At a Glance

Master of Science (Computer Science) Mixed Mode

School of Computer Sciences
Universiti Sains Malaysia

www.cs.usm.my
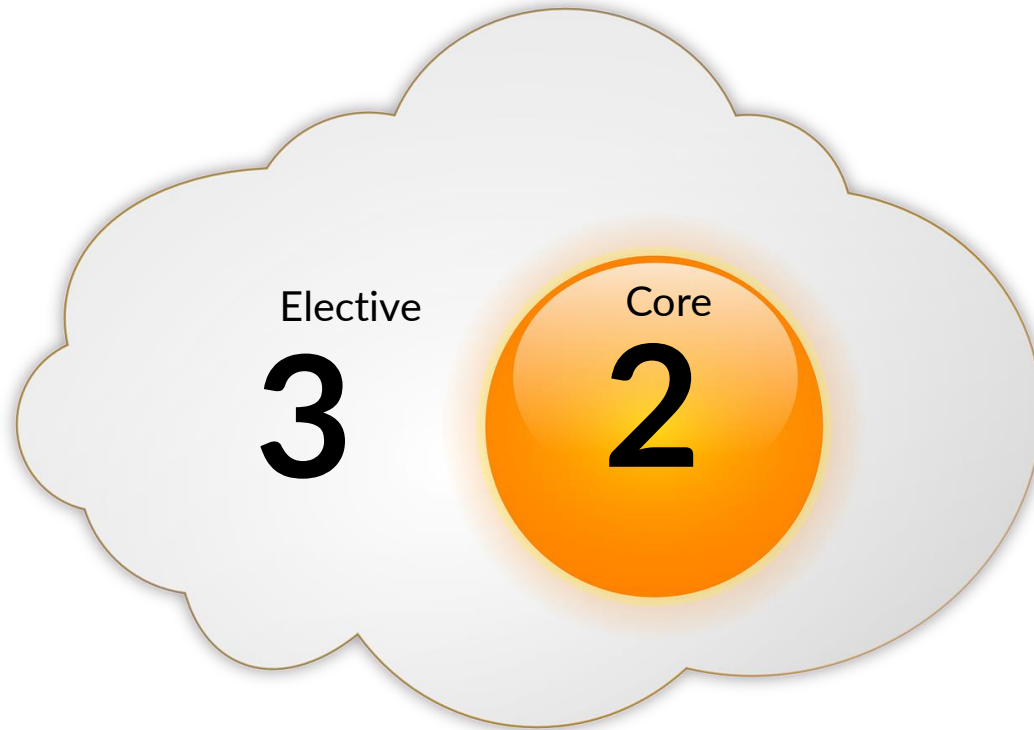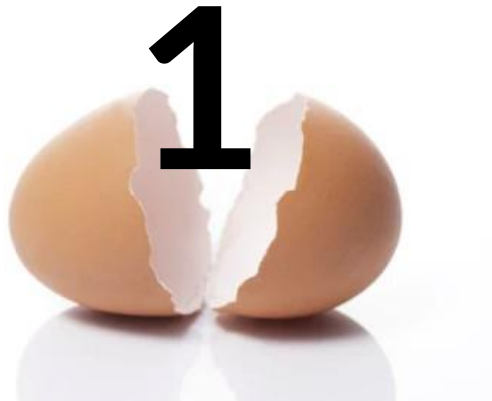
Master of Science
(Computer Science)

Programme Structure

Dissertation

6 courses

Taught courses

1

Elective

3

Core

2

Programme Structure

Dissertation

40units   Taught courses

20

Elective   Core

12   **8**

Full-time Scheme

Minimum

12 months

Maximum

24 months

equivalent to

Minimum

2 semesters

Maximum

4 semesters

Part-time Scheme

Minimum

24 months

Maximum

48 months

equivalent to

Minimum

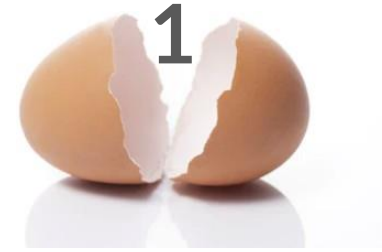## 4 semesters

Maximum

8 semesters

Core Courses
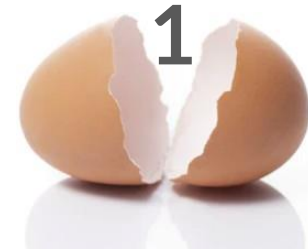
CODE	SUBJECT	Offering
CCS591/4	Research & Empirical Methods in Computer Science	SEM 1 & SEM 2
CCS592/4	Advanced Algorithms & Complexity	SEM 2

- Pre-requisite course CCS591

- To be taken in **2 consecutive semesters** (CCS591 then CCS 599)

