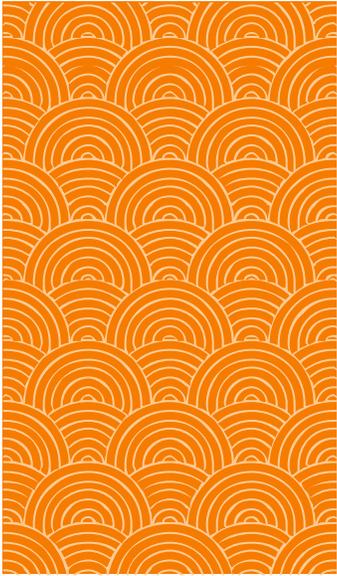
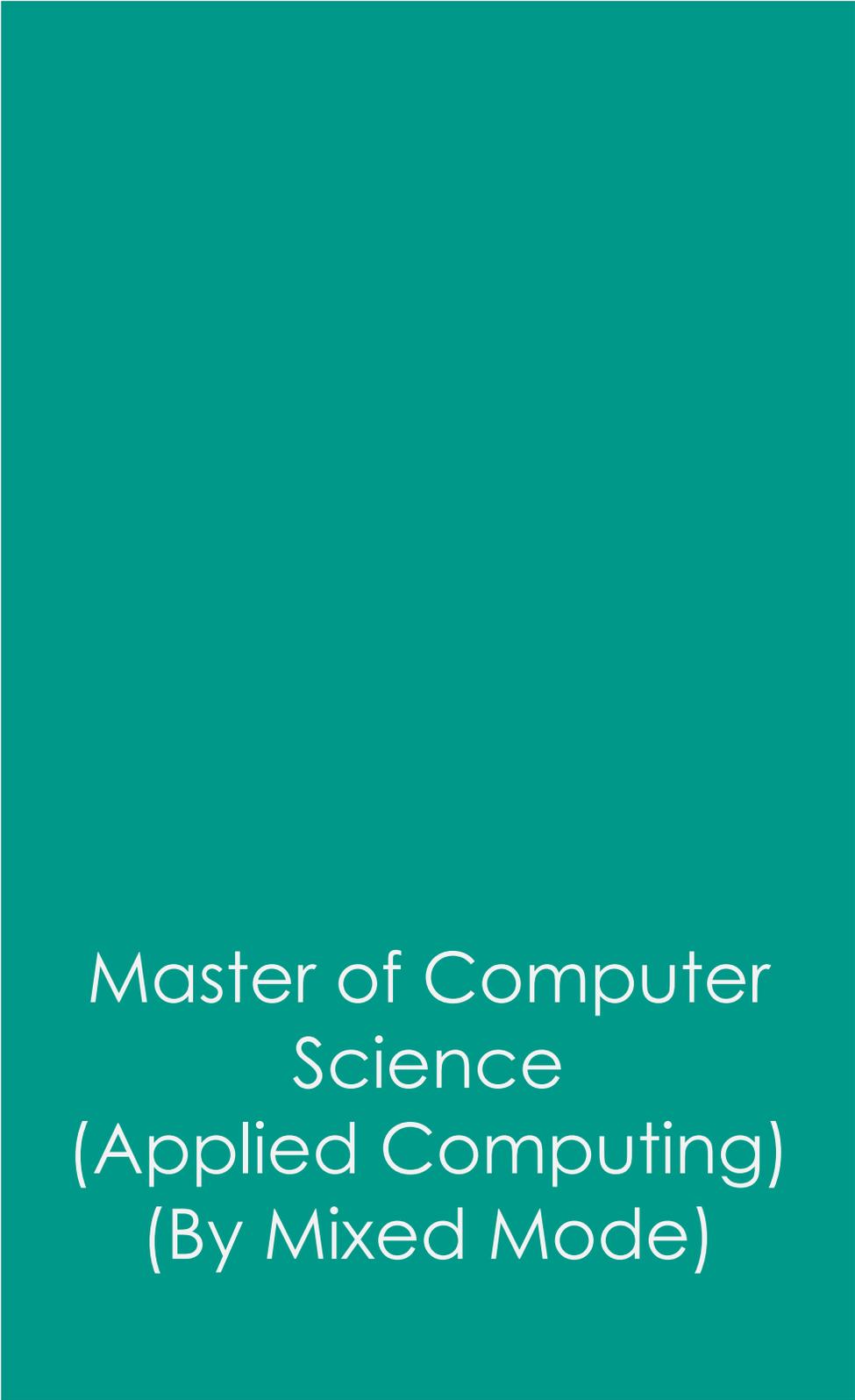


Postgraduate Programme Kit

Faculty of Computer Science and
Information Technology,
University Malaya

<https://fsktm.um.edu.my/>



Master of Computer
Science
(Applied Computing)
(By Mixed Mode)

COURSE PLAN

ACADEMIC SESSION 2022/2023

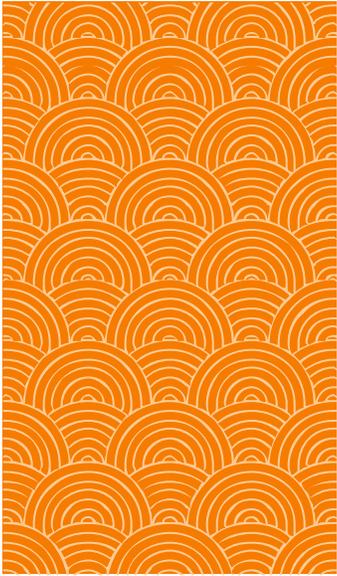
INTAKE SEMESTER I 2022/2023

MASTER OF COMPUTER SCIENCE (APPLIED COMPUTING)		Credits	Semester I 2022/2023	Semester II 2022/2023	Semester I 2023/2024
Core Courses					
WOX7001	Research Methodology	3	√		
WOA7001	Advanced Algorithms	3	√		
WOA7015	Advanced Machine Learning	3	√		
WOA7016	Cloud Computing	3		√	
WOA7017	Security Risk Analysis and Evaluation	3		√	
WOC7021	Dissertation	21		√**	√**
Elective Courses [Students are required to choose any 2 courses from the lists below]					
WOA7018	Autonomous Robotics	3	√		
WOA7019	Augmented Reality	3		√	
WOC7014	Framework-Based Software Design and Development	3		√	
WOC7020	Advanced Internet of Things	3	√		
WQD7003	Data Analytics	3	√		

* Students are required to register Research Methodology course in their first semester

** Students are only allowed to register for a Dissertation after completing six (6) credits of coursework.

Note: The courses that will be offered every semester are subject to change, depending on the availability of staff and the number of students registering.



