

## Curriculum for students admitted in AY2026 – Society Specialisation

| 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   |
| ES2802                        | GIS and the Earth System                                               | 3   |
| MH1802                        | Calculus for the Sciences                                              | 4   |
| SOCIETY ADDITIONAL MAJOR CORE |                                                                        |     |
| ES2203                        | Global Environmental Politics and Governance                           | 3   |
| ES2305                        | Introductory Statistics and Numerical Thinking                         | 3   |
| ES3201                        | Coupled Human and Natural Systems                                      | 3   |
| ES3202                        | Nature-Based Solutions for Urban Systems                               | 3   |
| ES4905                        | Environmental Science and Policy                                       | 3   |
| HE5091                        | Principles of Economics                                                | 3   |
| MAJOR PE                      |                                                                        |     |
| BS1001                        | Introductory Biology                                                   | 3   |
| BS1005                        | Biochemistry I                                                         | 3   |
| BS1008                        | Biostatistics                                                          | 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   |
| ES2303                        | Introduction to Ecology                                                | 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 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  |
| ES3303 | Environmental Biotechnology                               | 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  |
| ES4906 | Environmental Hydrology                                   | 3  |
| ES4901 | Oceanography                                              | 3  |
| ES4902 | Geophysical Data Analysis                                 | 3  |
| ES4904 | Volcanology                                               | 3  |
| ES4911 | Seismology                                                | 3  |
| HP1100 | Fundamentals of Social Science Research                   | 3  |
| HS2022 | Population and Society                                    | 3  |
| HS2023 | Environment and Sociology                                 | 3  |
| HE3024 | Environmental Economics                                   | 3  |
| MH2500 | Probability and Introduction to Statistics                | 4  |
| PH1104 | Mechanics                                                 | 3  |
| PH1106 | Electricity and Magnetism                                 | 3  |
| PH1105 | Optics, Vibrations and Waves                              | 3  |
| PH1107 | Relativity and Quantum Physics                            | 3  |

| 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                                    | 21                 | 7         | 10                                   |                     |                    |                                  | 38         |
| 2                                    | 23                 | 10        | 4                                    |                     | 3                  |                                  | 40         |
| 3                                    | 9                  | 12        |                                      | 11                  |                    | 8                                | 40         |
| 4                                    |                    | 4         |                                      |                     |                    | 13                               | 17         |
| <b>Total</b>                         | <b>53</b>          | <b>33</b> | <b>14</b>                            | <b>11</b>           | <b>3</b>           | <b>21</b>                        | <b>135</b> |

| 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         |                           |
| CC0001            | Inquiry and Communication in an Interdisciplinary World | ICC-CC | 2         |                           |
| CC0003            | Ethics & Civics in a Multi-Cultural World               | ICC-CC | 2         |                           |
| MPE               | Major Prescribed Electives                              | MPE    | 3         | Compulsory MPE for BS1001 |
| MPE               | Major Prescribed Electives                              | MPE    | 4         | Compulsory MPE for CM1001 |
|                   |                                                         |        | <b>21</b> |                           |

| 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         |                        |
| CC0006            | Sustainability: Human, Social, Economic & Environment | ICC-CC | 3         |                        |
| CC0007            | Science & Technology for Humanity                     | ICC-CC | 3         |                        |
|                   |                                                       |        | <b>17</b> |                        |

| 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)     |
| CC0015            | Healthy Living & Mental Wellbeing   | ICC-CC  | 2         |                              |
| CSL               | Care, Serve and Learn               | ICC-CSL | 3         |                              |
| MPE               | Major Prescribed Electives          | MPE     | 4         |                              |
|                   |                                     |         | <b>20</b> |                              |

| 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                |
| ML0004            | Career Design and Workplace Readiness in a Dynamic World | ICC-CC | 2         |                       |
| MPE               | Major Prescribed Electives                               | MPE    | 3         |                       |
| MPE               | Major Prescribed Electives                               | MPE    | 3         |                       |
|                   |                                                          |        | <b>20</b> |                       |

| YEAR 3 SEMESTER 1 |                                   |        |           |                       |
|-------------------|-----------------------------------|--------|-----------|-----------------------|
| Course Code       | Course Title                      | Type   | AU        | Pre-Requisite/Remarks |
| ES3202            | Resilient Urban System            | Core   | 3         | ES2802                |
| HE5091            | Principles of Economics           | Core   | 3         |                       |
| MLxxxx            | Profession Preparation            | ICC-PS | 1         |                       |
| MPE               | Major Prescribed Electives        | MPE    | 3         |                       |
| MPE               | Major Prescribed Electives        | MPE    | 3         |                       |
| MPE               | Major Prescribed Electives        | MPE    | 3         |                       |
| BDE               | Broadening and Deepening Elective | BDE    | 3         |                       |
|                   |                                   |        | <b>19</b> |                       |

| 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         |                        |
| BDE               | Broadening and Deepening Elective                                        | BDE    | 2         |                        |
| BDE               | Broadening and Deepening Elective                                        | BDE    | 3         |                        |
|                   |                                                                          |        | <b>16</b> |                        |

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

| YEAR 4 SEMESTER 1 |                                   |      |           |                        |
|-------------------|-----------------------------------|------|-----------|------------------------|
| Course Code       | Course Title                      | Type | AU        | Pre-Requisite /Remarks |
| MPE               | Major Prescribed Electives        | MPE  | 4         |                        |
| BDE               | Broadening and Deepening Elective | BDE  | 3         |                        |
| BDE               | Broadening and Deepening Elective | BDE  | 3         |                        |
| BDE               | Broadening and Deepening Elective | BDE  | 4         |                        |
|                   |                                   |      | <b>14</b> |                        |

| YEAR 4 SEMESTER 2 |                                   |      |          |                        |
|-------------------|-----------------------------------|------|----------|------------------------|
| Course Code       | Course Title                      | Type | AU       | Pre-Requisite /Remarks |
| BDE               | Broadening and Deepening Elective | BDE  | 3        |                        |
|                   |                                   |      |          |                        |
|                   |                                   |      | <b>3</b> |                        |

Total AU for  
Graduation :

**135**