

Curriculum for students admitted in AY2025 – ESPP

EESS CORE		
Course Code	Course Title	AUs
ES0001	The Physical Environments of Singapore	3
ES0138	Introduction to Scientific Writing	2
ES1001	E2S2 Environment and Society	4
ES1003	E2S2 Solid Earth	4
ES1006	Introductory Field Experience	4
ES1007	Climate Change	3
ES2001	Computational Earth Systems Science	4
ES2003	E2S2 Biosphere	4
ES2203	Global Environmental Politics and Governance	3
ES2303	Introduction to Ecology	3
ES2305	Introductory Statistics and Numerical Thinking	3
ES2802	GIS and the Earth System	3
ES3201	Coupled Human and Natural Systems	3
ES3202	Resilient Urban Systems	3
MH1802	Calculus for the Sciences	4
PPGA CORE		
HA1001	Introduction to International Relations and Foreign Policy	3
HA1002	Introduction to Political Theory	3
HA1003	Introduction to Public Administration and Policy	3
HA1011	Politics of Singapore	3
HA1012	Fundamentals of Politics	3
MAJOR PE		
BS1001	Introductory Biology	3
BS1005	Biochemistry I	3
BS1008	Bioinformatics and Statistics	3
BS2002	Microbiology	3
CM1001	Foundations of Chemistry I	4
CM1002	Foundations of Chemistry II	4
CM2011	Analytical and Bioanalytical Chemistry	3
ES2002	Earth Materials	3
ES2004	Sedimentary Geology	3
ES2005	Geology of Earthquakes	3
ES2201	Law & Economics, Sustainable Development, and Environmental Protection	3
ES2301	Principles of Heredity and Ecological Genetics	3
ES2304	Microbes on Natural Ecosystems	3
ES2801	Introduction to Natural Hazards	3
ES3002	Structural Geology and Tectonics	3
ES3003	Introduction to Geochemistry	3
ES3004	Introduction to Geophysics	3

ES3005	Advanced Field Course in Geology	5
ES3006	Space Geodesy	3
ES3008	E2S2 Research	3
ES3101	Petroleum Geology	3
ES3102	Global Tectonics	3
ES3103	Sea-level Rise & Coastal Processes	2
ES3203	The Genome & Society	3
ES3301	Plant and Animal Physiology	3
ES3302	Tropical Ecology	3
ES3304	Advanced Placement in Ecology and Society	2
ES3305	Current Issues in Ecology	3
ES3306	Global Change Ecology	3
ES3307	Experimental Design & Analysis for Ecology	3
ES3801	Biogeochemistry	3
ES3802	The Urban Environment: Issues, assessment, and management	3
ES4002	Final Year Project	10
ES4004	Overseas Entrepreneurship Prog (12-month)	20
ES4006	Overseas Entrepreneurship Prog (6-month)	11
ES4010	Teaching in E2S2	4
ES4201	Environmental Management and Valuation	3
ES4301	Conservation Biology and Biodiversity	3
ES4302	Introduction to Earth Environmental Simulations	3
ES4303	Marine and Aquatic Ecology	3
ES4304	Eyes on Earth - Satellite Remote Sensing	3
ES4901	Oceanography	3
ES4902	Geophysical Data Analysis	3
ES4904	Volcanology	3
ES4905	Environmental Science and Policy	3
ES4906	Environmental Hydrology	3
ES4911	Seismology	3
HP1100	Fundamentals of Social Science Research	3
PH1104 or PH1801	Mechanics or Foundations of Physics I	3
PH1106 or PH1802	Electricity and Magnetism or Foundations of Physics II	3
PH1105	Optics, Vibrations and Waves	3
PH1107	Relativity and Quantum Physics	3

