

MASTER OF PHILOSOPHY

Field: COMPUTER SCIENCE

PROGRAMME SPECIFICATIONS

The Master of Philosophy, Field: Computer Science is offered on a full-time basis. The full-time programme is offered only at the UTM Main Campus in Johor Bahru. The duration of study for the full-time programme is subjected to the student's entry qualifications and lasts between two (2) years to a maximum of four (4) years.

The programme is offered on full-time basis and is based on a 2-Semester per academic session. This is a full research programme. The candidate is supervised by a lecturer. The directed research work introduces candidates to the process by which new knowledge is developed and applied accordingly. Assessment is done by examining first assessment reports (research proposal), each semester's progress reports, and thesis examination (viva-voce).

General Information

1. Awarding Institution	Universiti Teknologi Malaysia			
2. Teaching Institution	Universiti Teknologi Malaysia			
3. Programme Name	Master of Philosophy			
4. Final Award	Master of Philosophy			
5. Programme Code	MCSSA3AJA			
6. Professional or Statutory Body of Accreditation	Ministry of Higher Education			
7. Language(s) of Instruction	English			
8. Mode of Study (Conventional, distance learning, etc)	Conventional			
9. Mode of operation (Franchise, self-govern, etc)	Self-governing			
10. Study Scheme (Full Time/Part Time)	Full Time			
11. Study Duration	Minimum : 2 yrs (4 semesters) Maximum : 4 yrs (8 Semesters)			
Type of Semester	No. of Semesters		No of Weeks/Semester	
	Full Time	Part Time	Full Time	Part Time

Normal	4	-	8	-
Short		-		-

Course Classification

No.	Classification	Credit Hours	Percentage
i.	University Courses	3	100%
ii.	Core Courses	0	0%
iii.	Research	0	0%
	Total	3	100%
Total Credit Hours to Graduate		3 credit hours	

COURSE MENU

Master of Philosophy students are required to register and pass the following courses before their first assessment (proposal defence).

- i. Research Methodology course (course code UCSP0010).
- ii. One University Elective Course (course code U*** **3).

YEAR 1: SEMESTER 1			
Code	Course	Credit	Pre-requisite
UCSM1263	IT Project Management	3	
UHAP6013	Seminar on Development, Economics and Global		
UICW 6023	Philosophy Science and Civilization		
UHAZ 6123	Malaysian Society and Culture		
UCSP0010	Research Methodology	0	
MCSS 1100	*Research	0	
	TOTAL CREDIT	3	
	CUMULATIVE CREDITS	3	

YEAR 1: SEMESTER 2			
Code	Course	Credit	Pre-requisite
MCSS 1200	*Research	0	
	TOTAL CREDIT	0	
	CUMULATIVE CREDITS	3	

* Research (course code MCSS **00), to be taken every semester until the submission of thesis. The progress of a candidate in any particular semester is assessed through research progress reports submitted at the end of each semester. It is important for the students to know that the submission of the

progress report needs to be done by the student themselves via GSMS website <http://spsapp3.utm.my:8080/gsmsv4/>.

RESEARCH CODE

Semester	Research Course Code
1	MCSS 1100
2	MCSS 1200
3	MCSS 2100
4	MCSS 2200
5	MCSS 3100
6	MCSS 3200
7	MCSS 4100
8	MCSS 4200

Programme Educational Objectives (PEO)

After having exposed to 3 to 5 years working experience, our graduates should become professionals who demonstrate the following competencies:

Code	Intended Educational Objectives
PEO1	Competent in computer science and digital industry and contribute to national development.
PEO2	Has character and ethics, as well as high professionalism and contributes to current and future needs.
PEO3	Creative, innovative, entrepreneurial and able to become leader or team member in an organisation and society.

Programme Learning Outcomes (PLO)

After having completed the programme, graduates should be able to demonstrate the following competencies:

Code	Intended Learning Outcomes
PLO1	Ability to demonstrate a mastery of knowledge in the field of computer science
PLO2	Ability to conduct Computer Science research in a systematic and scientific way with minimal supervision
PLO3	Ability to demonstrate ability to contribute idea in solving problems related to computer science to society
PLO4	Ability to demonstrate behaviours that are consistent with the code of Professional Ethics and Responsibilities
PLO5	Ability to communicate technical solutions and research findings to a range of audience orally and in writing
PLO6	Ability to generate solutions to problems using scientific and critical thinking skills
PLO7	Ability to manage information for lifelong long learning

PLO8	Ability to identify commercial value in the research output
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GRADUATION CHECKLIST

To graduate, students must pass all the stated courses in this checklist. It is the responsibility of the students to ensure that all courses are taken and passed. Students who do not complete any of the course are not allowed to graduate.

