Four-Year Study Plan of Artificial Intelligence Programme (2025 cohort)

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)											
AI1003	Python Programming	3									
MATH1003	Linear Algebra	3									
MATH1123	Calculus for Science and Engineering	3									
AI1013	Object-Oriented Programming			3							
AI1023	Database Management Systems			3							
AI2033	Probability and Statistics			3							
AI2003	Data Structures and Algorithm Analysis				3						
AI2013	Introduction to Artificial Intelligence				3						
MATH2003	Discrete Structures				3						
AI2023	Artificial Intelligence Workshop				3						
AI3013	Machine Learning					3					
AI3023	Machine Learning Workshop					3					
COMP3023	Design and Analysis of Algorithms					3					
AI3003	Neural Networks and Deep Learning							3			
AI3163	Computer Architecture and Operating Systems							3			
AI3043	Bayesian Networks								3		
AI4003	Optimization for Machine Learning								3		
AI4004	Final Year Project I (AI)③									3	
II. Major Elective Courses (21 Units)											
ME01 ME02 ME03 ME04 ME05 ME06 ME07								6	6	6	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 China①						2				
MT1003	Military Training		2								
WPEX1013	Emotional Intelligence			1							
WPEX2013	Experiential Arts②					1					
WPEX2023/ WPEX2033	Voluntary Service②, or Environmental Awareness②				1						
UCHL1XX3	Healthy Lifestyle②	1		1		1					
IV. General Education Courses (18 Units)											
Level 1 Foundational Courses	History and Civilization②				3						
	Quantitative Reasoning②	3									
	Values and the Meaning of Life④			3							
Level 2 Interdisciplinary Thematic Courses	Culture, Creativity and Innovation②, or Science, Technology and Society②, or Sustainable Communities②					3⑤		3⑤			
Level 3 GE Capstone Courses	Service-Learning Course②, or Service Leadership Education Course②, or Experiential Learning Course②, or Interdisciplinary Independent Study②										3
V. Free Elective Courses (18 Units)											
FE01 FE02 FE03 FE04 FE05 FE06								3	6	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 If students select a specific concentration, they must complete the final year's project for the specific concentration, i.e., students from AI in Business and Finance Concentration are required to complete a project using AI to solve a problem in Business and Finance, students from AI in Multimedia Concentration are required to complete a project using AI to solve a problem in Multimedia.

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.

ME Course List of AI (2025 cohort)

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Code	Course Title	Units
AI2053	Introduction to Cognitive Science	3
AI2063	Game Theory	3
AI3033	Introduction to Robotics	3
AI3053	Intelligent Agent Technology	3
AI3063	Neuroscience in Artificial Intelligence	3
AI3073	Introduction to Bioinformatics	3
AI3093	Decision Theory	3
AI3103	Regression Analysis	3
AI3113	Speech Processing and Recognition	3
AI3123	Digital Image Processing	3
AI3133	Natural Language Processing	3
AI3143	Computer Vision	3
AI3153	Human-Computer Interaction	3
AI4005	Final Year Project II (AI)[#]	3
AI4013	Knowledge Graph Engineering	3
AI4023	Deep Reinforcement Learning	3
AI4033	Large-Scale Distributed Multi-Agent Systems	3
AI4053	Fintech	3
AI4063	Pattern Recognition	3
AI4083	Multimedia Mining and Analytics	3
AI4093	Design and Implementation of Intelligent Vision System	3
COMP3263	Intelligent Internet of Things	3
COMP3273	5G Networks and Mobile Computing	3
COMP4003	Theory of Computation	3
COMP4043	Data Mining and Knowledge Discovery	3
COMP4153	Quantum Finance and Intelligent Financial Trading Systems	3
COMP4243	Mathematical and Computing Methods	3
COMP4253	AI-Generated Content	3
DS4073	Introduction to Data Visualisation	3
DS4083	Big Data Analytics	3
DS4093	Introduction to Recommender System	3
MATH1153	Applied Linear Algebra and Linear Dynamics	3
MATH1163	Advanced Calculus	3
MATH3153	Advanced Probability	3
PHYS2003	Principles of Physics	3
STAT4013	Multivariate Analysis	3

Students who continue with the fianl year project in the second semester of Year 4 should register AI4005 Final Year Project II (AI) as a major elective during the Online Course Selection (or Course Add/Drop) period.