The aim of this course is to introduce the concepts and technologies of computing, in particular software engineering, network security and network & mobile computing. The course will introduce skills and concepts related to the design, development, and deployment of computing applications. Concepts related to general computing such as database, system analysis and design, human computer interaction and programming will also be included.

Besides concepts and theories related to computer science, this course also aims to provide students with practical skills that meet the demands of the computing industry, especially in software development and network security. Students will also learn soft skills and a foreign language, which are required in today's business environment.

A survey by MDeC also indicated that multimedia is the third most sought-after IT job in Malaysia, with jobs ranging from multimedia designer to visual effect specialist.

BACHELOR OF COMPUTER SCIENCE (HONS)

In collaboration with

Coventry University

Highlights

- Receive 2 awards upon completion: A Bachelor of Computer Science (Hons) from INTI International University and a BSc. (Hons) Computer Science awarded by the Coventry University, UK
- Students can choose their specialisation track from Year 2 onwards
- This programme covers part of the industry recognised CCNA syllabus. Students can move on to the advanced CCNA module upon programme completion at INTI
- Strong focus on applied knowledge with 50% of the curriculum based on practical application
- Internship opportunities with organisations like INTEL Technology, Sony, CSC Malaysia, Khind Holdings Berhad, Silverlake Sprints and more
- Incorporates real life Employer Projects in the classroom

Fields of study available

Digital Multimedia
The new digital media industries require specialists who can integrate sound, video, image, text and animation to create rich and engaging digital user experiences. This programme will provide students with related skills for various multimedia roles, such as animators, web designers, digital video effects specialists and more.

Recommended electives:
- 3D Animation & Production Techniques
- Digital Video & Sound Technology
- Ludology
- Multimedia Scripting
- Visual Communication & Typography

Mobile Application Development
Smart devices have dominated the landscape of computing since the last few years. With more and more smart devices that behave like a mini computer in the markets nowadays, in keeping up with the demand for their applications, many software houses are looking towards building APPs. This specialisation will fulfill the current market demand for these specialised APP programmers.

Recommended electives:
- Interactive Web Programming
- IOS Development
- Mobile Application Development
- Open Source Development
- Web Application Development

Network & Mobile Computing
This specialisation will help students understand how basic computer networks and mobile applications work, as well as the technology behind wired and wireless networks. Skills developed include computer network design, correcting network problems, network security protections, network management techniques and mobile programming for PDA applications.

Recommended electives:
- Mobile Operation System
- Network Management
- Wireless Network Planning & Design
- Wireless Network Security
- Wireless Programming

Network Security
Companies are spending a lot of resources to protect their data and networks. This specialisation will enable students to protect network systems from theft, hacker attacks and breaches in network security.

Recommended electives:
- Ethical Hacking
- Network Management
- Network Security
- Routing Protocols & Concepts
- Wireless Network Security

Software Engineering
Students will learn to design, implement and document quality software systems in appropriate languages for available computers. This includes the ability to design software that makes effective use of the hardware. They will also gain a clear understanding of organisational structures, along with the information needs and consequent systems requirements of an organisation.

Recommended electives:
- Concurrent & Real-time System
- Formal Methods
- Software Testing
- Software Quality
- Wireless Programming
Career opportunities

Programmer, IT Consultant, Network Administrator, Software Engineer, Systems Analyst, Technical Support Engineer, Network Engineer, Technical Consultant, Project Manager, Web Developer

Offered at

INTI International University

INTAKES: JAN, MAY & AUG

Duration

3 Years

Programme structure

Year 1
- Computer Architecture
- Computer Ethics
- Fundamentals of Operating System
- Fundamentals of Software Engineering
- Graphic Design & Animations
- Introduction to Enterprise Resource Planning
- Mathematics for Computing
- Object-oriented Programming
- Programming Techniques
- Quantitative Methods
- Systems Analysis & Design

Year 2
- Computer Communication & Networks
- Data Structure & Algorithms
- Database System Concepts
- Human Computer Interface
- Socket Programming
- System Development Tools & Techniques

Electives:
(Choose two)
- Computer Graphics
- Digital Video & Sound Technology
- Ethical Hacking
- Information Assurance & Security
- IT Service Management
- Mobile Operating System
- Multimedia Scripting
- Open Source Development
- Routing Protocols & Concepts
- Software Testing
- Web Application Development
- Wireless Programming

Year 3
- Computational Modelling & Simulation
- Computer Project Management
- Intelligent Systems
- Network Security
- Project I
- Project II

Electives:
(Choose three)
- 3D Animation & Production Techniques
- Concurrent & Real-time System
- Emerging Technologies
- Formal Methods
- Information Storage & Management
- Interactive Web Programming
- IOS Development
- Ludology
- Mobile Application Development
- Network Management
- Network Security
- Software Quality
- Visual Communication & Typography
- Wireless Network Planning & Design
- Wireless Network Security

Internship

MPU subjects
- Bahasa Kebangsaan A*
- Community Service & Co-curriculum
- Entrepreneurship
- Ethnic Relations (Local students) / Communicating in Malay 2 (International students)
- Islamic & Asian Civilisation (Local students) / Malaysian Studies 3 (International students)
- Presentation Skills

*For Malaysian students who do not have a credit in SPM