NO.	CODE	COURSE	CREDIT EARNED (JKD)	CREDIT COUNT-ED (JKK)	TICK (✓) IF PASSED
CORE COURSES (0 CREDITS)					
1	UCSP0010	Research Methodology	0	0	
TOTAL CREDIT OF CORE COURSES (a)			0	0	
UNIVERSITY ELECTIVE COURSES					
1	UCSM1263	IT Project Management	3	3	
	UHAP6013	Seminar on Development, Economics and Global			
	UICW 6023	Philosophy Science and Civilization			
	UHAZ 6123	Malaysian Society and Culture			
TOTAL CREDIT of UNIVERSITY GENERAL COURSES (b)			3	3	
TOTAL CREDIT TO GRADUATE (a + b)			3	3	
RESEARCH					
1	Hard-Bound Thesis endorsed by supervisor – 3 copies				
2	Copy of CD for Each Thesis – Extra 1 unit				
3	Copy of All Semester Results (Pre-Transcript)				
4	Copy of Registration Slip (current semester)				
5	Abstract and Title Page Approval Form (original copy)				
6	Course Checklist (endorsed by coordinator)				
7	Copy of IC (local student) / first page of Passport (international student)				
8	Fee Release Letter (UTM Bendahari)				
9	Exit Survey				
10	Submission of Thesis Form – 3 copies				
11	Verification of Graduate Information Form – 1 copy				

COURSE SYNOPSIS

CORE COURSES

UCSP0010 - Research Methodology

This course covers the general principles of Research Methodology that are applicable to any discipline. It discusses the fundamental process in conducting an academic research. The theoretical and practical aspects of preparing a research proposal presented. Amongst topics that will be covered are introduction to research and its philosophy, problem formulation and research objective, literature review, research methodology and design, data collection procedures, data analysis, research proposal and thesis preparation and research management.

UNIVERSITY ELECTIVE COURSES

UCSM 1263 - IT Project Management

This course presents a hands-on perspective to Information Technology project management. This course will assist post-graduate students to plan and implement their post-graduate projects as well as other IT projects effectively. The subject is organized into three main sections, that covers I) Basic concepts, life cycle and framework of project management II) Detailed description of each project management knowledge areas under the Project Management Institute (PMI) Body of Knowledge (PMBOK) and its applications, and III) Real Project Initiation, Planning, Executing, Monitoring and Closing. The Project Management areas include – project integration, scope, time, cost, quality, human resource, communications, risks and procurement management. Students are expected to perform real projects with teams and achieve agreed Key performance Indicators (KPI)

UHAP 6013 - Seminar on Development, Economics and Global

Discussion on this subject includes issues related to globalization and development, economic and social crisis that has become a global concern. It aims in developing skills in understanding and analyzing global issues and recommending relevant solutions. Issues will be discussed in details.

UICW 6023 - Philosophy Science and Civilization

This course is offered to international students in advanced scholar and doctoral programs from Malay societies such as Indonesia, Brunei, South Thailand and Malay-Singapore. This course contains two sections. This subject discusses the world view of its role and importance in shaping the culture of life and civilization; The concepts of revelation, science, humanity, nature and happiness; and Comparative Studies in the Philosophy of Science: Epistemology, Ontology and Axiology in Education. Discussions on current issues and challenges, among others; the challenge of civilization between the West and the East; Development and the environment; Economy and trade; National administration and management; Scientific research;

Communication and information technology; Ethics and morals; Crime and violence; and Family education.

UHAZ 6123 - Malaysian Society and Culture

This course is designed for international postgraduates from countries of non-Malay origins. Students will be exposed to various aspects of the Malaysian culture such as belief system, religious festivals, customs and etiquettes of different ethnic groups in Malaysia. Emphasis will be given to the Malay culture as it makes the core for the Dasar Kebudayaan Kebangsaan. Students will also be briefly introduced to basics of Malay language as the national language of Malaysia.