Table 1: Economics Core courses and Major Prescribed Electives

Course Type	Course Code	Course Title	AU	Sem*	Total AU Load
Core (ECON)	HE1001	Microeconomics I	3	1	24
	HE1002	Macroeconomics I	3	1	
	HE2001	Microeconomics II	3	2	
	HE2002	Macroeconomics II	3	2	
	HE2003	Econometrics I	3	1	
	HE3001	Microeconomics III	3	1	
	HE3002	Macroeconomics III	3	1	
	HE3003	Econometrics II	3	2	
Students are required to choose 15 AUs, consisting of one (1) level 3000 course and three(3) level 4000 courses, of which one (1) must be from the courses highlighted in bold.					
Major PE (ECON)	HE3004	Mathematics for Economists II	3	1	15
	HE3010	Money and Banking	3	1	
	HE3012	Financial Economics	3	2	
	HE3013	Economics of Corporate Finance	3	2	
	HE3020	International Economics	3	TBA	
	HE3021	Development Economics	3	1	
	HE3022	Public Economics	3	1	
	HE3023	Labour Economics	3	1 and 2	
	HE3024	Environmental Economics	3	1	
	HE3025	Health Economics	3	1	
	HE3026	Urban Economics	3	1 and 2	
	HE3027	Housing Economics	3	1	
	HE3031	Industrial Organisation & Business Strategies	3	1	
	HE3032	Game Theory	3	1	
	HE3033	The Chinese Economy	3	1 and 2	
	HE3034	Economics of Education	3	2	
	HE3111	Monetary Economics	3	2	
	HE4040	Behavioural Economics	4	2	
	HE4041	Cost-Benefit Analysis	4	1 and 2	
	HE4042	Singapore Economy in a Globalized World	4	2	
	HE4043	Finance and Development	4	2	
	HE4044	Growth Theory and Empirics	4	1	
	HE4103	Time Series Analysis & Applications	4	TBA	
	HE4140	Experimental Economics	4	1	
	HE4203	Microeconometrics & Panel Data	4	2	
	HE4303	Machine Learning and Data Analysis	4	TBA	
	HE4403	Econometric & Business Forecasting	4	TBA	
	HE4901	Seminar in Microeconomics	4	TBA	
	HE4902	Seminar in Macroeconomics	4	TBA	
	HE4903	Advanced Econometrics	4	2	
	HE4904	Mathematics for Economists III	4	TBA	
	HE4045	**Quantitative Economics with Data Science**	**4**	**TBA**	
	HE4046	**Big Data Applications in Economics and Financial Analysis**	**4**	**TBA**	
				Total	**39**

* The offering of a given ECON course is subject to availability of teaching faculty and demand. As such, this is to be taken as a rough guide only.

Table 2: Data Science Core courses and Major Prescribed Electives

Course Type	Course Code	Course Title	AU	Sem#	Total AU Load
Core (DS)	SC1003	Introduction to Computational Thinking & Programming	3	1	33
	SC1007	Data Structures and Algorithms	3	2	
	SC2001	Algorithm Design and Analysis	3	2	
	SC2207	Introduction to Database System	3	2	
	SC3000	Artificial Intelligence	3	2	
	MH1805	Calculus	4	1	
	MH1812	Discrete Mathematics	3	2	
	MH2100	Calculus III	4	1	
	MH2500	Probability and Introduction to Statistics	4	1	
	MH2802	Linear Algebra for Scientists	3	1	
Students are required to choose 22 AUs in total, from the following list of Major PEs.					
Major PE (DS)	SC3020	Database System Principles	3	1 and 2	22
	SC4020	Data Analytics and Mining	3	1	
	SC4000	**Machine Learning**	**3**	**1 and 2**	
	SC4023	Big Data Management	3	2	
	SC4025	Developing Data Products	3	TBA	
	SC4021	Information Retrieval	3	2	
	SC4XXX	Distributed Computing for Data Science & AI	3	TBA	
	SC4024	Data Visualization	3	1	
	MH3500	Statistics	4	2	
	MH3510	Regression Analysis	4	1	
	MH3511	Data Analysis with Computer	3	2	
	MH3512	Stochastic Processes	4	1	
	MH3700	Numerical Analysis I	3	2	
	MH3701	Basic Optimisation	4	2	
	MH4320	Computational Economics	4	1	
	MH4500	Time Series Analysis	4	2	
	MH4510	Statistical Learning and Data Mining	4	1	
	MH4511	Sampling and Survey	4	1	
	MH4513	Survival Analysis	4	1	
	MH4514	Financial Mathematics	4	2	
	MH4515	Applied Bayesian Statistics	4	TBA	
	MH4516	Applied Categorical Data Analysis	4	TBA	
	MH4517	Data Applications in Natural Sciences	4	2	
	MH4518	Simulations in Finance	4	1	
	MH4702	Probabilistic Methods in Operations Research	4	1	
				Total	**55**

The offering of a given SPMS/SCSE course is subject to availability of teaching faculty and demand. As such, this is to be taken as a rough guide only.