

Applied Mathematics Programme

(*The Study Plans provided on the SAI website are for reference only. For the official versions, please refer to the documents published on the AR website.)

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.