Master of Software
Engineering
(Software
Technology)
(By Mixed Mode)

COURSE PLAN

ACADEMIC SESSION 2022/2023

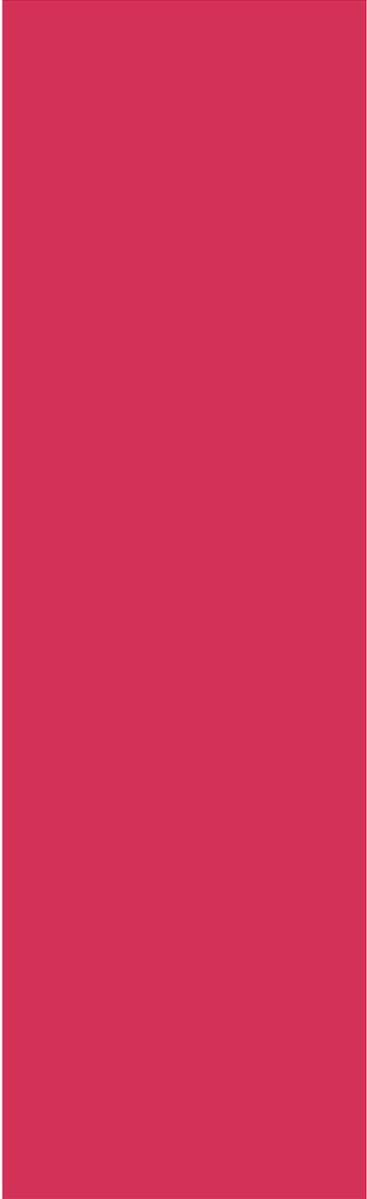
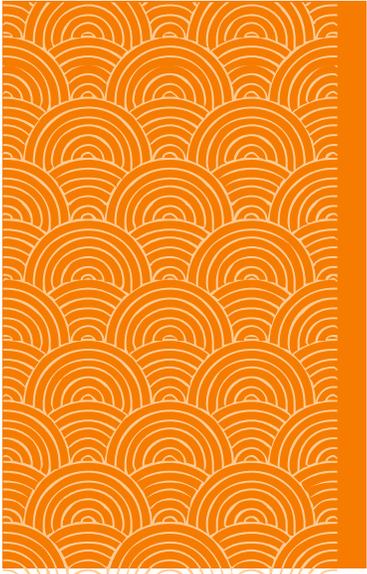
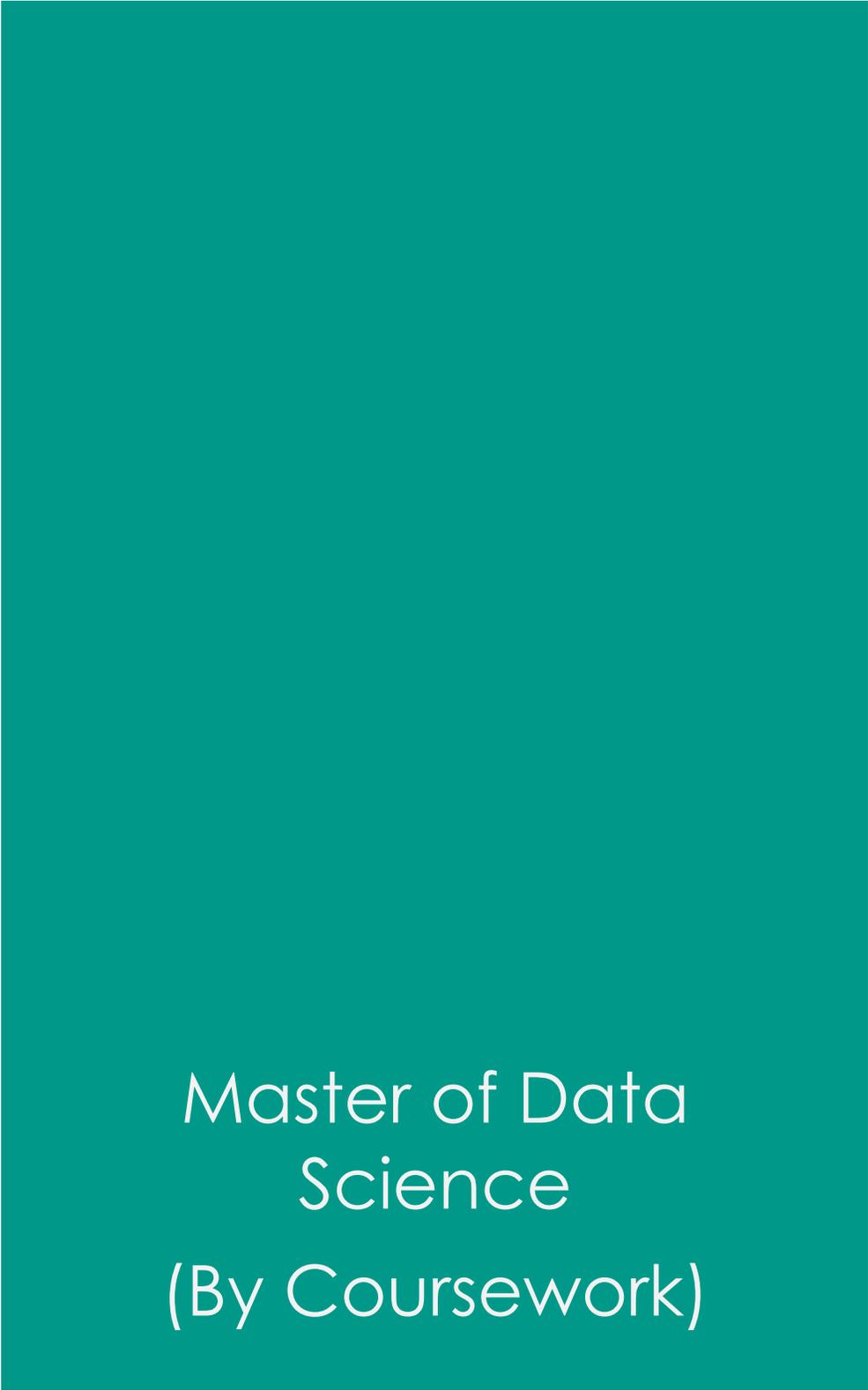
INTAKE SEMESTER I 2022/2023

MASTER OF SOFTWARE ENGINEERING (SOFTWARE TECHNOLOGY)		Credits	Semester I 2022/2023	Semester II 2022/2023	Semester I 2023/2024
Core Courses					
WOX7001	Research Methodology	3	√		
WOC7004	Architecting Software Systems	3	√		
WOC7014	Framework Based Software Design and Development	3		√	
WOC7015	Software Verification and Validation	3	√		
WOC7016	Software Project Management	3		√	
WOC7021**	Dissertation	21		√**	√**
Elective Courses [Students are required to choose any 2 courses from the list below]					
WOA7015	Advanced Machine Learning	3	√		
WOA7017	Security Risk Analysis and Evaluation	3		√	
WOC7017	Big Data Processing	3		√	
WOC7018	Requirements Engineering	3			
WOC7019	User Experience Design Studio	3		√	
WOC7020	Advanced Internet of Things	3	√		

*** Student are required to register Research Methodology course in their first semester**

**** Students are only allowed to register for Dissertation after completing six (6) credits of coursework.**

Note: The courses that will be offered every semester are subject to change, depending on the availability of staff and the number of students registering.



