

This program is designed to introduce candidates to the processes by which new knowledge is developed or/and applied accordingly. The academic progress of a candidate is assessed through a research progress report submitted each semester. The degree is awarded based on an oral examination (viva-voice) of the thesis submitted by the candidate on completion of the study.

Admission Requirements

Master of Information and Communication Technology

- A Bachelor degree in Computer Science with minimum CGPA of 2.5 in relevant fields from an institution recognized by the Senate.

Or

- A bachelor degree with relevant work experience in ICT field and recognized by the Senate.

Doctor of Philosophy

- A Master degree from an institution recognized by the Senate.

Or

- Other equivalent Master degree with relevant work experience recognized by the Senate.

English Requirement:

- Minimum of TOFEL score of 500.

Or

- Minimum of IELTS score of 5.5 (6.0 for PhD)

Or

- Minimum of EPT score of 70%

Research Cluster

Computational Intelligence and Technologies Lab

Innovative Software Systems & Services

Biomedical Computing and Engineering Technologies

Information Security Forensics and Computer Networking

Creative Media Lab

Optimization, Modelling, Analysis, Simulation and Scheduling

Communication, Multimedia, Networks and Systems

Human Centered Computing and Information Systems Lab

Duration:

Master (Full-time)

- Minimum of 2, maximum of 6 semesters

Master (Part-time)

- Minimum of 4, maximum of 10 semesters

PhD (Full-time)

- Minimum of 4, maximum of 10 semesters



FACULTY OF
**INFORMATION & COMMUNICATION
TECHNOLOGY**
Fakulti Teknologi Maklumat & Komunikasi

POSTGRADUATE PROGRAMS

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FTMK
World!

Join
us!

Vision

To be the leading creative and innovative centre of excellence in ICT education, research and services.

Mission

To produce highly competent professionals in the field of Information and Communication Technology through a world-class quality technical education based on application-oriented teaching, learning and research with smart university-industry partnership in line with the country's aspiration.

Objectives

- To produce highly competent professionals in the field of Information and Communication Technology, who become the first choice of industries, local and abroad.
- To lead and develop applied researches in the ICT field which create new knowledge and innovative technologies needed by the industry or to be commercialized and recognized worldwide.
- To improve staff professionalism and competency and contribute to the generation of the university's financial resource through high-quality consultation services, professional trainings and continuous education.
- To contribute towards improving the understanding and culturing of ICT in the society and other social programs that contribute to the social and economic development.
- To initiate continuous smart partnership and co-operation with industry bodies and institutions of excellence, local and abroad.
- To develop and apply a high-quality, efficient, effective and user-friendly faculty administration and management system which highly supports the programs and activities that achieve the objectives and aims of the faculty.



POST GRADUATE PROGRAMS

BY COURSE WORK

This program is designed to advance the knowledge and skills and to develop new professional skills of the graduates in the particular area of study.

Admission Requirements

- A Bachelor degree in Computer Science with minimum CGPA of 2.5 in relevant fields from an institution recognized by the Senate.

Or

- A bachelor degree with relevant work experience in ICT field and recognized by the Senate.

English Requirement:

- Minimum of TOFEL score of 500.

Or

- Minimum of IELTS score of 5.5 (6.0 for PhD)

Or

- Minimum of EPT score of 70%

Duration:

Minimum of 2, maximum of 6 semesters

Subjects

MASTER OF TECHNOLOGY (DATA SCIENCE AND ANALYTICS)

This program is specifically designed to equip students with the core and utilization of knowledge, technical skills, and the latest technology in the field of Data Science and Analytics.

