloud Computing

- Internet Protocols Architecture & Routing
- Web Engineering & Technologies