Four-Year Study Plan of Computer Science and Technology Programme (2021cohort)

Course Code	Course Title	Year One Sem 1	Year One Winter	Year One Sem 2	Year One Summer	Year Two Sem 1	Year Two Sem 2	Year Three Sem 1	Year Three Sem 2	Year Four Sem 1	Year Four Sem 2
I. Major Required Courses (54 Units)											
COMP1023	Foundations of C Programming	3									
MATH1003	Linear Algebra	3									
MATH1123	Calculus for Science and Engineering	3									
COMP1033	Systems and Web Development Workshop			3							
COMP2013	Object-Oriented Programming			3							
MATH2003	Discrete Structures			3							
COMP1003	Computer Organisation					3					
COMP2003	Data Structures and Algorithms					3					
COMP3013	Database Management Systems					3					
COMP2073	Data Programming Workshop						3				
COMP3003	Data Communications and Networking						3				
COMP3023	Design and Analysis of Algorithms						3				
COMP3033	Operating Systems						3				
COMP3173	Compiler Construction							3			
DS4023	Machine Learning							3			
COMP3063	Software Engineering								3		
COMP3253	Advanced Software Development Workshop								3		
COMP4004	Final Year Project I (COMP)									3	
II. Major Elective Courses (21 Units)											
ME01 ME02 ME03 ME04 ME05 ME06 ME07								6	6	6	3[3]
III. University Core Courses (36 Units)											
UCLC1003	University Chinese	3									
UCLC1013	English for Academic Purposes I	3									
UCLC1023	English for Academic Purposes II			3							
UCLC1033	English for Academic Purposes III						3				
CHI1103	Introduction to Modern Social Theories		3								
CHI1203	Morality and Foundations of Law					3					
CHI1063	Chinese Culture and Modern China						3				
CHI1073	Contemporary Chinese Society and Thoughts (Theories)			3							
CHI1183	Contemporary Chinese Society and Thoughts (Social Practice)				2						
CHI1193	Contemporary World and China[1]						2				
MT1003	Military Training		2								
WPEX1013	Emotional Intelligence			1							
WPEX2013	Experiential Arts[2]						1				
WPEX2023/ WPEX2033	Voluntary Service[2], or Environmental Awareness[2]					1					
UCHL1XX3	Healthy Lifestyle[2]	1		1			1				
IV. General Education Courses (18 Units)											
Level 1 Foundational Courses	History and Civilization[2]					3					
	Quantitative Reasoning[2]	3									
	Values and the Meaning of Life[2]			3							
Level 2 Interdisciplinary Thematic Courses	Culture, Creativity and Innovation[2], or Science, Technology and Society[2], or Sustainable Communities[2]							3	3		
Level 3 GE Capstone Courses	Service-Learning Course[2], or Service Leadership Education Course[2], or Experiential Learning Course[2], or Interdisciplinary Independent Study[2]										3
V. Free Elective Courses (18 Units)											
FE01 FE02 FE03 FE04 FE05 FE06						3		6	3	6	
Total Units: 147		**19**	**5**	**20**	**2**	**19**	**22**	**21**	**18**	**15**	**6**

[1] This 2-unit course requires student to attend at least 10 lectures within his/her first two years of study.

[2] This denotes a course category in which a list of courses may be developed for students' selection. Students are expected to refer to the Online Course Selection System for courses available under each category.

[3] Students who continue with the final year project in the second semester of Year 4 should register COMP4005 Final Year Project II (COMP) as a major elective during the Online Course Selection (or Course Add/Drop) period.

ME Course List of CST (2021 cohort)

Course Code	Course Title	Units
Intelligence Technology Stream		
COMP3073	Introduction to Robotics	3
COMP3083	Numerical Computation	3
COMP3103	Design Patterns	3
COMP3123	Software Testing	3
COMP3163	Mobile Application Development	3
COMP3183	Financial Computing	3
COMP3193	Cloud Computing	3
COMP3213	Internet of Things	3
COMP3223	Mobile Computing	3
COMP4003	Theory of Computation	3
COMP4005	Final Year Project II (COMP)*	3
COMP4023	Computer and Network Security	3
COMP4033	Computer Graphics	3
COMP4043	Data Mining and Knowledge Discovery	3
COMP4053	Database System Implementation	3
COMP4063	Digital Media Computing	3
COMP4073	Distributed Computing Systems	3
COMP4083	E-technology Architectures, Tools and Applications	3
COMP4093	Internet and the World Wide Web	3
COMP4103	Artificial Intelligence and Machine Learning	3
COMP4113	Computer Vision and Pattern Recognition	3
COMP4123	Information Retrieval and Search Engine	3
COMP4133	System Analysis and Design	3
COMP4143	Introduction to Web Intelligence	3
COMP4153	Quantum Finance and Intelligent Financial Trading Systems	3
COMP4163	Neural Networks and Deep Learning	3
COMP4173	Digital Image Processing	3
COMP4213	Wireless Communication and Mobile Computing	3
DS3023	Digital Logic Design	3
DS4033	Text Mining and Analytics	3
DS4053	Introduction to Bioinformatics	3
GCAP3123	Computer Technology and AI Project	3
STAT3003	Survey Sampling	3
STAT3073	Statistical Computing	3
STAT4013	Multivariate Analysis	3
Game Design Technology Stream		
COMP3233	Video Game Programming	3
COMP4033	Computer Graphics	3
COMP4063	Digital Media Computing	3
COMP4183	Game Engine Design	3
COMP4193	Multiplayer Games and Accessories	3
DS3023	Digital Logic Design	3
GCAP3123	Computer Technology and AI Project	3
MAD3033	3D Design Fundamentals	3
MAD3063	Animation	3
MAD3103	Computer Game Design	3
Other Common Major Elective Courses		
AI3043	Bayesian Networks	3
AI3073	Introduction to Bioinformatics	3
AI3133	Natural Language Processing	3
AI3153	Human-Computer Interaction	3
AI4023	Deep Reinforcement Learning	3
BIOL2003	General Biology	3
COMP4203	Linear Systems	3
COMP4223	Deep Learning for Computer Vision	3
COMP4233	Functional Programming	3
COMP4243	Mathematical and Computing Methods	3
COMP4253	AI-Generated Content	3
COMP4263	3D Computer Vision	3
DS3053	Requirements Engineering for Data Science Projects	3
DS4073	Introduction to Data Visualisation	3
DS4083	Big Data Analytics	3
DS4093	Introduction to Recommender System	3
MATH1163	Advanced Calculus	3
PHYS2003	Principles of Physics	3

* Students who continue with the final year project in the second semester of Year 4 should register COMP4005 Final Year Project II (COMP) as a major elective during the Online Course Selection (or Course Add/Drop) period.