Master of Data
Science
(By Coursework)

COURSE PLAN

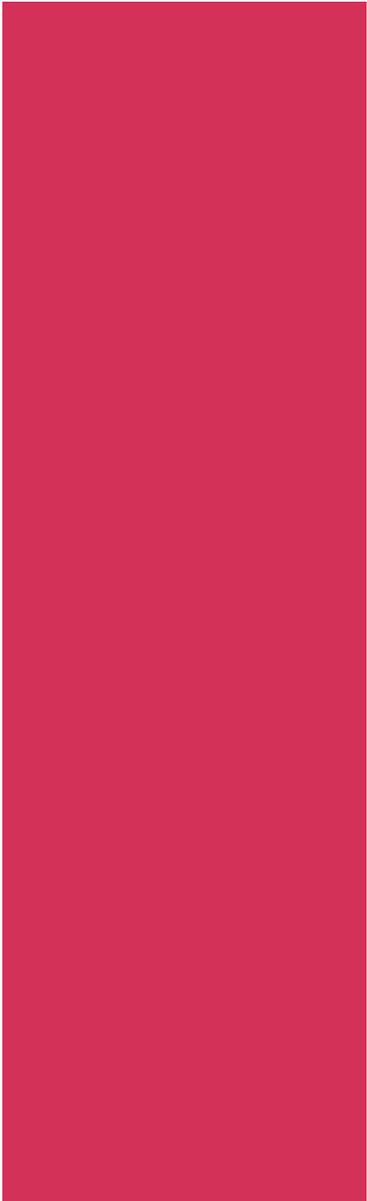
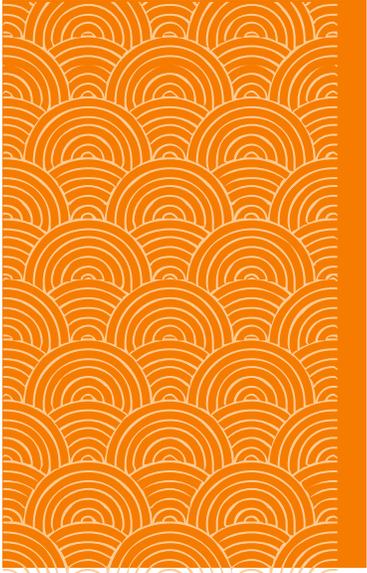
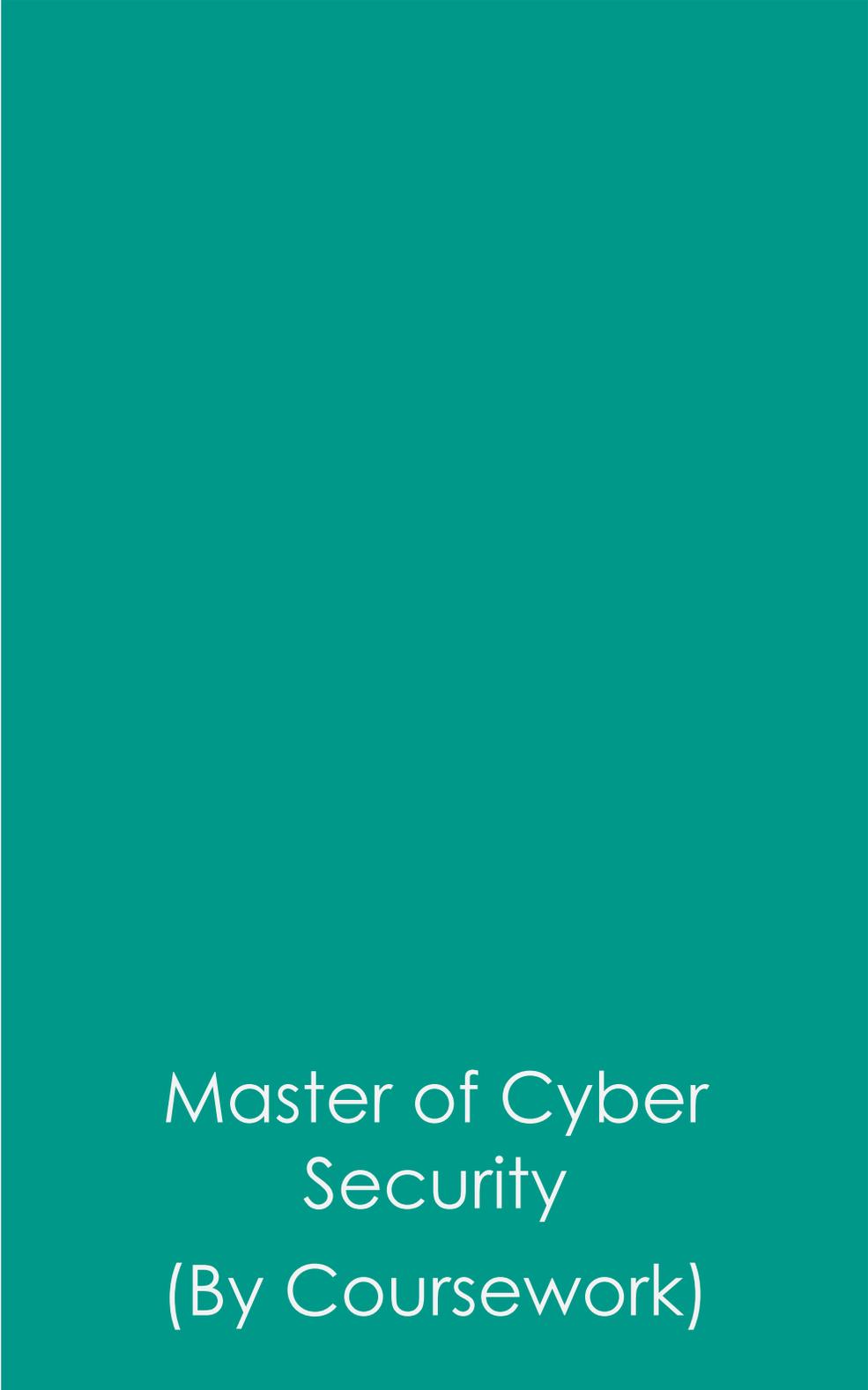
ACADEMIC SESSION 2022/2023