- Consult prospective supervisors for research topics during CCS591

- Research topic based on focus area

- Complete chapter 1- 3 during CCS591

- Register during inter semester break OR during long vacation session

CCS599 - Dissertation

Activity	Actual Week	Week of the Semester*	
Start	1th	1st (Inter -semester Break)	1st (Long Vacation Session)
Submission of the Mid-Term Report - Refined Chapters 1 to 3 (From CCS591), and Chapter 4: Proposed Work (Three (3) copies, red cover)	9th	5th (Semester II - February)	9th (Long Vacation Session)
Presentation of the Mid-Term Report in a Seminar +	11th	7th (Semester II)	1st (Semester I - September)
Submission of the Draft of the Dissertation to be Checked by the Respective Supervisor – Refined Chapters 1 to 4, Chapter 5: Evaluation, and Chapter 6: Conclusion	21th	17th (Semester II)	11th (Semester I)
Submission of the Dissertation (Five (5) copies, red cover)	23rd	19th (Semester II)	13th (Semester I)
Viva Voce	26th	3rd (Long Vacation Session)	16th (Semester I)
Submission of Corrected Dissertation (Two (2) copies)	28th	5th (Long Vacation Session)	18th (Semester I)
Submission of Final Corrected Dissertation (Hardbound, three (3) copies, red cover). Students must also return the logbook.	30th	7th (Long Vacation Session)	1st (Inter -semester Break)

Students are expected to complete chapter 1- 3 during CCS591

MSc (Computer Science) Mixed Mode

Focus Areas

Data &
Knowledge
Engineering

Enabling
Technologies &
Infrastructures

Elective Courses

3

Data & Knowledge Engineering	Enabling Technologies & Infrastructure
CCS516/4 – Computational Intelligence (SEM 1)	CCS525/4 – Advanced Cloud Computing Platform (SEM 2)
CDS503/4 – Machine Learning (SEM 1 & SEM 2)	CCS526/4 – Wireless and Mobile Communications (SEM 1)
CDS505/4 – Data Visualization & Visual Analytics (SEM 1)	CCS527/4 – Internet of Things (SEM 1)
CDS521/4 – Multimodal Information Retrieval (SEM 2)	CCS528/4 – Information Security & Cryptography (SEM 1)
CDS522/4 – Text & Speech Analytics (SEM 1)	CDS523/4 – Forensic Analytics & Digital Investigation (SEM 2)

Study Scheme: 1-year (**Sep/Oct Intake**)

(applicable to full-time study scheme only)

Course Type (Code) (Unit)	Sep/Oct Intake: 1 Year (2 semesters + 1 Inter-Semester Break + 1 Long Vacation Session)			
	Year I Sem I (Sep/Oct)	Unit	Year I Sem II (Feb/Mar/Apr)	Unit
Core (T) (28 Units)	CCS591+	4	CCS599+ (3 + 12 + 5 units) [4 (Inter-Semester Break) + 19 (Semester II) + 7 (Long Vacation) = 30 weeks]	20
			CCS592	4
Elective (E) (12 Units)	Elective I	4		
	Elective II	4		
	Elective III	4		
Total: 40 Units		16		24

+ *Must be taken in two consecutive semesters, CCS591 followed by CCS599*

Study Scheme: 1.5-year (Sep/Oct Intake)

(applicable to full-time study scheme only)

Course Type (Code) (Unit)	Sep/Oct Intake: 1.5 Years (3 Semesters + 1 Long Vacation Session)					
	Year I Sem I (Sep/Oct)	Unit	Year I Sem II (Feb/Mar/Apr)	Unit	Year II Sem I (Sep/Oct)	Unit
Core (T) (28 Unit)			CCS591+	4	CCS599+ (8 +12 units) [10 (Long Vacation) + 20 (Semester I) = 30 weeks]	20
			CCS592	4		
Elective (E) (12 Units)	Elective I	4	Elective III*	4		
	Elective II	4				
	Elective III*	4				
Total: 40 Units		8/12		8/12		20

+ *Must be taken in consecutive semesters - CCS591 followed by CCS599*
* *Alternative semester*

Study Scheme: 2-year (**Sep/Oct Intake**)

(applicable to full-time and part-time study schemes)

Course Type (Code) (Unit)	Sep/Oct Intake: 2 Years (4 Semesters + 1 inter-Semester Break + 1 Long Vacation Session)							
	Year I Sem I (Sep/Oct)	Unit	Year I Sem II (Feb/Mar/Apr)	Unit	Year II Sem I (Sep/Oct)	Unit	Year II Sem II (Feb/Mar/Apr)	Unit
Core (T) (28 Units)			CCS592	4	CCS591+	4	CCS599+ (3 + 12 + 5 units) [4 (Inter-Semester Break) +19 (Semester II +7 (Long Vacation) = 30 weeks]	20
Elective (E) (12 Units)	Elective I	4	Elective III	4				
	Elective II	4						
Total: 40 Units		8		8		4		20

+Must be taken in two consecutive semesters, CCS591 followed by CCS599

Study Scheme: 2.5-year (**Sep/Oct Intake**)

(applicable to part-time study scheme only)

