

**Graduation Requirements for BES XDP – Cohort AY2026/2027 onwards  
(w.e.f. AY2026/2027 Semester 1)**

| <b>Requirements</b>                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                           | <b>Units</b> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| <b>CHS Common Curriculum Courses (including General Education)</b>                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                           | <b>40</b>    |
| <ul style="list-style-type: none"> <li>- Asian Studies</li> <li>- Humanities</li> <li>- Social Sciences</li> <li>- Scientific Inquiry I</li> <li>- Data Literacy</li> </ul>                                                                                                                                                                                                                                                                         | <ul style="list-style-type: none"> <li>- Artificial Intelligence</li> <li>- Communities and Engagement</li> <li>- Design Thinking</li> <li>- Scientific Inquiry II</li> <li>- Digital Literacy</li> </ul> |              |
| <b>Integrated Core Courses – Pass 36 units as indicated</b>                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                           | <b>36</b>    |
| ENV1101 Environmental Studies: An Interdisciplinary Overview                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                           | 4            |
| ENV2102 Environmental Law                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                           | 4            |
| ENV2103 The Environment and Public Health                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                           | 4            |
| ENV2301 Methods and Techniques for Environmental Studies                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                           | 4            |
| ENV2302 Communications for Environmental Studies                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                           | 4            |
| <b>Pass 2 of the following elective options:</b><br>ENV3101 Environmental Challenges in Asia.<br>ENV3104 Socio-Ecological Assessment of Environmental Impacts<br>ENV3202A Environmental Studies Internship Programme<br>ENV3206 Evaluating Environmental Sustainability<br>UROP(GE3551/R)/UROPs(LSM3288/R)/UROPES(ENV3288/R) – Refer to *Note 1                                                                                                     |                                                                                                                                                                                                           | 8            |
| ENV3102 Field Course in Environmental Studies (or another interdisciplinary field course by approval) – Refer to *Note 2                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                           | 4            |
| ENV4101 Environmental Management in Singapore                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                           | 4            |
| <b>Common Core Courses – Pass 52 units as indicated</b>                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                           | <b>52</b>    |
| GE2103 Our Planet: An Earth System Science Perspective                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                           | 4            |
| LSM3257 Applied Data Analysis in Ecology and Evolution                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                           | 4            |
| <b>Pass 4 Life Sciences LSM elective courses and 4 Geography GE elective courses from the respective lists below, encompassing:</b> <ul style="list-style-type: none"> <li>- 1 LSM22xx</li> <li>- 2 LSM32xx</li> <li>- 1 LSM42xx</li> <li>- 1 GE2xxx</li> <li>- 2 GE3xxx</li> <li>- 1 GE4xxx</li> </ul> Up to one LSM or GE course (of any level) can be fulfilled with an exchange enrichment course ENV2991/3991/4991 in place – Refer to *Note 3 |                                                                                                                                                                                                           | 32           |
| LSM2251 Ecology and Environment                                                                                                                                                                                                                                                                                                                                                                                                                     | GE2101 Methods and Practices in Geography                                                                                                                                                                 |              |
| LSM2252 Biodiversity                                                                                                                                                                                                                                                                                                                                                                                                                                | GE2102 Politics, Economies And Space                                                                                                                                                                      |              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                     | GE2205 Nature and Society                                                                                                                                                                                 |              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                     | GE2208 Too Hot to Handle: Understanding Our Weather & Climate                                                                                                                                             |              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                     | GE2215 Introduction to GIS                                                                                                                                                                                |              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                     | GE2231 Living Space: Introducing Social and Cultural Geography                                                                                                                                            |              |
| LSM3252 Evolution and Comparative Genomics                                                                                                                                                                                                                                                                                                                                                                                                          | GE3207 Environmental Pollution                                                                                                                                                                            |              |
| LSM3254 Ecology of Aquatic Environments                                                                                                                                                                                                                                                                                                                                                                                                             | GE3212 Environmental Modelling                                                                                                                                                                            |              |