INTAKE SEMESTER I 2022/2023

MASTER OF DATA SCIENCE		Credits	Semester I 2022/2023	Semester II 2022/2023	Semester III 2022/2023
Core Courses					
WOX7001	Research Methodology	3	√		
WQD7001	Principles of Data Science	3	√		
WQD7003	Data Analytics	3	√		
WQD7004	Programming for Data Science	4	√		
WQD7005	Data Mining	4		√	
WQD7006	Machine Learning for Data Science	4		√	
WQD7007	Big Data Management	3		√	
WQD7002	Data Science Research Project	10		√	√
Elective Courses [Students are required to choose any 2 courses from the lists below]					
WQD7008	Parallel and Distributed Computing	4	√		
WQD7009	Big Data Applications & Analytics	4	√		
WQD7010	Network and Security	4		√	
WQD7011	Numerical Optimization	4		√	

**Students are only allowed to register for WQD7002 Data Science Research Project after completing at least three (3) core discipline courses (including WOX7001)

Note: The courses that will be offered every semester are subject to change, depending on the availability of staff and the number of students registering.



Master of Cyber
Security
(By Coursework)

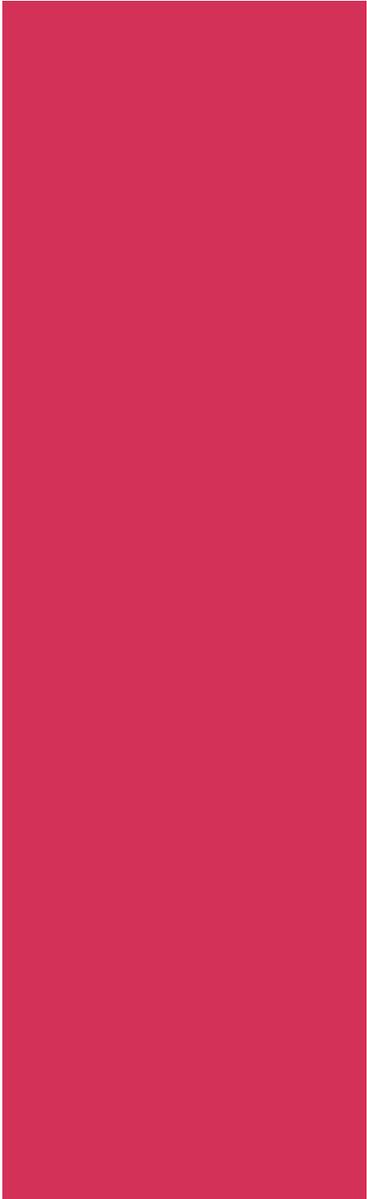
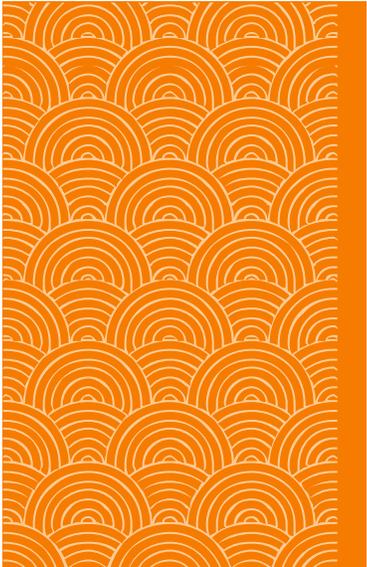
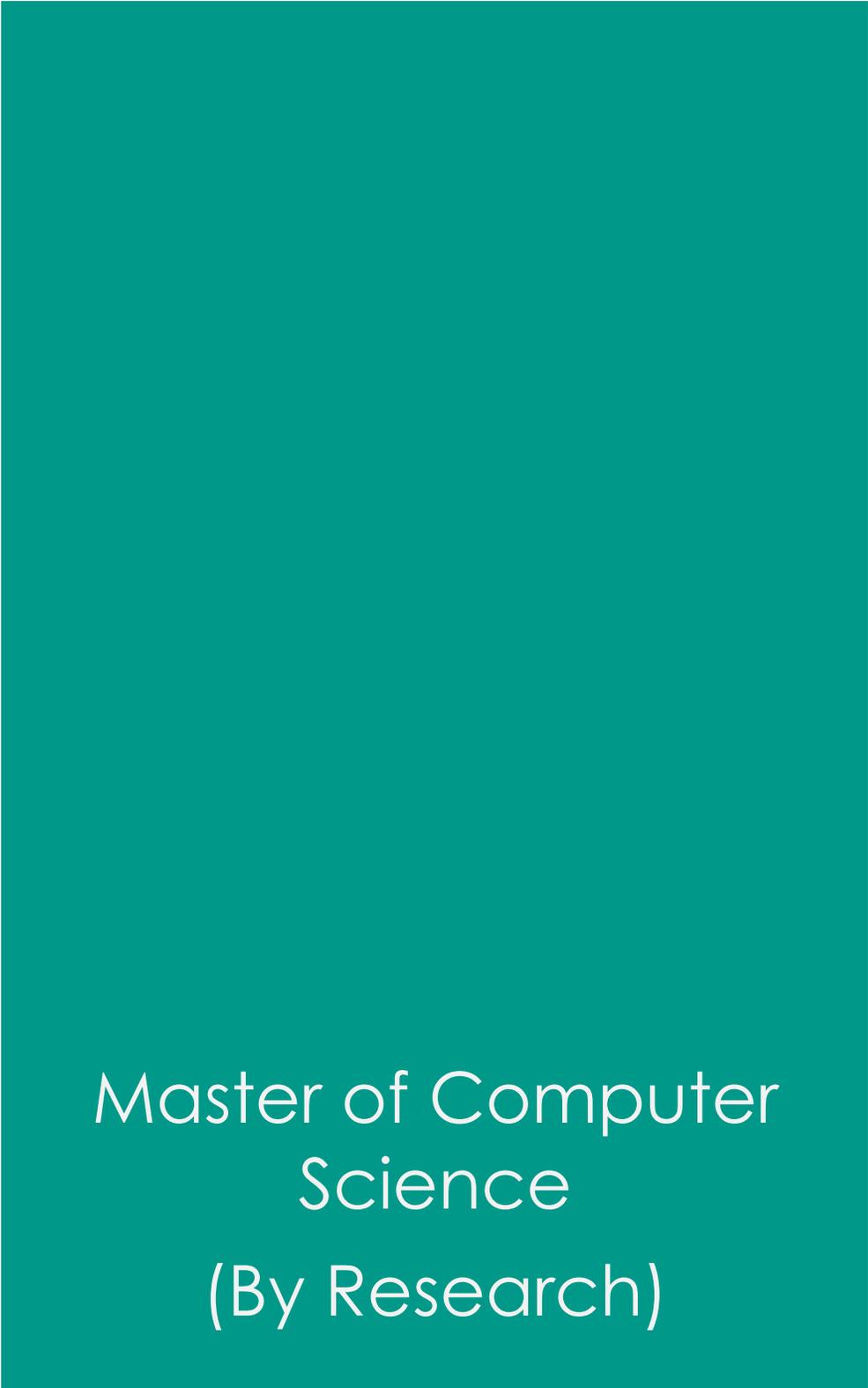
COURSE PLAN

