AY2025-2026 AND LATER COHORTS

Curriculum for Bachelor of Computing (Computer Science)

Accelerated Bachelor Programme

SUMMARY OF ACADEMIC UNIT REQUIREMENT							
			ICC				
Year of Study	Core	MPE	Common -	Professional	Care, Serve &	BDE	Total AU
			Core	Series	Learn		
1	25	0	8	3	0	0	36
2	18	6	6	0	3	11	44
3	4	13	0	12	0	3	32
4	0	16	0	1	0	6	23
Total	47	35	14	16	3	20	135

Recommended Course Schedule

	YEAR 1 SEMESTER 1					
Course Code	Course Title	Туре	AU	Pre-requisite		
SC1003	Introduction to Computational Thinking & Programming	Professional Series	3	Nil		
SC1004	Linear Algebra for Computing	Core	4	SC1003 (co-requisite)		
SC1005	Digital Logic	Core	3	Nil		
MH1812	Discrete Mathematics	Core	3	Nil		
CC0003	Ethics & Civics in a Multicultural World	C-Core	2	Nil		
CC0015	Health & Wellbeing	C-Core	2	Nil		
HW0001	Introduction to Academic Communication	-	-	For student failed QET		
HW0002	Calculus	-	-	For student not done Calculus		
			17			

YEAR 1 SEMESTER 2					
Course Code	Course Title	Туре	AU	Pre-requisite	
SC1006	Computer Organisation & Architecture	Core	3	SC1005 (co-requisite)	
SC1007	Data Structures & Algorithms	Core	3	SC1003	
SC1008	C and C++ Programming	Core	3	SC1003	
SC2000	Probability & Statistics for Computing	Core	3	Nil	
SC2002	Object Oriented Design & Programming	Core	3	SC1003 OR SC1007	
CC0001	Inquiry & Communication in an Interdisciplinary World	C-Core	2	Nil	
ML0004	Career Design & Workplace Readiness in the V.U.C.A World	C-Core	2	Nil	
			19		

Year 1 Total AU 36

	YEAR 2 SEMESTER 1					
Course Code	Course Title	Туре	AU	Pre-requisite		
SC2001	Algorithm Design & Analysis	Core	3	SC1007 & MH1812		
SC2005	Operating Systems	Core	3	SC1006 & SC1007		
SC2203	Automata. Computability and Complexity	Core	3	SC2001 (co-requisite)		
SC2006	Software Engineering	Core	3	SC2002 (co-requisite)		
SC2008	Computer Network	Core	3	SC2000 & SC1004		
CC0007	Science & Technology for Humanity	C-Core	3	Nil		
	Broadening and Deepening Elective	BDE	3	Refer to Class Schedule		
	Broadening and Deepening Elective	BDE	2	Refer to Class Schedule		
CSL	CSL (service learning course)- Part 1	CSL	-	(Continue in Semester 2)		
			23			

	YEAR 2 SEMESTER 2					
Course Code	Course Title	Туре	AU	Pre-requisite		
SC2207	Introduction to Databases	Core	3	SC2001 (co-requisite)		
CC0006	Sustainability: Society, Economy & Environment	C-Core	3	Nil		
SC3xxx/SC4xxx	Major Prescribe Elective (Choose within SC3xxx/SC4xxx)	MPE	3	Year 3 Standing		
SC3xxx/SC4xxx	Major Prescribe Elective (Choose within SC3xxx/SC4xxx)	MPE	3	Year 3 Standing		
	Broadening and Deepening Elective	BDE	3	Refer to Class Schedule		
	Broadening and Deepening Elective	BDE	3	Refer to Class Schedule		
CSL	CSL (service learning course)- Part 2	CSL	3	(Continue from Semester 1)		
			21			

Year 2 Total AU 44

Classification: Restricted

	YEAR 3 SEMESTER 1					
Course Code	Course Title	Туре	AU	Pre-requisite		
SC3920	Professional Internship (Graded)	Professional Series	10	Year 3 Standing		
			10			

YEAR 3 SEMESTER 2					
Course Code	Course Title	Туре	AU	Pre-requisite	
SC3099	Capstone Project	Core	4	Year 3 Standing	
HW0288	Engineering Communication	Professional Series	2	CC0001 & Year 3 standing	
SC4079	Final Year Project (Part 1)	MPE	4	Year 4 Standing	
SC3xxx/SC4xxx	Major Prescribe Elective (Choose within SC3xxx/SC4xxx)	MPE	3	Year 3 Standing	
SC3xxx/SC4xxx	Major Prescribe Elective (Choose within SC3xxx/SC4xxx)	MPE	3	Year 3 Standing	
SC3xxx/SC4xxx	Major Prescribe Elective (Choose within SC3xxx/SC4xxx)	MPE	3	Year 3 Standing	
	Broadening and Deepening Elective	BDE	3	Refer to Class Schedule	
			22		

Year 3 Total AU 32

YEAR 4 SEMESTER 1				
Course Code	Course Title	Туре	AU	Pre-requisite
SC4079	Final Year Project (Part 2)	MPE	4	Year 4 Standing
SC4xxx	Major Prescribe Elective (Choose within SC4xxx)	MPE	3	Year 3 Standing
SC4xxx	Major Prescribe Elective (Choose within SC4xxx)	MPE	3	Year 3 Standing
SC4xxx	Major Prescribe Elective (Choose within SC4xxx)	MPE	3	Year 3 Standing
SC4xxx	Major Prescribe Elective (Choose within SC4xxx)	MPE	3	Year 3 Standing
	Broadening and Deepening Elective	BDE	3	Refer to Class Schedule
	Broadening and Deepening Elective	BDE	3	Refer to Class Schedule
ML0015	Profession Preparation	Professional Series	1	Nil
			23	

YEAR 4 SEMESTER 2					
Course Code	Course Title	Туре	AU	Pre-requisite	
			0		

Year 4 Total AU 23

Note:

- 1. Students are required to complete **9 Major Prescribed Electives** (SC3xxx or SC4xxx), including **at least 4 at the SC4xxx level**.
- $2. \ Students \ may \ choose \ to \ complete \ a \ \textbf{Final Year Project (FYP)} \ or \ take \ \textbf{3} \ \textbf{additional MPEs} \ in \ its \ place.$
- ${\bf 3.}\ In\ order\ to\ graduate\ with\ \textbf{Highest\ Distinction},\ students\ must\ complete\ a\ \textbf{Final\ Year\ Project}.$

MPE Structure of Computer Science (U24 and after)					
Course Code	Туре	AU	Remarks		
SC3000	MPE-1	3	MPE(Compulsory)		
SC3010	MPE-2	3	MPE(Compulsory)		
SC3xxx/SC4xxx	MPE-3	3	Any MPE		
SC3xxx/SC4xxx	MPE-4	3	Any MPE		
SC3xxx/SC4xxx	MPE-5	3	Any MPE		
SC4xxx	MPE-6	3	MPE (Choose within SC4xxx)		
SC4xxx	MPE-7	3	MPE (Choose within SC4xxx)		
SC4xxx	MPE-8	3	MPE (Choose within SC4xxx)		
SC4xxx	MPE-9	3	MPE (Choose within SC4xxx)		
	Total	27			