



# BACHELOR OF ENGINEERING IN SOFTWARE ENGINEERING (HONOURS)

KPT/JPS [N/481/6/0707] 11/20 [MQA/FA5712]

## DURATION

4 years

## INTAKE

February/April/September

## MEDIUM OF INSTRUCTION

English

## ABOUT THE PROGRAMME

The software engineering programme at Xiamen University (XMU), which was introduced in 2002, is supported by the Software School, one of the 35 national exemplary software engineering schools approved by China's Ministry of Education. The school has established joint research and development collaborations with a number of overseas IT enterprises including MICROSOFT, IBM, BEA, ORACLE, SYBASE, SUN and DELL.

We have achieved great success in cultivating talents with practical abilities and an international outlook in the field of software engineering since the inception of the programme. We were approved as the "Innovative Area of Talent Training Mode" and "Excellent Engineer Training Programme" by China's Ministry of Education. Moreover, the course "software engineering" has been rated as a top-quality course by XMU, Fujian Province and Ministry of Education respectively.

Our programme at Xiamen University Malaysia is geared at producing graduates who are able to strike a balance between theories and practical implementation in software engineering, applying their knowledge and skills to design, develop, maintain and manage computer and mobile application systems in the context of a real-world engineering environment.

Note: The degree is not among the fields of engineering in the register of the Board of Engineers Malaysia.

## PROGRAMME HIGHLIGHTS

- A comprehensive curriculum that is designed to cultivate the fundamental technical skills of graduates alongside the freedom to specialise in niche areas of software engineering
- An emphasis on cultivating interdisciplinary software engineering talents who are capable of meeting challenges in an ever-changing world
- A problem-based learning approach that incorporates practical/project/training-based elements into the teaching-learning process
- An opportunity to gain valuable industry exposure and hands-on experience through cooperation with global IT enterprises

## CAREER OPPORTUNITIES

- Analyst programmer
- Application analyst
- Database administrator
- IT consultant
- Mobile application developer
- Programmer
- Requirements engineer
- Software design engineer
- Software project manager
- Software quality engineer
- Software architect
- Software auditor
- Software developer
- Software engineer
- Software tester
- Systems analyst
- Techno entrepreneur
- Web developer



# BACHELOR OF ENGINEERING IN SOFTWARE ENGINEERING (HONOURS)

## ENTRY REQUIREMENTS

<b>STPM</b>	A pass in STPM with at least a Grade C (GP2.0) in any 2 subjects
<b>A-Level</b>	A pass in A-Level with at least a Grade D in any 2 subjects
<b>UEC</b>	A pass in UEC with at least a Grade B in 5 subjects including Advanced Mathematics
<b>Foundation/Matriculation (Science/in a relevant field)</b>	A pass in Foundation/Matriculation with at least CGPA 2.0 out of 4.0
<b>Diploma</b>	A pass in Diploma in Computer Science/Information System/Information Technology/Software Engineering/ any Science and Technology or the equivalent with at least CGPA 2.5* out of 4.0
<b>AND</b>	<b>(i) Additional Mathematics** - a credit in SPM or the equivalent; OR (ii) Mathematics and any 1 Science/Technology/Engineering subject - a credit in SPM or the equivalent AND pass a Mathematics placement test organised by XMUM before joining the programme</b>

- NOTES:** \* Candidates with a CGPA of less than 2.5 but more than 2.0 may be accepted subject to a stringent internal evaluation process.  
\*\* The requirement for the Additional Mathematics at SPM level can be exempted if the Foundation/Matriculation or its equivalent offers a Mathematics course that is of a similar or higher level compared to the Additional Mathematics at SPM level.

\*For other equivalent qualifications, please consult our programme counsellor.

## MAIN COURSES

Computing Mathematics

Computer fundamentals

C and C++ Programming

Principles of Information Systems

Data Structure

Principles of Artificial Intelligence

Introduction of Software Engineering

Computer Architecture

Operating Systems

Database

Fundamentals of Network Technology

Software Architecture and Design Patterns

Algorithm Analysis and Design

Object Oriented Modeling

Human Computer Interaction

Software Quality Engineering

Software Project Management

Computer Graphics

Software Verification and Validation

Embedded System

Digital Media Technology

Advanced Software Engineering

Game Design and Development

Software Requirement Engineering

Information Security

Introduction of Cloud Computing

Mobile Application System Design

Distributed Systems

Data Mining

Technology and Application of Internet of Things

Big Data Analytics

Virtual Reality Technology & Application

## XIAMEN UNIVERSITY MALAYSIA DULN009(B)

TEL : +603 7610 2079

FAX : +603 7610 2068

E-MAIL : enquiry@xmu.edu.my

WEBSITE : www.xmu.edu.my

CAMPUS ADDRESS : Jalan Sunsuria, Bandar Sunsuria, 43900 Sepang, Selangor Darul Ehsan, Malaysia



The information in this brochure is correct at the time of publication. Xiamen University Malaysia (XMUM) reserves the right to change the information in line with updates from time to time. Please check the website (www.xmu.edu.my) for latest information.

March 2021