Four-Year Study Plan of Statistics Programme (2021 cohort)

Rev 20230223

Course Code	Course Title	Year One				Year Two		Year Three		Year Four	
		Sem 1	Winter	Sem 2	Summer	Sem 1	Sem 2	Sem 1	Sem 2	Sem 1	Sem 2
I. Major Required Courses (54 Units)											
MATH1053	Linear Algebra I	3									
MATH1073	Calculus I	3									
MATH1063	Linear Algebra II			3							
MATH1083	Calculus II			3							
COMP1023	Foundations of C Programming					3					
STAT2003	Advanced Statistics					3					
STAT2023	Advanced Probability					3					
OR4023	Optimization						3				
STAT2013	Regression Analysis						3				
STAT3043	Data Analysis Using R						3				
MATH3173	Applied Stochastic Process							3			
STAT3073	Statistical Computing							3			
STAT4013	Multivariate Analysis							3			
MATH4063	Case Studies in Mathematical Modelling								3		
STAT4043	Categorical Data Analysis								3		
STAT4063	Time Series Analysis								3		
MATH3163	Real Analysis									3	
STAT4004	Final Year Project I (STAT)									3	
II. Major Elective Courses (18 Units)											
ME01 ME02 ME03 ME04 ME05 ME06							3	3	3	6	3③
III. University Core Courses (36 Units)											
UCLC1003	University Chinese	3									
UCLC1013	English for Academic Purposes I	3									
UCLC1023	English for Academic Purposes II			3							
UCLC1033	English for Academic Purposes III						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 Thoughts (Theories)			3							
CHI1183	Contemporary Chinese Society and Thoughts (Social Practice)				2						
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 Life②			3							
Level 2 Interdisciplinary Thematic Courses	Culture, Creativity and Innovation②, or Science, Technology and Society②, or Sustainable Communities②							3	3		
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 (24 Units)											
FE01 FE02 FE03 FE04 FE05 FE06 FE07 FE08		3		3		3		6	3	3	3
Total Units: 150		**19**	**5**	**20**	**2**	**19**	**22**	**21**	**18**	**18**	**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 who continue with the final year project in the second semester of Year 4 should register STAT4005 Final Year Project II (STAT) as a major elective during the Online Course Selection (or Course Add/Drop) period.

ME Course List of STAT (2021 cohort)

Rev 20230223

Course Code	Course Title	Units
COMP2003	Data Structures and Algorithms	3
COMP3013	Database Management Systems	3
COMP4163	Neural Networks and Deep Learning	3
DS4023	Machine Learning	3
DS4033	Text Mining and Analytics	3
DS4053	Introduction to Bioinformatics	3
MATH2013	Introduction to Mathematical Finance*	3
MATH4003	Graph Theory	3
MATH4023	Differential Equation	3
MATH4033	Computational Finance*	3
MATH4043	Actuarial Mathematics*	3
MATH4053	Numerical Methods	3
OR3003	Logistics	3
OR3013	Linear Programming and Integer Programming	3
OR4003	Dynamic Programming Inventory Control	3
OR4013	Advanced Topics in Operations Research	3
OR4033	Network and Transportation Models	3
STAT3003	Survey Sampling	3
STAT3013	Life Contingencies*	3
STAT3023	Quality Control - Six Sigma	3
STAT3033	Bayesian Statistics	3
STAT4003	Experimental Design	3
STAT4005	Final Year Project II (STAT)#	3
STAT4023	Loss Models*	3
STAT4033	Structural Equation Modelling	3
STAT4053	Survival Analysis	3
STAT4073	Data Mining	3
STAT4103	Introduction to Deep Learning with Python	3
STAT4113	Nonparametric Statistics	3

* Actuarial science course.

Students who continue with the final year project in the second semester of Year 4 should, with the approval of the Programme, register STAT4005 Final Year Project II (STAT) as a major elective in that semester.