

Applied Mathematics Programme

(*The Study Plans provided on the SAI website are for reference only. For any questions, please contact your Course Coordinator.)*

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. Common Core Courses (24 Units)											
Common Core Courses (Required) (24 Units)											
MATH1053	Linear Algebra I	3									
MATH1073	Calculus I	3									
COMP1023	Foundations of C Programming	3									
MATH1063	Linear Algebra II			3							
MATH1083	Calculus II			3							
STAT2063	Probability Theory				3						
MATH4123	Final Year Project I (MATH)									3	
MATH4163	Final Year Project II (MATH)										3
II. Major Required Courses (30 Units)											
COMP2003	Data Structures and Algorithms				3						
MATH2043	Ordinary Differential Equations				3						
MATH2053	Mathematical Analysis				3						
MATH4083	Numerical Analysis					3					
OR4023	Optimization					3					
STAT3083	Applied Statistics					3					
MATH4093	Complex Analysis							3			
MATH4103	Mathematical Modelling							3			
MATH3033	Partial Differential Equations								3		
MATH3163	Real Analysis								3		
III. Major Elective Courses (12 Units)											
ME01 ME02 ME03 ME04						3			3	3	3
IV. 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					
V. General Education Courses (18 Units)											
Level 1 Foundational Courses	History and Civilization ^②				3						
	Quantitative Reasoning ^②			3							
	Values and the Meaning of Life ^③			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
VI. Free Elective Courses (27 Units)											
FE01 FE02 FE03 FE04 FE05 FE06 FE07 FE08 FE09					3				9	6	9
Total Units: 148		19	2	23	22	20	2	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 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.