

Table 1: Economics Major Courses

Course Type	Course Code	Course Title	AU	Total AU Load
Core (ECON)	HE1001	Microeconomics I	3	24
	HE1002	Macroeconomics I	3	
	HE2001	Microeconomics II	3	
	HE2002	Macroeconomics II	3	
	HE2003	Econometrics I	3	
	HE3001	Microeconomics III	3	
	HE3002	Macroeconomics III	3	
	HE3003	Econometrics II	3	
Student is required to choose 15 AUs, one (1) level 3000 course and three(3) level 4000 courses, of which one (1) must be from the HE4xxx list.				
Major PE (ECON)	HE3004	Mathematics for Economists II	3	15
	HE3010	Money and Banking	3	
	HE3012	Financial Economics	3	
	HE3013	Economics of Corporate Finance	3	
	HE3020	International Economics	3	
	HE3021	Development Economics	3	
	HE3022	Public Economics	3	
	HE3023	Labour Economics	3	
	HE3024	Environmental Economics	3	
	HE3025	Health Economics	3	
	HE3026	Urban Economics	3	
	HE3027	Housing Economics	3	
	HE3031	Industrial Organisation & Business Strategies	3	
	HE3032	Game Theory	3	
	HE3033	The Chinese Economy	3	
	HE3111	Monetary Economics	3	
	HE4903	Advanced Econometrics	4	
	HE4040	Behavioural Economics	4	
	HE4041	Cost-Benefit Analysis	4	
	HE4042	Singapore Economy in a Globalized World	4	
	HE4043	Finance and Development	4	
	HE4044	Growth Theory and Empirics	4	
	HE4103	Time Series Analysis & Applications	4	
	HE4140	Experimental Economics	4	
	HE4203	Panel Data & Policy Analysis	4	
	HE4303	Machine Learning and Data Analysis	4	
	HE4403	Econometric & Business Forecasting	4	
	HE4901	Seminar in Microeconomics	4	
HE4902	Seminar in Macroeconomics	4		
HE4904	Mathematics for Economists III	4		
HE4XXX	Big Data: Applications in Economics and Financial Analysis	4		
HE4XXX	Mathematical Modelling in Economics and Finance	4		
HE4XXX	Agent-based Modelling and Simulation	4		
Total				39

Table 2: Data Science Major Courses

Course Type	Course Code	Course Title	AU	Total AU Load
Core (DS)	SC1003	Introduction to Computational Thinking & Programming	3	33
	SC1007	Data Structures and Algorithms	3	
	SC2001	Algorithm Design and Analysis	3	
	SC2207	Introduction to Database System	3	
	SC3000	Artificial Intelligence	3	
	MH1805	Calculus	4	
	MH1812	Discrete Mathematics	3	
	MH2100	Calculus III	4	
	MH2500	Probability and Introduction to Statistics	4	
	MH2802	Linear Algebra for Scientists	3	
Student is required to choose 22 AUs in total, from the following list of Major PEs.				
Major PE (DS)	SC3020	Database System Principles	3	22
	SC4020	Data Analytics and Mining	3	
	SC4000	Machine Learning	3	
	SC4023	Big Data Management	3	
	SC4021	Information Retrieval	3	
	SC4XXX	Distributed Computing for Data Science & AI	3	
	SC4024	Data Visualization	3	
	MH3500	Statistics	4	
	MH3511	Data Analysis with Computer	3	
	MH3512	Stochastic Processes	4	
	MH3701	Basic Optimization	4	
	MH3700	Numerical Analysis I	3	
	MH4511	Sampling and Survey	4	
	MH4500	Time Series Analysis	4	
	MH4513	Survival Analysis	4	
	MH4515	Applied Bayesian Statistics	4	
	MH4516	Applied Categorical Data Analysis	4	
	MH4514	Financial Mathematics	4	
	MH4320	Computational Economics	4	
	MH4518	Simulations in Finance	4	
MH4510	Statistical Learning and Data Mining	4		
MH4517	Data Applications in Natural Sciences	4		
MH4702	Probabilistic Methods in Operations Research	4		
Total				55