PPGA MPE Major Prescribed Electives (11 courses totaling 35 AUs)		
Code	Title	AUs
HA2003	Politics and Government in Southeast Asia	3
HA2004	Theories in International Relations	3
HA2005	Contemporary Political Theory	3
HA2009	The Making of E-government	3
HA2011	Cost-benefit Analysis in Public Policy	3
HA2014	Public Organization Theory	3
HA2015	China in Africa	3
HA2017	Foreign Policy Analysis	3
HA2023	Research Methodology in Social Sciences	3
HA2024	Statistical Analysis for Public Affairs I	3
HA2026	American Foreign Policy	3
HA2027	Statistical Analysis for Public Affairs II	3
HA2028	Ethics in Public Policy Making and Implementation	3
HA3002	Political Anthropology	3
HA3004	United States & East Asia	3
HA3005	Politics of the Developing World	3
HA3007	Public Budgeting and Financial Management	3
HA3010	Mass Media and Public Policy	3
HA3014	Singapore's Foreign Policy	3
HA3015	Media and Politics	3
HA3016	China's Foreign Policy	3
HA3018	Borderless Migration	3
HA3019	East Asian Security: Past, Present & Future	3
HA3020	Justice	3
HA3022	The Origins of Modern Political Thought	3
HA3023	International Security	3
HA3024	China's Re-emergence in World Politics	3
HA3025	The Politics and Practice of International Diplomacy	3
HA3026	Crisis Leadership and Management	3
HA3027	Comparative Regional Security Institutions: Asia to Africa	3
HA3028	Political Parties and Elections	3
HA3029	China & Southeast Asia in the 21st Century	3
HA3030	Innovation Management and Policy	3
HA3032	Urban Politics and Policy-making	3
HA3033	Qualitative Research Methods for Public Affairs	3
HA3034	Governing Algorithms: Asia-Pacific	3
HA3035	Trust & Digital Health Policy in Southeast Asia	3
HA3036	Digital Publics & Policy: Social Media and Governance	3
HA3037	Cold War Ideas	3
HA3038	Civil-Military Relations in Southeast Asia	3

HA3080	Special Topics in Public Policy	3
HA3090	Special Topics in Global Affairs	3
HA3091	Cross-Strait Relations	3
HA3092	Ancient Political Thought	3
HA3093	Non-Western and Global International Relations Theories	3
HA3094	International Relations of Northeast Asia	3
HA4001	ASEAN in the 21st Century	4
HA4006	Public Leadership	4
HA4011	Public Administration: Past, Present, and Future	4
HA4013	Advanced Topics in Democratic Theory: Democracy & Division	4
HA4014	European Union	4
HA4016	Global Cities	4
HA4017	Economics Issues for Public Decision Making	4
HA4018	Policy Evaluation	4
HA4019	Methods in Political Theory	4
HA4021	Comparative Politics in Asia	4
HA4022	International Politics of the Asia-Pacific	4
HA4026	Selected Topics in Health Care and Ageing	4
HA4029	Quantitative Approach to International Relations	4
HA4030	Interstate Conflict	4
HA4031	Human Capital Management in the Government	4
HA4032	What is a City?	4
HA4033	Political Theory and Psychoanalysis	4
HA4034	Causal Inference In Policy Evaluation	4
HA4035	Food Politics and Policies	4
HA4036	Power in International Relations: Order and Transition	4
HA4038	Critical International Theory	4
HA4039	Knowledge Politics	4
HA4040	Health, Disease Outbreaks and Politics	4
HA4041	Film and Political Theory	4
HA4043	Japanese Foreign Policy	4
HA4044	Policy Values & Debates	4
HA4046	Culture, Arts & Politics	4
HA4064	Model United Nations	4
HA4065	Crisis Diplomacy	4
HA4066	War in Film	4
HA4067	Geopolitics & Geoeconomics of the Mekong Region	4
HA4068	Politics in Thailand	4

SUMMARY OF ACADEMIC UNIT REQUIREMENT							
Year of Study	Major Requirements		Interdisciplinary Collaborative Core			Broadening & Deepening Electives	Total AU
	Core	Major PE	Common Core	Professional Series	Care, Serve, Learn		
1	33		8				41
2	26	9	6		3		44
3	6	27		11			44
4		17				2	19
Total	65	53	14	11	3	2	148

