

Four-Year Study Plan of Computer Science and Technology Programme (2025 cohort)

Rev 20250422

Rev 20250422

Course Code	Course Title	Year One			Year Two			Year Three		Year Four	
		Sem 1	Winter	Sem 2	Sem 1	Sem 2	Summer	Sem 1	Sem 2	Sem 1	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 (37 Units)											
UCLC1003	University Chinese			3							
UCLC1013	English for Academic Purposes I	3									
UCLC1023	English for Academic Purposes II			3							
UCAI1003	Introduction to AI Literacy	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 Thought I							3			
CHI1253	Contemporary Chinese Society and Thought II					3					
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						
UCLH1XX3	Healthy Lifestyle ^②	1		1		1					
IV. General Education Courses (18 Units)											
Level 1	History and Civilization ^②				3						
Foundational Courses	Quantitative Reasoning ^②	3									
	Values and the Meaning of Life ^③			3							
Level 2 Interdisciplinary Thematic Courses	Culture, Creativity and Innovation ^③ , or Science, Technology and Society ^③ , or Sustainable Communities ^③							3 ^③	3 ^③		
Level 3 GE Capstone Courses	Service-Learning Course ^③ , or Service Leadership Education Course ^③ , or Experiential Learning Course ^③ , or Interdisciplinary Independent Study ^③										3
V. Free Elective Courses (18 Units)											
FE01 FE02 FE03 FE04 FE05 FE06					3			3	3	6	3
Total Units: 148		19	2	23	19	20	2	21	18	15	9

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.

④ Students are required to take GFVM1033 Ethics in An Era of Artificial Intelligence and Robotics or GFVM1043 Ethics in Daily Life and Life Sciences under this category.

⑤ Students are not allowed to take GTSC2093 IT for Success in Everyday Life and Work under this category.

**Four-Year Study Plan of Math Plus
Computer Science and Technology Programme (2025 cohort)**

Rev 20260304

		Rev 20260304									
Course Code	Course Title	Year One			Year Two			Year Three		Year Four	
		Sem 1	Winter	Sem 2	Sem 1	Sem 2	Summer	Sem 1	Sem 2	Sem 1	Sem 2
I. Major Required Courses (54 Units)											
COMP1023 ^{②*}	Foundations of C Programming	3									
MATH1053 ^{②*}	Linear Algebra I	3									
MATH1073 ^{②*}	Calculus I	3									
COMP1033	Systems and Web Development Workshop			3							
COMP2013	Object-Oriented Programming			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		
MATH2003	Discrete Structures							3			
COMP4004 ^{②*}	Final Year Project I (COMP)									3	
II. Major Elective Courses (21 Units)											
ME01 ME02 ME03 ME04 ME05 ME06 ME07				3 ^{②*}				6	3	6	3 ^{②*}
III. University Core Courses (37 Units)											
UCLC1003	University Chinese			3							
UCLC1013	English for Academic Purposes I	3									
UCLC1023	English for Academic Purposes II			3							
UCAI1003	Introduction to AI Literacy	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 Thought I						3				
CHI1253	Contemporary Chinese Society and Thought II					3					
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						
UCLH1XX3	Healthy Lifestyle ^②	1		1		1					
IV. General Education Courses (18 Units)											
Level 1	History and Civilization ^②				3						
Foundational Courses	Quantitative Reasoning ^②	3									
	Values and the Meaning of Life ^②								3		
Level 2	Culture, Creativity and Innovation ^② , or Science, Technology and Society ^② , or Sustainable Communities ^②							3	3		
Level 3	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 ^{②*}	3 ^{②*}			3	3	6	
Total Units: 148		19	2	23	19	20	2	21	21	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 are required to take GFVM1033 Ethics in An Era of Artificial Intelligence and Robotics or GFVM1043 Ethics in Daily Life and Life Sciences under this category.

④ Students are not allowed to take GTSC2093 IT for Success in Everyday Life and Work under this category.

* Common Core Course (Required) - CCR

⑤ Students are required to take COMP1023 Foundations of C Programming under MR.

⑥ Students are required to take MATH1053 Linear Algebra I under MR, equivalent to MATH1003 Linear Algebra.

⑦ Students are required to take MATH1073 Calculus I under MR, equivalent to MATH1123 Calculus for Science and Engineering.

⑧ Students are required to take COMP4004 Final Year Project I (COMP) under MR.

⑨ Students are required to take MATH1083 Calculus II under ME.

⑩ Students are required to take COMP4005 Final Year Project II (COMP) under ME.

⑪ Students are required to take MATH1063 Linear Algebra II under FE.

⑫ Students are required to take STAT2063 Probability Theory under FE.

Common Core Course (Elective) - CCE:

The CCE courses listed below are strongly recommended for students of the Math plus Computer Science and Technology Programme.

AI3133	Natural Language Processing	FE
MATH2043	Ordinary Differential Equations	FE
MATH3033	Partial Differential Equations	FE
STAT3033	Bayesian Statistics	FE
STAT4073	Data Mining	FE
COMP4163	Neural Networks and Deep Learning	ME

ME Course List of CST (2025 cohort)

Rev 20260304

Course Code	Course Title	Units
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
COMP3073	Introduction to Robotics	3
COMP3083	Numerical Computation	3
COMP3123	Software Testing	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
COMP4073	Distributed Computing Systems	3
COMP4083	E-technology Architectures, Tools and Applications	3
COMP4093	Internet and the World Wide Web	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
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
DS3063	Computational Statistics and Programming	3
DS4033	Text Mining and Analytics	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
STAT3073	Statistical Computing	3

* Except for the Math Plus Computer Science and Technology Programme, 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.

Students of the Math Plus Computer Science and Technology Programme are required to take MATH1083 Calculus II instead of MATH1163 Advanced Calculus under ME.