## **AY2024-25 AND LATER COHORTS** Curriculum for Bachelor of Computing (Computer Science) With a Second Major in Entrepreneurship

	SUMMARY OF ACADEMIC UNIT REQUIREMENT						
	Ma	ajor		ICC			
Year of Study	Core	MPE	ENT	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	7	0	0	0	36
Total	47	35	25	17	15	0	139

## **Recommended Course Schedule**

	YEAR 1 SEMESTER 1						
Course Code	Course Title	Туре	AU	Pre-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	-	-	For student not done Calculus			
ET5211	Entrepreneurial Mindset & Technology Innovation	Core	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	
ET5213	Managing New Ventures	Core	3	Nil	
			19		

## Year 1 Total AU <u>37</u>

	YEAR 2 SEMESTER 1					
Course Code	Course Title	Type	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		
ET5212	Entrepreneurial Ecosystems	Core	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)		
	Sustainability: Society, Economy & Environment	U-Core	3	Nil		
ML0004	Career & Innovative Enterprise for the Future World	C-Core	2	Nil		
ET5214	Financing Entrepreneurial Ventures	Core	3	ET5213		
			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		
ET-E1	Entrepreneurship Elective 1	Core	3	Refer to syllabus		
ET-E2	Entrepreneurship Elective 2	Core	3	Refer to syllabus		
			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 <u>31</u>

YEAR 4 SEMESTER 1					
Course Code	Course Title	Туре	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	
ET-E3	Entrepreneurship Elective 3	Core	3	Refer to syllabus	
			19		

	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		
ET-E4	Entrepreneurship Elective 4	Core	4	Refer to syllabus		
			17			
	<u>Year 4 1</u>	<u> Total AU</u>	<u>36</u>			

## 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	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 refer	Please refer the CSC MPE Courses and Specialization on CCDS website.							

AU 3	Pre-requisite
3	
1 3	Nil
3	Nil
3	Nil
3	ET5213
3	Refer to syllabus
3	Refer to syllabus
3	Refer to syllabus
4	Refer to syllabus
	3 3 3

<u>Please refer to the Second Major in Entrepreneurship (SMiE) webiste for Entrepreneurship Elective Listing:</u>
<a href="https://www.ntu.edu.sg/ntupreneur/second-major-in-entrepreneurship">https://www.ntu.edu.sg/ntupreneur/second-major-in-entrepreneurship</a>