Course Work List

- University Compulsory Subjects
- Fundamental of Data Science
- Big Data Management
- Applied Statistical Methods
- Applied Machine Learning
- Big Data Analytics & Visualization
- Elective Subjects:
 - Special Topics in Applied Data Science
 - Manufacturing Analytics
 - Social Media Analytics
 - Geospatial Analytics
 - Healthcare Analytics
 - Tourism Analytics
 - Customer & Financial Analytics

University Compulsory Subjects

- Research Methodology
- Entrepreneurship
- Project Management
- Quality Management System
- Management of Engineering & Technology

Core Program

- Algorithms Analysis and Design
- Advanced Data Communication and Networks
- Computer Architecture and Compiler
- Computational Method
- Advanced Human-Computer Interaction
- Project 1 & Project 2

MASTER OF TECHNOLOGY (SOFTWARE AND APPLICATION DEVELOPMENT)

This program is specifically designed to equip students with the use of the latest technology to develop artifacts and mobile computing systems.

Course Work List

- University Compulsory Subjects
- Mobile Development I
- The Development of Internetworking Object
- User Experience & User-Interface Design
- Mobile Analytics
- Mobile Testing
- Mobile Backup
- Elective Subjects:
 - Agile Project Management
 - Mobile Application Architecture
 - Mobile Development II
 - Mobile Security and Privacy

MASTER OF COMPUTER SCIENCE (SECURITY SCIENCE)

To emphasize on the security elements in information and communication technology related to management, data and infrastructure.

Course Work List

- University Compulsory Subjects
- Core Program Subjects
- Core Course Subjects:
 - Computer Forensics
 - Data Cryptography and Security
 - Security Management Practices (CISSP)
 - System and Network Hacking
 - Watermarking
 - Public Key Infrastructure
 - Intrusion Detection and Prevention

MASTER OF COMPUTER SCIENCE (SOFTWARE ENGINEERING)

To emphasize on the latest software engineering and software engineering management in information technology that can meet industry needs.

Course Work List

- University Compulsory Subjects
- Core Program Subjects
 - Advanced Software Engineering
 - Software Quality
 - Advanced Software Project Management
 - Secure Software Development
 - Software Testing and Quality
 - Requirements Engineering

MASTER OF COMPUTER SCIENCE (MULTIMEDIA COMPUTING)

To emphasize on the development, approach, pedagogy and implementation of information technology in accordance with the design of multimedia and multimedia technology that can meet the needs of the industry.

Course Work List

- University Compulsory Subjects
- Core Program Subjects
- Elective Subjects:
 - 3D Model
 - Advanced 3D Animation
 - Advanced Audio & Video Technology
 - Mobile Application Development
 - Advanced Web Programming
 - Professional Multimedia Ethics
 - Instructional Multimedia Design
 - Computer Graphics & Visualization

MASTER OF COMPUTER SCIENCE (INTERNETWORKING TECHNOLOGY)

To emphasize on the technology, design and networking in information and communication technology that can meet industry needs.

Course Work List

- University Compulsory Subjects
- Core Program Subjects
- Core Course Subjects:
 - Advanced Scalable Internetworking
 - Advanced Network Design & Diagnostics
 - Distributed Computing System
 - Advanced High-Performance Network
 - Parallel Processing
 - Advanced Mobile Computing

MASTER OF COMPUTER SCIENCE (DATABASE TECHNOLOGY)

To emphasize on the teknologi, design and latest database management in information technology that can meet industry needs.

Course Work List

- University Compulsory Subjects
- Core Program Subjects
 - Database Administration and Security
 - Spatial Database
 - Distributed Database
 - Data Warehouse and Data Mining
 - Data Integration
 - Advanced Database Principles

MASTER OF INFORMATION SYSTEM

To emphasize on the latest software engineering and software engineering management in information technology that can meet industry needs.

Course Work List

- Development of Information Systems
- Data Center Management
- Data Analysis
- Business Information System
- Database System Management
- Information Systems Project Management
- Design and Architecture of Information
- Special Topics in Information Systems
- Configuration Management and Maintenance
- Information Security and Governance
- Healthcare Information System
- Project Paper
- Research Methodologv