ACADEMIC SESSION 2022/2023

INTAKE SEMESTER I 2022/2023

MASTER OF CYBER SECURITY		Credits	Semester I 2022/2023	Semester II 2022/2023	Semester III 2022/2023
Core Courses					
WOX7001	Research Methodology	3	√		
WQE7001	Cyber security	3	√		
WQE7002	Advanced Network Security Programming	4	√		
WQE7007	Network Technology and Security	3	√		
WQE7003	Cryptography and Information Hiding	3		√	
WQE7004	Information Assurance	3		√	
WQE7005	Advanced Digital Forensics	3		√	
WOC7020	Advanced Internet of Thing	3		√	
WQE7006	Cyber Security Research Project	10		√	√
Elective Courses [Students are required to choose any 2 courses from the list below]					
WQE7008	Wireless Networking and Mobile Computing	4	√		
WQE7011	Advanced Computer Penetration and Defense	4	√		
WQE7009	Emerging Cyber Security Trends	4		√	
WQE7010	Cloud Computing	4		√	

Note: The courses that will be offered every semester are subject to change, depending on the availability of staff and the number of students registering.

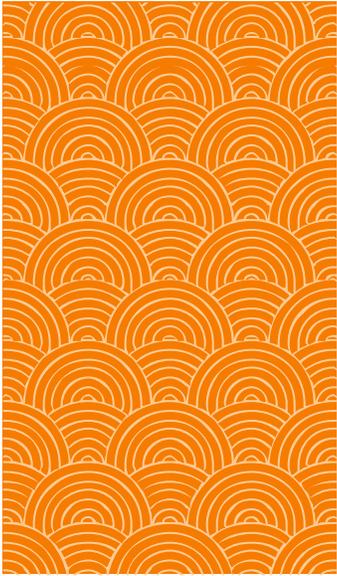
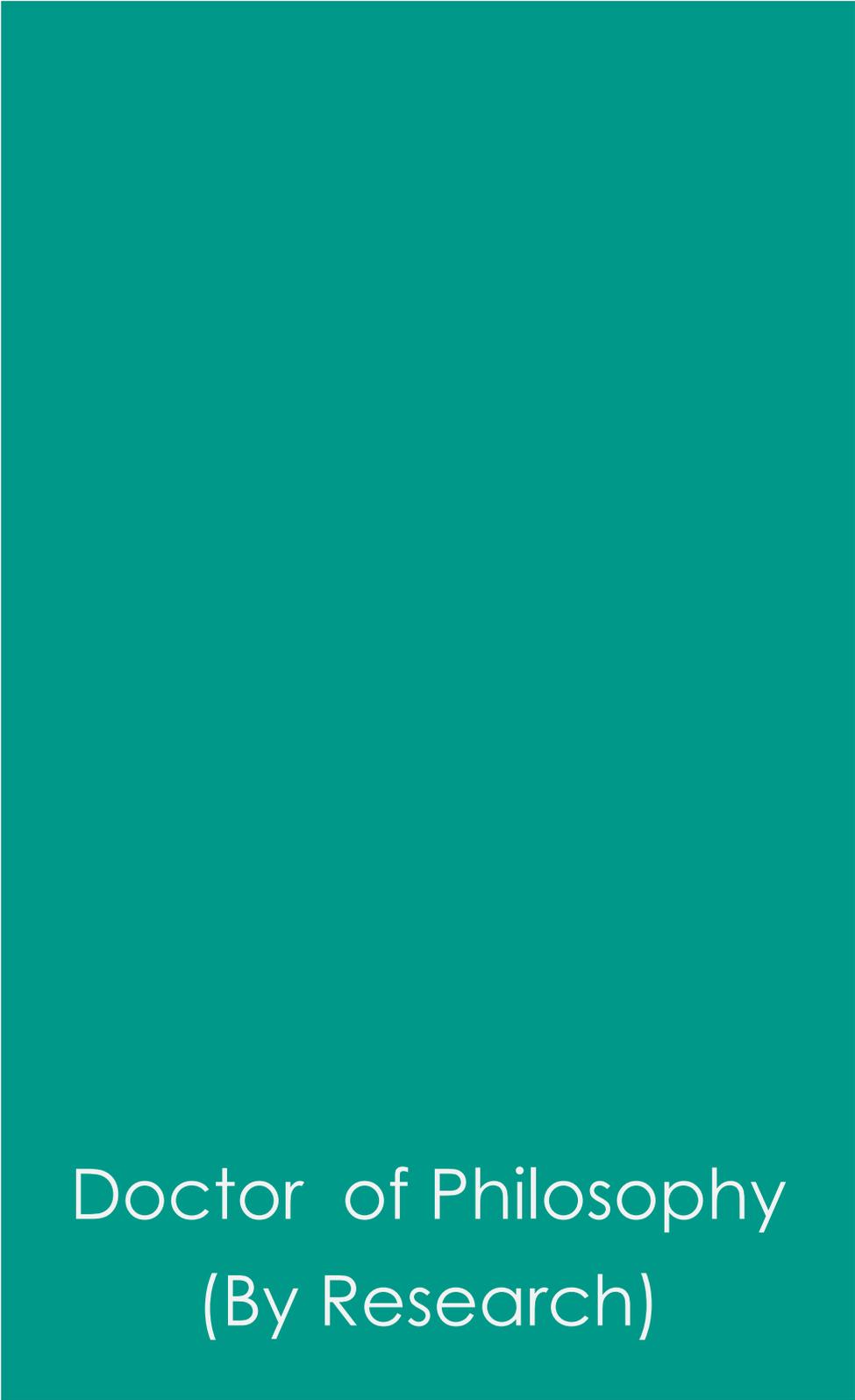


Master of Computer
Science
(By Research)

COURSE PLAN

ACADEMIC SESSION 2022/2023

MASTER OF COMPUTER SCIENCE		Credits
COURSES		
WOX7001	Research Methodology	3
WOX7002	Dissertation	1