YEAR 1 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite /Remarks
ES0138	Introduction to Scientific Writing	Core	2	
ES1001	E2S2 Environment and Society	Core	4	
MH1802	Calculus for the Sciences	Core	4	
HA1001	Introduction to International Relations and Foreign Policy	Core	3	
HA1012	Fundamentals of Politics	Core	3	
CC0001	Inquiry and Communication in an Interdisciplinary World	ICC-CC	2	
CC0003	Ethics & Civics in a Multi-Cultural World	ICC-CC	2	
			20	

YEAR 1 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite /Remarks
ES1003	E2S2 Solid Earth	Core	4	
ES1007	Climate Change	Core	3	ES1001
ES2003	E2S2 Biosphere	Core	4	
HA1003	Introduction to Public Administration and Policy	Core	3	
HA1011	Politics of Singapore	Core	3	
ML0004	Design Your Life & Career	ICC-CC	2	
CC0015	Healthy Living & Mental Wellbeing	ICC-CC	2	
			21	

YEAR 2 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite /Remarks
ES1006	Introductory Field Experience	Core	4	Y1ST complete, Y2S1 register
ES2001	Computational Earth Systems Science	Core	4	MH1802
ES2802	GIS and the Earth System	Core	3	ES1003 & ES2001 (Co-req)
HA1002	Introduction to Political Theory	Core	3	
CC0006	Sustainability: Human, Social, Economic & Environment	ICC-CC	3	
CC0007	Science & Technology for Humanity	ICC-CC	3	
CSL	Care, Serve and Learn	ICC-CSL	3	
			23	

YEAR 2 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite /Remarks
ES0001	The Physical Environments of Singapore	Core	3	
ES2303	Introduction to Ecology	Core	3	BS1001 & ES2003
ES2203	Global Environmental Politics and Governance	Core	3	ES1001
ES2305	Introductory Statistics and Numerical Thinking	Core	3	MH1802
MPE	Major Prescribed Electives	MPE	3	
MPE	Major Prescribed Electives	MPE	3	
MPE	Major Prescribed Electives	MPE	3	
			21	

YEAR 3 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite /Remarks
ES3202	Resilient Urban System	Core	3	ES2802
MLxxx	Profession Preparation	ICC-PS	1	
MPE	Major Prescribed Electives	MPE	3	
MPE	Major Prescribed Electives	MPE	3	
MPE	Major Prescribed Electives	MPE	3	
MPE	Major Prescribed Electives	MPE	3	
MPE	Major Prescribed Electives	MPE	3	
			19	

YEAR 3 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite /Remarks
ES3201	Coupled Human and Natural Systems	Core	3	ES1001
ES0002	Fundamentals of Data Science for Earth and Environmental Systems Science	ICC-PS	3	ES2001 & MH1802
ES0238	Scientific Writing for Non-Scientists	ICC-PS	2	ES0138
MPE	Major Prescribed Electives	MPE	3	
MPE	Major Prescribed Electives	MPE	3	
MPE	Major Prescribed Electives	MPE	3	
MPE	Major Prescribed Electives	MPE	3	
			20	

YEAR 3 SPECIAL SEMESTER				
Course Code	Course Title	Type	AU	Pre-Requisite /Remarks
ES4007	Professional Attachment	ICC-PS	5	
			5	

YEAR 4 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
MPE	Major Prescribed Electives	MPE	3	
MPE	Major Prescribed Electives	MPE	3	
MPE	Major Prescribed Electives	MPE	3	
MPE	Major Prescribed Electives	MPE	3	
			12	

YEAR 4 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
MPE	Major Prescribed Electives	MPE	3	
MPE	Major Prescribed Electives	MPE	2	
BDE	Broadening and Deepening Elective	BDE	2	
			7	