Course Type (Code) (Unit)	Sep/Oct Intake: 2.5 Years (5 Semesters + 1 Long Vacation Session)									
	Year I Sem I (Sep/Oct)	Unit	Year I Sem II (Feb/Mar/Apr)	Unit	Year II Sem I (Sep/Oct)	Unit	Year II Sem II (Feb/Mar/Apr)	Unit	Year III Sem I (Sep/Oct)	Unit
Core (T) (28 Unit)			CCS592	4			CCS591[+]	4	CCS599[+] (8+12 units) [10 (Long Vacation) + 20 (Semester I) = 30 weeks]	20
Elective (E) (12 Units)	Elective I	4								
	Elective II*	4	Elective II*	4	Elective III	4				
Total: 40 Units		4/8		4/8		4		4		20

[+] *Must be taken in consecutive semesters, CCS591 followed by CCS599*

* *Alternative semester*

Study Scheme: 1-year (**Feb/Mar/Apr Intake**)
(applicable to full-time study scheme only)

Course Type (Code) (Unit)	Feb/Mar/Apr Intake: 1 Year (2 semesters + 1 Long Vacation Session)			
	Year I Sem II (Feb/Mar/Apr)	Unit	Year I Sem I (Sep/Oct)	Unit
Core (T) (28 Unit)	CCS591+	4	CCS599+ (8 + 12 units) [10 (Long Vacation) + 20 (Semester I) = 30 weeks]	20
	CCS592	4		
Elective (E) (12 Units)	Elective I	4	Elective III	4
	Elective II	4		
Total: 40 Units		16		24

+ *Must be taken in two consecutive semesters, CCS591 followed by CCS599*

Study Scheme: 1.5-year (Feb/Mar/Apr Intake)

(applicable to full-time study scheme only)

Course Type (Code) (Unit)	Feb/Mar/Apr Intake: 1.5 Years (3 Semesters + 1 Inter-Semester Break + 1 Long Vacation Session)					
	Year I Sem II (Feb/Mar/Apr)	Unit	Year I Sem I (Sep/Oct)	Unit	Year II Sem II (Feb/Mar/Apr)	Unit
Core (T) (28 Unit)	CCS592	4	CCS591+	4	CCS599+ (3 + 12 + 5 units) [4 (Inter-Semester Break) + 19 (Semester II) + 7(Long Vacation) = 30 weeks]	20
Elective (E) (12 Units)	Elective I	4	Elective II*	4		
	Elective II*	4	Elective III	4		
Total: 40 Units		8/12		8/12		20

+ Must be taken in consecutive semesters - CCS591 followed by CCS599

* Alternative semester

MSc (Computer Science) Mixed Mode

Study Scheme: 2-year (Feb/Mar/Apr Intake)

(applicable to full-time and part-time study schemes)

Course Type (Code) (Unit)	Feb/Mar/Apr Intake: 2 Years (4 Semesters + 1 Long Vacation Session)							
	Year I Sem II (Feb/Mar/Apr)	Unit	Year I Sem I (Sep/Oct)	Unit	Year II Sem II (Feb/Mar/Apr)	Unit	Year II Sem I (Sep/Oct)	Unit
Core (T) (28 Units)	CCS592	4			CCS591+	4	CCS599+ (8 + 12 units) [10 (Long Vacation) + 20 (Semester I) = 30 weeks]	20
Elective (E) (12 Units)	Elective I	4	Elective II	4				
			Elective III	4				
Total: 40 Units		8		8		4		20

+ *Must be taken in consecutive semesters, CCS591 followed by CCS599*

Study Scheme: 2.5-year (**Feb/Mar/Apr Intake**)

(applicable to part-time study scheme only)

Course Type (Code) (Unit)	Feb/Mar/Apr Intake: 2.5 Years (5 Semesters +1 Inter-Semester Break 1 Long Vacation Session)									
	Year I Sem II (Feb/Mar/Apr)	Unit	Year I Sem I (Sep/Oct)	Unit	Year II Sem II (Feb/Mar/Apr)	Unit	Year II Sem I (Sep/Oct)	Unit	Year III Sem II (Feb/Mar/Apr)	Unit
Core (T) (28 Units)					CCS592	4	CCS591+	4	CCS599+ (3+12+5 units) [4(Inter-Semester Break) +19 (Semester II +7 (Long Vacation) = 30 weeks]	20
Elective (E) (12 Units)	Elective I	4	Elective II*	4						
	Elective II*	4	Elective III	4						
Total: 40 Units		4/8		4/8		4		4		20

* Alternative semester
⁺ Must be taken in consecutive semesters - CCS591 followed by CCS599

Evaluation

Type	Evaluation Components	Grades
Courses	- coursework - final examination	C+ or better for a pass
Dissertation	- initial evaluation in CCS591 - mid-term report - final dissertation - viva	Pass or fail

* Students are eligible to repeat the course if the grade obtained is B- or below

Graduation Requirement

2 Core Courses	8
1 Dissertation	20
3 Electives	12
Total	40 units

CGPA >= 3.0
Obtain minimum C+ for each course