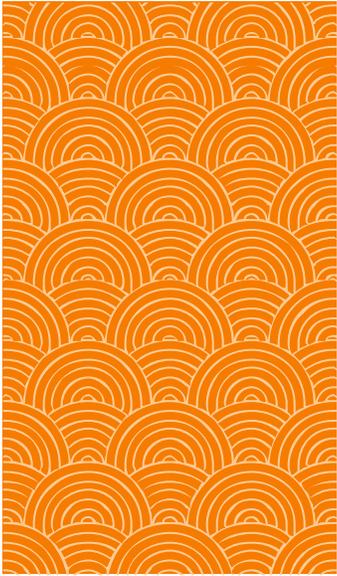
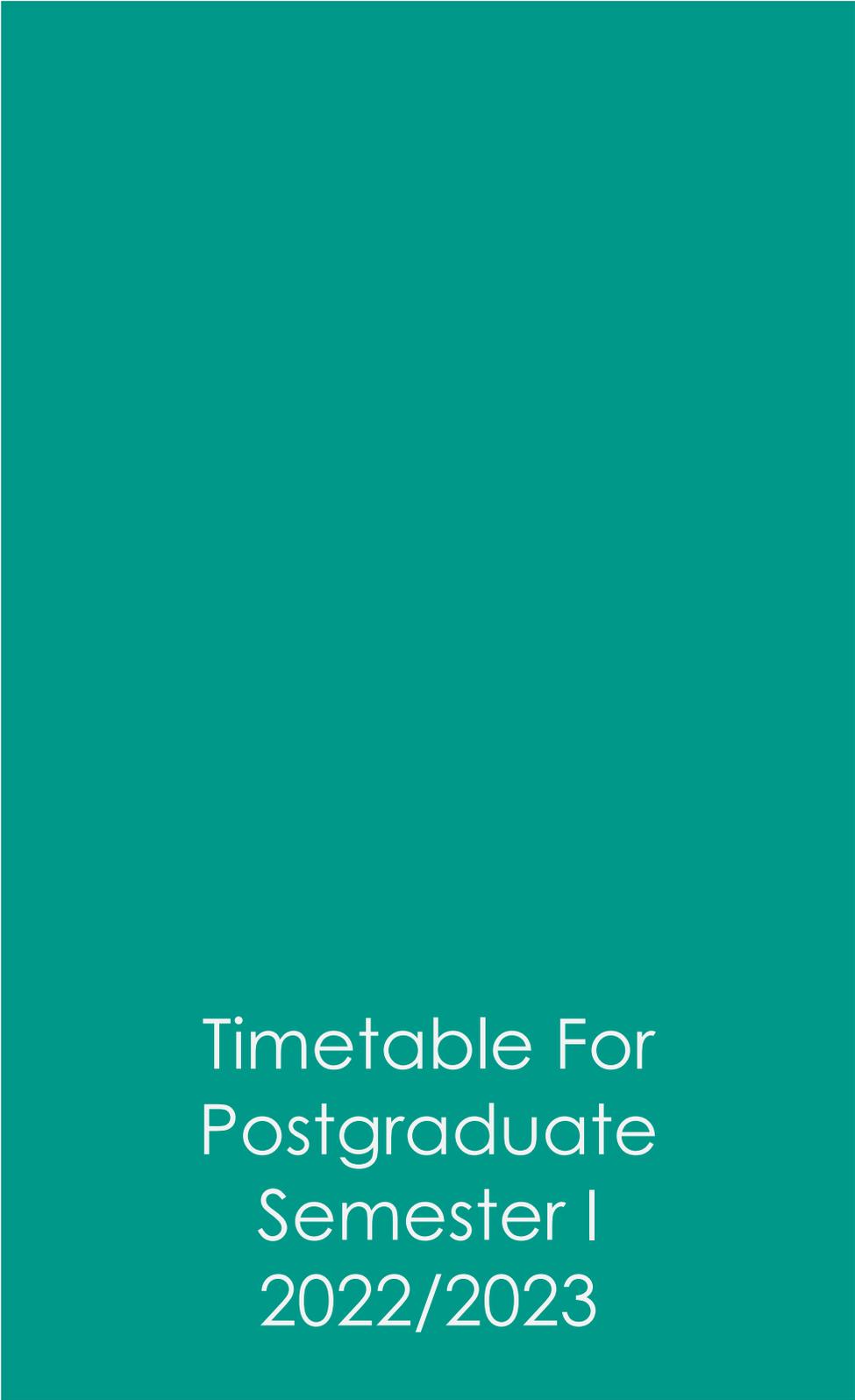


Doctor of Philosophy
(By Research)

COURSE PLAN

ACADEMIC SESSION 2022/2023

DOCTOR OF PHILOSOPHY		Credits
COURSES		
WVX8001	Advanced Research Methods In Computer Science And Information Technology	3
WVX8002	Thesis	1



