AY2021-22 AND LATER COHORTS
CURRICULUM FOR COMPUTER ENGINEERING

With a Second Major in Entrepreneurship

SUMMARY OF ACADEMIC UNIT REQUIREMENT

Year of Study	Major		ENT	ICC		BDE	Total AU
	Core	MPE		Common - Core	Foundational - Core		
1	19	0	6	9	3	0	37
2	21	0	6	8	0	0	35
3	10	0	3	0	12	0	25
4	20	12	10	0	0	0	42
Total	70	12	25	17	15	0	139

Recommended Course Schedule

YEAR 1 SEMESTER 1

Course Code	Course Title	Type	AU	Pre-requisite
SC1003	Introduction to Computational Thinking & Programming	Core	3	Nil
SC1013	Physics For Computing	Core	2	Nil
MH1810	Mathematics I	Core	3	Nil
ET5211	Entrepreneurial Mindeset & Technology Innovation	Core	3	Nil
EG1001	Engineers in Society	Core	2	Nil
CC0003	Ethics & Civics in a Multicultural World	C-Core	2	Nil
CC0005	Healthy Living & Wellbeing	C-Core	3	Nil
HW0001	Introduction to Academic Communication	-	-	For student who failed QET
			18	

YEAR 1 SEMESTER 2

Course Code	Course Title	Type	AU	Pre-requisite
SC1005	Digital Logic	Core	3	Nil
SC1007	Data Structures & Algorithms	Core	3	SC1003
SC1015	Introduction to Data Science & Artificial Intelligence	F-Core	3	SC1003
MH1812	Discrete Mathematics	Core	3	Nil
ET5213	Managing New Ventures	Core	3	Nil
CC0001	Inquiry & Communication in an Interdisciplinary World	C-Core	2	Nil
CC0002	Navigating the Digital World	C-Core	2	Nil
			19	

Year 1 Total AU **37**

YEAR 2 SEMESTER 1

Course Code	Course Title	Type	AU	Pre-requisite
SC1004	Linear Algebra for Computing	Core	3	SC1003 (co-requisite) & MH1810
SC1006	Computer Organisation & Architecture	Core	3	SC1005 (co-requisite)
SC2001	Algorithm Design & Analysis	Core	3	SC1007 & MH1812
SC2002	Object Oriented Design & Programming	Core	3	SC1003 OR SC1007
ET5212	Entrepreneurial Ecosystems	Core	3	Nil
CC0007	Science & Technology for Humanity	C-Core	3	Nil
			18	

YEAR 2 SEMESTER 2

Course Code	Course Title	Type	AU	Pre-requisite
SC2000	Probability & Statistics for Computing	Core	3	MH1810
SC2104	Sensors, Interfacing & Digital Control	Core	3	SC1006
SC2107	Microprocessor System Design and Development	Core	3	SC1006
ET5214	Financing Entrepreneurial Ventures	Core	3	Nil
CC0006	Sustainability: Society, Economy & Environment	C-Core	3	Nil
ML0004	Career & Innovative Enterprise for the Future World	C-Core	2	Nil
			17	

Year 2 Total AU **35**

YEAR 3 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-requisite
SC2005	Operating Systems	Core	3	SC1006 & SC1007
SC2006	Software Engineering	Core	3	SC2002 (co-requisite)
SC2079	Multidisciplinary Design Project	Core	4	Year 3 Standing
ET-E1	Entrepreneurship Elective 1	Core	3	Refer to syllabus
HW0288	Engineering Communication	F-Core	2	CC0001 & Year 3 standing
			15	

YEAR 3 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-requisite
SC3079	Professional Internship	F-Core	10	Year 3 Standing
			10	

Year 3 Total AU **25**

YEAR 4 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-requisite
SC4079	Final Year Project (Part 1)	Core	4	Year 4 Standing
SC2008	Computer Network	Core	3	SC2000 & SC1004
SC2103	Digital Systems Design	Core	3	SC1005
SC3102	Signals, Systems and Transforms	Core	3	SC1004
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-E2	Entrepreneurship Elective 2	Core	3	Refer to syllabus
			22	

YEAR 4 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-requisite
SC4079	Final Year Project (Part 2)	Core	4	Year 4 Standing
SC3103	Embedded Programming	Core	3	SC2107
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-E3	Entrepreneurship Elective 3	Core	3	Refer to syllabus
ET-E4	Entrepreneurship Elective 4	Core	4	Refer to syllabus
			20	

Year 4 Total AU **42**

MPE Structure of Computer Engineering (U21 and after)			
Course Code	Type	AU	Remarks
SC3xxx/SC4xxx	MPE	3	Choose within SC3xxx & SC4xxx
SC3xxx/SC4xxx	MPE	3	Choose within SC3xxx & SC4xxx
SC3xxx/SC4xxx	MPE	3	Choose within SC3xxx & SC4xxx
SC3xxx/SC4xxx	MPE	3	Choose within SC3xxx & SC4xxx
	Total	12	
Please refer the CE MPE Courses and Elective Focus Areas on SCSE websit.			

Entrepreneurship Course Lising				
Course Code	Course Title	Type	AU	Pre-requisite
ET5211	Entrepreneurial Mindeset & Technology Innovation	Core	3	Nil
ET5213	Managing New Ventures	Core	3	Nil
ET5212	Entrepreneurial Ecosystems	Core	3	Nil
ET5214	Financing Entrepreneurial Ventures	Core	3	Nil
ET-E1	Entrepreneurship Elective 1	Core	3	Refer to syllabus
ET-E2	Entrepreneurship Elective 2	Core	3	Refer to syllabus
ET-E3	Entrepreneurship Elective 3	Core	3	Refer to syllabus
ET-E4	Entrepreneurship Elective 4	Core	4	Refer to syllabus
Please refer to the Second Major in Entrepreneurship (SMiE) webiste for Entrepreneurship Elective Listing: https://www.ntu.edu.sg/ntupreneur/second-major-in-entrepreneurship				