AY2024-25 AND LATER COHORTS

Curriculum for Bachelor of Computing (Computer Science)

With a Second Major in Business Mainstream Track

PI option: 20-WEEK Professional Internship

SUMMARY OF ACADEMIC UNIT REQUIREMENT							
				ICC			
Year of Study	Core	MPE	Business	Common - Core	Foundational - Core	BDE	Total AU
1	19	0	6	9	3	0	37
2	21	0	6	8	0	0	35
3	7	6	6	0	12	0	31
4	0	29	12	0	0	0	41
Total	47	35	30	17	15	0	144

Recommended Course Schedule

YEAR 1 SEMESTER 1							
Course Code	Course Title	Type	AU	Pre-requisite			
	Introduction to Computational Thinking & Programming	F-Core	3	Nil			
SC1004	Linear Algebra for Computing	Core	4	SC1003 (co-requisite)			
MH1812	Discrete Mathematics	Core	3	Nil			
CC0003	Ethics & Civics in a Multicultural World	U-Core	2	Nil			
CC0005	Healthy Living & Wellbeing	C-Core	3	Nil			
HW0001	Introduction to Academic Communication	-	-	For student failed QET			
HW0002	Calculus	-	-	For student not done Calculus			
AB1201	Financial Management	Business	3	Nil			
			18				

YEAR 1 SEMESTER 2							
Course Code	Course Title	Туре	AU	Pre-requisite			
SC1005	Digital Logic	Core	3	Nil			
SC1006	Computer Organisation & Architecture	Core	3	SC1005 (co-requisite)			
SC1007	Data Structures & Algorithms	Core	3	SC1003			
SC1008	C and C++ Programming	Core	3	SC1003			
CC0001	Inquiry & Communication in an Interdisciplinary World	U-Core	2	Nil			
CC0002	Navigating the Digital World	U-Core	2	Nil			
AB1501	Marketing	Business	3	Nil			
			19				

Year 1 Total AU 37

YEAR 2 SEMESTER 1							
Course Code	Course Title	Туре	AU	Pre-requisite			
SC2000	Probability & Statistics for Computing	Core	3	Nil			
SC2001	Algorithm Design & Analysis	Core	3	SC1007 & MH1812			
SC2002	Object Oriented Design & Programming	Core	3	SC1003 OR SC1007			
SC2005	Operating Systems	Core	3	SC1006 & SC1007			
CC0007	Science & Technology for Humanity	U-Core	3	Nil			
AD1102	Financial Accounting	Business	3	Nil			
			18				

YEAR 2 SEMESTER 2						
Course Code	Course Title	Туре	AU	Pre-requisite		
SC2006	Software Engineering	Core	3	SC2002 (co-requisite)		
SC2008	Computer Network	Core	3	SC2000 & SC1004		
SC2207	Introduction to Databases	Core	3	SC2001 (co-requisite)		
CC0006	Sustainability: Society, Economy & Environment	U-Core	3	Nil		
ML0004	Career & Innovative Enterprise for the Future World	C-Core	2	Nil		
AB1601	Organisational Behaviour and Design	Business	3	Nil		
			17			

YEAR 3 SEMESTER 1						
Course Code	Course Title	Туре	AU	Pre-requisite		
SC2203	Automata. Computability and Complexity	Core	3	SC2001 (co-requisite)		
SC3099	Capstone Project	Core	4	Year 3 Standing		
HW0288	Engineering Communication	F-Core	2	CC0001 & 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		
AD2102	Management Accounting	Business	3	AD1102		
AB1301	Business Law	Business	3	Nil		
			21			

YEAR 3 SEMESTER 2						
Course Code	Course Title	Type	AU	Pre-requisite		
SC3920	Professional Internship (Graded)	F-Core	10	Year 3 Standing		
			10			