Timetable For
Postgraduate
Semester I
2022/2023

**TIMETABLE FOR POSTGRADUATE PROGRAMMES
SEMESTER I, 2022/2023 ACADEMIC SESSION**

Last Revised:
13/10/2022
9.30 am

Program	Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
PHD	6.00pm - 9.00pm		WVX8001 (RA) BK					
MCS Master of Computer Science (Research only)	6.00pm - 9.00pm			WOX7001 (SUH) MM4				
MdatSc Master of Data Science (Coursework)	8.30am - 11.30am						WOX7001 (HSM) (Group 2) DK1	WQD7004 (ATF) (Group 3)
							WQD7007 (SP) (Group 2) MM4	
	11.30am - 2.30 pm						WQD7003 (HSM) (Group 2) MM3	WQD7009 (RYZ) (Group 2)
							WQD7006 (VIM) (Group 2) MM4	
	3.00pm - 6.00pm						WQD7004 (ATF) (Group 2) MM3	
							WQD7005 (TYW) (Group 2) MM4	
							WQD7003 (AQMS) (Group 3)	
							WQD7008 (LCS) (Group 2)	
	6.00pm - 9.00pm	WQD7001 (RM) (Group 1) MM3	WQD7003 (SSN) (Group 1) MM3	WOX7001 (NAG) (Group 1) DK1	WQD7004 (ATF) (Group 1) MM3	WQD7008 (LCS) (Group 1) MM3		
		WQD7006 (VIM) (Group 1) MM4	WQD7007 (HWL) (Group 1) MM4	WQD7001 (MAI) (Group 2) MM3	WQD7005 (TYW) (Group 1) MM4	WQD7009 (RYZ) (Group 1) MM4		
M CyberSec Master of Cyber Security (Coursework)	6.00pm - 9.00pm	WQE7001 (RS) CCNA	WQE7002 (MFZ) MM6	WOX7001 (NAG) (Group 1) DK1	WQE7007 (ASK (PT)) CCNA			
						WQE7011 (AWAW) MM6		
MCS (AC) [COHORT 2016-2020 ONWARDS] Master of Computer Science (Applied Computing) (Coursework & Dissertation)	6.00pm - 9.00pm	WOA7001 (RJRY) BK2		WOX7001 (SUH) MM4				
MSE (ST) [COHORT 2016-2020 ONWARDS] Master of Software Engineering (Software Technology) (Coursework & Dissertation)	6.00pm - 9.00pm	WOC7005 (SHAH) ML		WOX7001 (SUH) MM4	WOC7004 (SMT) MM2			
MCS (AC) [COHORT 2021-2022] Master of Computer Science (Applied Computing) (Coursework & Dissertation)	6.00pm - 9.00pm	WOA7001 (RJRY) BK2	WOC7020 (AD) MM2	WOX7001 (SUH) MM4	WOA7018 (ZH) BK2	WOA7015 (SSN) MM1		
			WQD7003 (SSN) MM3					
MSE (ST) [COHORT 2021-2022] Master of Software Engineering (Software Technology) (Coursework & Dissertation)	6.00pm - 9.00pm	WOC7015 (SHAH) ML	WOC7020 (AD) MM2	WOX7001 (SUH) MM4	WOC7004 (SMT) MM2	WOA7015 (SSN) MM1		
Note: WOX7001 Research Methodology (Group 1 & Group 2) - Master by Coursework - MdatSc and M CyberSec WOX7001 Research Methodology (Group 3) - Master by Coursework & Dissertation - MCS (AC) and MSE (ST) - Master by Research - MCS WQD7003 Data Analytics (Group 1,&2) Master by Coursework - MdatSc WQD7003 Data Analytics (Group 1) - MCS (AC)								

*This timetable is subject to change.
Students are advised to consult the latest version at http://jw.fsktm.um.edu.my/edit/data/jadual_IT.pdf or any changes.*

NO	COURSE CODE	COURSE TITLE	CREDIT	LECTURER'S NAME	INT.	DEPT.
1	WQD7001 (GROUP 2)	PRINCIPLE OF DATA SCIENCE	3	ASSOC. PROF. DR. MAIZATUL AKMAR ISMAIL	MAI	IS
	WQD7001 (GROUP 1)			DR. ROHANA MAHMUD (Coordinator)	RM	AI
2	WQD7003 (GROUP 1) MDS (GROUP 1) MCS (AC)	DATA ANALYTICS	3	DR. SAW SHIER NEE (Coordinator)	SSN	AI
	WQD7003 (GROUP 2)			DR. HEMA SUBRAMANIAM	HSM	SE
	WQD7003 (GROUP 3)			DR. AZNUL QALID MD SABRI	AQMS	AI
3	WQD7004 (GROUP 1)	PROGRAMMING FOR DATA SCIENCE	4	ASSOC. PROF. DR. ANG TAN FONG	ATF	CST
	WQD7004 (GROUP 2)			ASSOC. PROF. DR. ANG TAN FONG	ATF	CST
	WQD7004 (GROUP 3)			ASSOC. PROF. DR. ANG TAN FONG	ATF	CST
4	WQD7005 (GROUP 1)	DATA MINING	4	PROFESSOR DR. TEH YING WAH	TYW	IS
	WQD7005 (GROUP 2)			PROFESSOR DR. TEH YING WAH	TYW	IS
5	WQD7006 (GROUP 1)	MACHINE LEARNING FOR DATA SCIENCE	4	ASSOC. PROF. DR. VIMALA BALAKRISHNAN (Coordinator)	VIM	IS
6	WQD7006 (GROUP 2)			ASSOC. PROF. DR. VIMALA BALAKRISHNAN (Coordinator)	VIM	IS
7	WQD7007 (GROUP 1)	BIG DATA MANAGEMENT	3	DR. HOO WAI LAM (Coordinator)	HWL	IS
	WQD7007 (GROUP 2)			ASSOC. PROF. DR. SHIVAKUMARA PALAIAHNAKOTE	SP	MM
8	WQD7008 (GROUP 1)	PARALLEL AND DISTRIBUTED COMPUTING	4	DR. LIEW CHEE SUN	LCS	CST
9	WQD7008 (GROUP 2)	PARALLEL AND DISTRIBUTED COMPUTING	4	DR. LIEW CHEE SUN	LCS	CST
10	WQD7009 (GROUP 1)	BIG DATA APPLICATIONS & ANALYTICS	4	DR. RIYAZ AHAMED	RA	IS
11	WQD7009 (GROUP 2)	BIG DATA APPLICATIONS & ANALYTICS	4	DR. RIYAZ AHAMED	RA	IS
12	WQE7001	CYBER SECURITY	3	ASSOC. PROF. DR. ROSLI SALLEH	RS	CST
13	WQE7002	ADVANCED NETWORK SECURITY PROGRAMMING	4	DR. MUHAMMAD FAIZ MOHD ZAKI	MFZ	CST
14	WQE7007	NETWORK TECHNOLOGY AND SECURITY	3	DR. AHMAD SHAHRAFIDZ BIN KHALID	ASK	PT
15	WQE7011	ADVANCED COMPUTER PENETRATION AND DEFENSE	4	ASSOC. PROF. TS. DR. AINUDDIN WAHID ABDUL WAHAB	AWAW	MM
16	WOA7001	ADVANCED ALGORITHMS	3	DR. RAJA JAMILAH RAJA YUSOF	RJRY	SE
17	WOA7015	ADVANCED MACHINE LEARNING	3	DR. SAW SHIER NEE	SSN	AI
18	WOA7018	AUTONOMOUS ROBOTICS	3	DR. ZATI HAKIM AZIZUL HASAN	ZH	AI
19	WOC7004	ARCHITECTING SOFTWARE SYSTEMS	3	DR. SU MOON TING	SMT	SE
20	WOC7005	SOFTWARE TESTING TECHNIQUES AND MANAGEMENT	3	ASSOC. PROF. DR. SITI HAFIZAH AB HAMID	SHAH	SE
21	WOC7015	SOFTWARE VERIFICATION AND VALIDATION	3	ASSOC. PROF. DR. SITI HAFIZAH AB HAMID	SHAH	SE
22	WOC7020	ADVANCED INTERNET OF THINGS	3	DR. ADELEH ASEMI ZAVAREH	AD	SE
23	WVX8001 (PhD)	ADVANCED RESEARCH METHODS IN COMPUTER SCIENCE AND INFORMATION TECHNOLOGY	3	ASSOC. PROF. DR. RODINA AHMAD	RA	SE
24	WOX7001 (GROUP 1)	RESEARCH METHODOLOGY (MASTERS BY COURSEWORK)	3	ASSOC. PROF. DR. NORJIHAN ABDUL GHANI	NAG	IS
	WOX7001 (GROUP 2)	RESEARCH METHODOLOGY (MASTERS BY COURSEWORK)	3	DR. HEMA SUBRAMANIAM (Coordinator)	HSM	IS
	WOX7001 (GROUP 3)	RESEARCH METHODOLOGY (MASTER BY COURSEWORK AND DISSERTATION/ MASTER BY RESEARCH)	3	ASSOC. PROF. DR. SURAYA HAMID	SUH	IS

This timetable is subject to change.

