

# MASTER OF SCIENCE (COMPUTER SCIENCE)

SCHOOL OF DIGITAL TECHNOLOGY

## PROGRAMME OVERVIEW

This programme enables outstanding students to develop knowledge and skills in diverse areas of computer science, and prepares them for senior positions in research development or technology management.

OPTIONAL EXIT:	a. Postgraduate Diploma (Computer Science) b. Postgraduate Certificate (Computer Science)
LEVEL OF STUDY :	Masters
DURATION	Full time: 1.5 Years Part time: 2 Years
GENTRE :	Centre of Postgraduate Studies & Research
INTAKE :	January / April / August
CREDIT VALUES :	40
DELIVERY METHODS :	Lecture, tutorial, lab and project

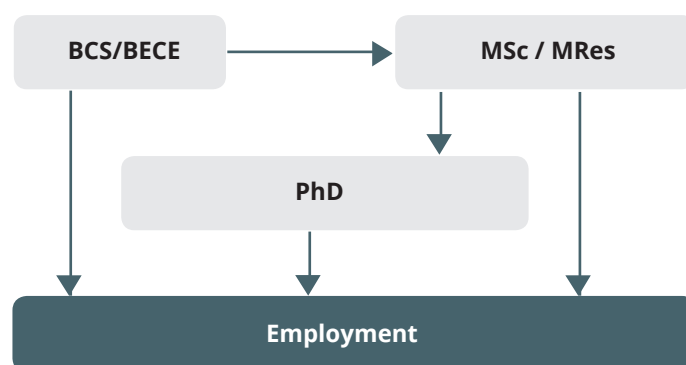
## ENTRY REQUIREMENTS

- BSc (in computing or science & technology with CGPA  $\geq$  3.0)
- BSc (in computing or science & technology with  $2.5 \leq$  CGPA  $<$  3.0 (applications will be considered on an individual basis)
- BSc (in computing or science & technology with CGPA  $<$  2.5) with minimum 5 years relevant industry experience).
- BSc (in non-computing or science & technology). Required to take pre-requisite courses.

## ENGLISH REQUIREMENT (for international students only)

- Pass TOEFL (within the 2- year validity period) with a minimum score of 550; OR
- Pass IELTS (within the 2- year validity period) with a minimum score of Band 6

## STUDY / CAREER PATHWAY



## CAREER OPPORTUNITIES

- Systems manager
- Information analyst
- Software engineer
- Web engineer
- Data warehouse consultant
- User interface designer
- Systems specialist
- IT consultant
- Policy advisor
- Project manager
- Senior lecturer

# COURSE OUTLINE

## 40 CREDIT VALUES

### CORE COURSES (25 CREDITS)

- CS501 Algorithms (3 credits)
- CS502 Discrete structure (3 credits)
- CS511 Simulation and modelling techniques (3 credits)
- CS524 Artificial intelligence (3 credits)
- CS525 Programming language concepts (3 credits)
- CS588-CS589 Master project (10 credits)

### ELECTIVE COURSES (9 CREDITS) – choose 3 subjects

*Algorithms and Theory Domain (3 credits for each subject)*

- CS503 Complexity theory
- CS504 Cryptography
- CS505 Geometric modeling
- CS506 Computational techniques for science and engineering

*Knowledge Systems Domain (3 credits for each subject)*

- CS507 Intelligent multi-agent systems
- CS508 Data mining
- CS509 Machine learning
- CS510 Computational linguistics

*Computer Systems Domain (3 credits for each subject)*

- CS512 Performance analysis of queueing systems
- CS513 Cloud computing
- CS514 Information security
- CS515 Service-oriented architecture
- CS516 Compiler construction

*Software Engineering Domain (3 credits for each subject)*

- CS517 Requirements engineering
- CS518 Software testing and quality assurance
- CS519 Software design methodologies
- CS520 Interface design methodology

### UNIVERSITY CORE COURSES (6 CREDITS)

- CS521 Graduate seminar (1 credit)
- CS522 Research methodology and academic writing (3 credits)
- CS523 Fundamental issues in computing (2 credits)

## Remarks:

**CS588-CS589 Master project (10 credits):**

**The Centre shall receive the master projects consisting of, but not limited to the following 17 knowledge areas in computer science:**

- Architecture and Organization
- Computational Science
- Discrete Structures
- Graphics and Visual Computing
- Human-Computer Interaction
- Information Assurance and Security
- Management Information Systems
- Intelligent Systems
- Networking and Communications
- Operating Systems
- Platform-based Development
- Parallel and Distributed Computing
- Programming Languages
- Software Development Fundamentals
- Software Engineering
- Systems Fundamentals
- Social and Professional Issues

# COURSE OUTLINE FOR OPTIONAL EXIT

## a. POSTGRADUATE DIPLOMA (COMPUTER SCIENCE) 31 CREDIT VALUES

### CORE COURSES (16 CREDITS)

Choose 4 subjects (3 credits for each subject)  
Master project (4 credits)

### ELECTIVE COURSES (9 CREDITS)

choose 3 subjects (3 credits for each subject)

### UNIVERSITY CORE COURSES (6 CREDITS)

- CS521 Graduate seminar (1 credit)
- CS522 Research methodology and academic writing (3 credits)
- CS523 Fundamental issues in computing (2 credits)

## b. POSTGRADUATE CERTIFICATE (COMPUTER SCIENCE) 21 CREDIT VALUES

### CORE COURSES (12 CREDITS)

Choose 4 subjects (3 credits for each subject)

### ELECTIVE COURSES (9 CREDITS)

choose 3 subjects (3 credits for each subject)

## APPLICATION PROCEDURE

Online application is available at [admission.unimy.edu.my](http://admission.unimy.edu.my)

## FOR ENQUIRIES

T +6 03 8800 5050 F +6 03 8800 5011 E [info@UniMy.edu.my](mailto:info@UniMy.edu.my)

## WEBSITE

[www.UniMy.edu.my](http://www.UniMy.edu.my)

 [www.facebook.com/unimyofficial](https://www.facebook.com/unimyofficial)

 <https://twitter.com/unimyofficial>



## ADDRESS

University Malaysia of Computer Science & Engineering  
Menara Z10, Ground and Mezzanine Floor  
Jalan Alamanda 2, Precinct 1  
62000 Wilayah Persekutuan Putrajaya, Malaysia.

## ACADEMIC PARTNERS



## INDUSTRY PARTNERS