Year 3 Total AU 31

YEAR 4 SEMESTER 1								
Course Code	Course Title	Type	AU	Pre-requisite				
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				
SC4xxx	Major Prescribe Elective (Choose within SC4xxx)	MPE	3	Year 3 Standing				
BF2219	Investments	Business	3	AB1201				
BE2602	02 Management Principles, Skills & Competencies		3	AB1601				
			22					

YEAR 4 SEMESTER 2						
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		
BM2509	Consumer Insights	Business	3	AB1501		
BE1402	Business Operations & Process	Business	3	Nil		
			19			

Year 4 Total AU 41

Note:

- 1. Students are required to complete 9 Major Prescribed Elective (MPE) courses (SC3xxx or SC4xxx), including at least 4 courses at the
- 2. Students may choose to fulfill this requirement by either completing a Final Year Project (FYP) or by taking 3 additional MPE courses.
- 3. To be eligible for **Highest Distinction**, students **must complete a Final Year Project**.

MPE Structure of Computer Science (U24 and after)								
Course Code	Туре	AU	Remarks					
SC3xxx/SC4xxx	MPE-1	3	Any MPE					
SC3xxx/SC4xxx	MPE-2	3	Any MPE					
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							
Please ref	Please refer the CSC MPE Courses and Specialization on CCDS website.							

AY2024-25 AND LATER COHORTS

Curriculum for Bachelor of Computing (Computer Science)

With a Second Major in Business

Mainstream Track

PA option: 10-WEEK Professional Attachmer

SUMMARY OF ACADEMIC UNIT REQUIREMENT							
				ICC			
Year of Study	Core	MPE	Business	Common - Core	Foundational - Core	BDE	Total AU
1	19	0	6	9	3	0	37
2	21	0	6	8	0	0	35
3	7	18	9	0	7	3	44
4	0	13	9	0	0	2	24
Total	47	31	30	17	10	5	140

Recommended Course Schedule

YEAR 1 SEMESTER 1									
Course Code									
	55005000	туре	AU	Fie-requisite					
SC1003	Introduction to Computational Thinking & Programming	F-Core	3	Nil					
SC1004	Linear Algebra for Computing	Core	4	SC1003 (co-requisite)					
MH1812	Discrete Mathematics	Core	3	Nil					
CC0003	Ethics & Civics in a Multicultural World	U-Core	2	Nil					
CC0005	Healthy Living & Wellbeing	U-Core	3	Nil					
HW0001	Introduction to Academic Communication	•	-	For student failed QET					
HW0002	Calculus	-	1	For student not done Calculus					
AB1201	Financial Management	Business	3	Nil					
			18						

YEAR 1 SEMESTER 2						
Course Code	Course Title	Туре	AU	Pre-requisite		
SC1005	Digital Logic	Core	3	Nil		
SC1006	Computer Organisation & Architecture	Core	3	SC1005 (co-requisite)		
SC1007	Data Structures & Algorithms	Core	3	SC1003		
SC1008	C and C++ Programming	Core	3	SC1003		
CC0001	Inquiry & Communication in an Interdisciplinary World	U-Core	2	Nil		
CC0002	Navigating the Digital World	U-Core	2	Nil		
AB1501	Marketing	Business	3	Nil		
			19			

Year 1 Total AU 37

YEAR 2 SEMESTER 1						
Course Code	Course Title	Туре	AU	Pre-requisite		
SC2000	Probability & Statistics for Computing	Core	3	Nil		
SC2001	Algorithm Design & Analysis	Core	3	SC1007 & MH1812		
SC2002	Object Oriented Design & Programming	Core	3	SC1003 OR SC1007		
SC2005	Operating Systems	Core	3	SC1006 & SC1007		
CC0007	Science & Technology for Humanity	U-Core	3	Nil		
AD1102	Financial Accounting	Business	3	Nil		
			18			