Students are advised to consult the latest version at http://jw.fsktm.um.edu.my/edit/data/jadual_IT.pdf or any changes.

**Master of Data Science (Remote Learning) Schedule
Batch (Intake Semester 1 Session 2022/2023)
Weekend**

Semester 1 2022/2023

Course Code	Course Name	Type	Credit	Lecturer	Time Table
WQD7001	Principles of Data Science	Core	3	TBC	Saturday 8:30AM – 11:30AM
WOX7001	Research Methodology	Core	3	Profesor Madya Dr. Suraya Hamid	Saturday 11:30AM – 2:30PM
WQD7003	Data Analytics	Core	3	Dr. Aznul Qalid Md Sabri	Saturday 3:00PM – 6:00PM
WQD7004	Programming for Data Science	Core	3	Professor Madya Dr. Ang Tan Fong	Sunday 8:30AM – 11:30AM
WQD7008	Parallel and Distributed Computing	Elective	4	Dr. Liew Chee Sun	Sunday 11:30AM – 2:30PM
WQD7009	Big Data Applications & Analytics	Elective	4	Dr. Riyaz Ahamed	Sunday 3:00PM – 6:00PM

*Time table for courses is subject to change.

WQD7002 Data Science Research Project must be completed in two consecutive semesters. Thus, to complete the programme in one year, you can register WQD7002 in Semester 2 2022/2023 and complete the project in Special Semester 2022/2023. However, we encourage you to register WQD7002 in special semester 2022/2023 and complete the project in Semester 1 2023/2024 or register WQD7002 in Semester 1 2023/2024 and complete the project in Semester 2 2023/2024 so that you have more time to complete the project.

MAYA PORTAL

**SEMESTER I
2022/2023**

**REGISTRATION SCHEDULE
(POSTGRADUATE)**

Offer Letter Acceptance

Level of Study	Student Category	Start Date	End Date
Postgraduate	New Students (Coursework & Mixed Mode)	-	30 Sep 2022 (11:59 pm)
	New Students (Research)	-	16 Jan 2023 (11:59 pm)

Self Enrolment

Level of Study	Student Category	Start Date	End Date
Postgraduate	New Students (Coursework & Mixed Mode)	3 Oct 2022 (8:30 am)	14 Oct 2022 (11:59 pm)
	New Students (Research)	3 Oct 2022 (8:30 am)	27 Jan 2023 (11:59 pm)

Module Registration & Enrolment Status Activation

Mode of Studies	Start Date	End Date
Current Students (Coursework, Mixed Mode & Research)	23 Sep 2022 (8:30 am)	14 Oct 2022 (11:59 pm)
New Students (Coursework & Mixed Mode)	3 Oct 2022 (8:30 am)	14 Oct 2022 (11:59 pm)
New Students (Research) <i>Module : Research Methodology & Thesis/ Dissertation</i>	3 Oct 2022 (8:30 am)	28 Oct 2022 (11:59 pm)
New Students (Research) <i>Module : Thesis/Dissertation only</i>	3 Oct 2022 (8:30 am)	27 Jan 2023 (11:59 pm)
Submission of Progress Report <i>For students who have registered for the Dissertation or Thesis Module in Semester 1, 2022/2023</i>	26 Dec 2022	27 Jan 2023

Updated: 7 September 2022

FOR MORE INFORMATION:



@umsitsmaya



umsitsguide.um.edu.my

MAYA PORTAL

ACADEMIC SESSION
2022/2023

**NEW STUDENTS (POSTGRADUATE)
SELF-ENROLMENT &
MODULE REGISTRATION**

PART 1: SELF-ENROLMENT

SELF-ENROL

1



- Log-in to maya.um.edu.my
- Use the given/MAYA username & password
- Go to Admission menu & click the Self-Enrolment button
- Confirm all on the checklist given
- Confirm Self-Enrolment



- **3rd October 2022 – 14th October 2022**
(Master/Doctoral by Coursework & Mixed Mode)
- **3rd October 2022 – 27th January 2023**
(Master/Doctoral by Research)

CREATE SISWAMAIL

2



- Go to siswa.um.edu.my
- Click New Registration & follow the instructions accordingly
- Activation of siswamail account will take 5 - 60 minutes

PART 2: MODULE REGISTRATION

LOG-IN TO MAYA WITH SISWAMAIL CREDENTIALS

3



- Log-in to maya.um.edu.my
- Username: Siswamail_username@perdana.um.edu.my
Password : Siswamail password
- Click Enrolment tab

4

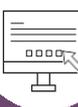


UPDATE PERSONAL DETAILS

- Click 'UPDATE PROFILE' button
- Fill-in all required compulsory details

MODULE(S) REGISTRATION

5



- Select & register module(s) based on programme structures / programme (DIET)
- Add/drop(s) of module(s) can be done during registration week. However, students are not allowed to Add/Drop any module once registration is confirmed within the stipulated dates



- **3rd October 2022 – 14th October 2022**
(Master/Doctoral by Coursework & Mixed Mode)
- **3rd October 2022 – 28th October 2022**
(Master/Doctoral by Research - Registration for Research Methodology (RM) **AND** Dissertation/Thesis modules)
- **3rd October 2022 – 27th January 2023**
(Master/Doctoral by Research – Registration for Dissertation/Thesis module **ONLY**)

GENERATE PRE-INVOICE & REGISTRATION ACTIVATION

6



- Click 'GENERATE' and pre-invoice tuition fees will appear
- Click 'ACTIVATE' to complete your registration activation
- Click 'PAY NOW' to proceed your tuition fees payment



All students shall make payment within the stipulated time frame
Please refer to Step 5 for registration dates

COMPLETED MODULE(S) REGISTRATION

7



- Your status will update as Active Student (AK)
- UMSpectrum will display your registered module(s) after 24 hours once registration is complete

IMPORTANT NOTES:

1. **Modules** refers to subject of a particular student programme.
2. **Siswamail** refers to UM student mail account

FOR MORE INFORMATION:



@umsitmaya



umsitsguide.um.edu.my