

Data Science 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						
DS4004	Final Year Project I (DS)									3	
DS4005	Final Year Project II (DS)										3
II. Major Required Courses (36 Units)											
COMP2013	Object-Oriented Programming			3							
MATH2003	Discrete Structures								3		
COMP2003	Data Structures and Algorithms				3						
DS2043	Data Processing Workshop I				3						
COMP3013	Database Management Systems					3					
DS3043	Data Processing Workshop II					3					
STAT2013	Regression Analysis					3					
COMP3023	Design and Analysis of Algorithms							3			
OR4023	Optimization							3			
STAT4073	Data Mining							3			
DS4023	Machine Learning								3		
COMP4163	Neural Networks and Deep Learning									3	
III. Major Elective Courses (12 Units)											
ME01 ME02 ME03 ME04								3	6	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						
UCHL1XX3	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 ^②					3					
Level 2 Interdisciplinary Thematic Courses	Culture, Creativity and Innovation ^② , or Science, Technology and Society ^{②④} , 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 (21 Units)											
FE01 FE02 FE03 FE04 FE05 FE06 FE07					3			3	3	6	6
Total Units: 148		19	2	20	19	23	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 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.