YEAR 2 SEMESTER 2						
Course Code	Course Title	Pre-requisite				
SC2006	Software Engineering	Core	3	SC2002 (co-requisite)		
SC2008	Computer Network	Core	3	SC2000 & SC1004		
SC2207	Introduction to Databases	Core	3	SC2001 (co-requisite)		
CC0006	Sustainability: Society, Economy & Environment	U-Core	3	Nil		
ML0004	Career & Innovative Enterprise for the Future World	C-Core	2	Nil		
AB1601	Organisational Behaviour and Design	Business	3	Nil		
			17			

YEAR 3 SEMESTER 1						
Course Code	Course Title	Type AU Pre-requisite				
SC2203	Automata. Computability and Complexity	Core	3	SC2001 (co-requisite)		
SC3099	Capstone Project	Core	4	Year 3 Standing		
HW0288	Engineering Communication	F-Core	2	CC0001 & 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		
AD2102	Management Accounting	Business	3	AD1102		
AB1301	Business Law	Business	3	Nil		
			21			

YEAR 3 SEMESTER 2							
Course Code	Course Title	Туре	AU	Pre-requisite			
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			
SC4xxx	Major Prescribe Elective (Choose within SC4xxx)	MPE	3	Year 3 Standing			
BF2219	Investments	Business	3	AB1201			
	Broadening and Deepening Elective	BDE	2	Refer to Class Schedule			
			17				
	YEAR 3 SPECIAL SEM	ESTER					
Course Code	Course Title	Туре	AU	Pre-requisite			
SC3026	Professional Attachment	F-Core	5	Year 3 Standing			
			5				

Year 3 Total AU 43

YEAR 4 SEMESTER 1						
Course Code	Pre-requisite					
SC4079	Final Year Project (Part 1)	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		
BE2602	Management Principles, Skills & Competencies	Business	3	AB1601		
	Broadening and Deepening Elective	BDE	3	Refer to Class Schedule		
			16			

YEAR 4 SEMESTER 2						
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		
BM2509	Consumer Insights	Business	3	AB1501		
BE1402	Business Operations & Process	Business	3	Nil		
			13			

Note:

- 1. Students are required to complete 9 Major Prescribed Elective (MPE) courses (SC3xxx or SC4xxx), including at least 4 courses
- 2. Students may choose to fulfill this requirement by either completing a Final Year Project (FYP) or by taking 3 additional MPE
- 3. To be eligible for **Highest Distinction**, students **must complete a Final Year Project**.

MPE Structure of Computer Science (U24 and after)							
Course Code Type AU Remarks							
SC3xxx/SC4xxx	MPE-1	3	Any MPE				
SC3xxx/SC4xxx	MPE-2	3	Any MPE				
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							
Please refer the CSC MPE Courses and Specialization on CCDS website.							

	Business Course Lising							
Course Code	Course Title	Туре	AU	Pre-requisite				
AB1201	Financial Management	Business	3	Nil				
AB1501	Marketing	Business	3	Nil				
AD1102	Financial Accounting	Business	3	Nil				
AB1601	Organisational Behaviour and Design	Business	3	Nil				
AD2102	Management Accounting	Business	3	AD1102				
AB1301	Business Law	Business	3	Nil				
BF2219	Investments	Business	3	AB1201				
BE2602	Management Principles, Skills & Competencies	Business	3	AB1601				
BM2509	Consumer Insights	Business	3	AB1501				
BE1402	Business Operations & Process	Business	3	Nil				
	Business Course Li	sing (ITP)						
Course Code Course Title Type AU Pre-req								
BF2226	Trade Incoterms & Ship Chartering	ITP	3	Nil				
BF2227	Commodity Markets	ITP	3	Nil				
BF3214	Commodities Trading	ITP	2	Nil				
BF2302	International Tax & Trading Law	ITP	2	Nil				
BF3226	Strategic Management in Commodity Markets	ITP	2	Nil				
BF3212	Trade, Structured & Supply Chain Finance	ITP	2	BF2226				
BF3213	Enterprise Risk Management in Commodity Markets	ITP	2	Nil				