| Requirements                                                                                                                                                                                                                                                                                                                             |                                                                               | Units      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|------------|
| LSM3255 Ecology of Terrestrial Environments                                                                                                                                                                                                                                                                                              | GE3226 Tourism Development                                                    |            |
| LSM3256 Tropical Horticulture                                                                                                                                                                                                                                                                                                            | GE3231 Natural Hazards                                                        |            |
| LSM3258 Comparative Botany                                                                                                                                                                                                                                                                                                               | GE3238 GIS Design and Practices                                               |            |
| LSM3259 Fungal Biology                                                                                                                                                                                                                                                                                                                   | GE3240 Geographical Research: Developing Ideas (*compulsory if taking GE4401) |            |
| LSM3265 Entomology                                                                                                                                                                                                                                                                                                                       | GE3251 Southeast Asia                                                         |            |
| LSM3266 Avian Biology and Evolution                                                                                                                                                                                                                                                                                                      | GE3254 Energy Futures: Environment and Sustainability                         |            |
| LSM3267 Behavioural Biology                                                                                                                                                                                                                                                                                                              | GE3255 Aquatic, Riparian and Coastal Systems                                  |            |
|                                                                                                                                                                                                                                                                                                                                          | GE3256 Earth Surface Processes, Landforms and Ecosystems                      |            |
|                                                                                                                                                                                                                                                                                                                                          | GE3259 Applied Geographical Data Science                                      |            |
| LSM4201 Environmental Communication & Coexistence                                                                                                                                                                                                                                                                                        | GE4207 Coastal Management                                                     |            |
| LSM4251 Plant Growth and Development                                                                                                                                                                                                                                                                                                     | GE4211 Advanced Hydrology and Water Resources Management                      |            |
| LSM4254 Principles of Taxonomy and Systematics                                                                                                                                                                                                                                                                                           | GE4214 Remote Sensing of Environment                                          |            |
| LSM4255 Methods in Mathematical Biology                                                                                                                                                                                                                                                                                                  | GE4218 Interpreting Tourism Spaces and Cultures                               |            |
| LSM4256 Evolution of Development                                                                                                                                                                                                                                                                                                         | GE4219 Development and Environment in Southeast Asia                          |            |
| LSM4257 Aquatic Vertebrate Diversity                                                                                                                                                                                                                                                                                                     | GE4220 Field Investigation in Physical Geography                              |            |
| LSM4258 Urban Ecology                                                                                                                                                                                                                                                                                                                    | GE4221 Field Investigation in Human Geography                                 |            |
| LSM4261 Marine Biology                                                                                                                                                                                                                                                                                                                   | GE4222 Advanced Geomorphology                                                 |            |
| LSM4262 Tropical Conservation Biology                                                                                                                                                                                                                                                                                                    | GE4224 Conservation Biogeography                                              |            |
| LSM4263 Field Studies in Biodiversity                                                                                                                                                                                                                                                                                                    | GE4227 Climate Change: Processes, Impact and Responses                        |            |
| LSM4264 Freshwater Biology                                                                                                                                                                                                                                                                                                               | GE4232 Global Political Ecologies                                             |            |
| LSM4266 Aquatic Invertebrate Diversity                                                                                                                                                                                                                                                                                                   | GE4233 Geography in the Contemporary World                                    |            |
| LSM4267 Light & Vision in Animal Communication                                                                                                                                                                                                                                                                                           | GE4234 Environmental Changes in the Tropics                                   |            |
| LSM4268 Environmental Bioacoustics                                                                                                                                                                                                                                                                                                       | GE4235 Urban Climates                                                         |            |
|                                                                                                                                                                                                                                                                                                                                          | GE4239 Coastal Dynamics                                                       |            |
|                                                                                                                                                                                                                                                                                                                                          | GE4240 Spatial Decision-Making                                                |            |
|                                                                                                                                                                                                                                                                                                                                          | GE4241 Spatial Health                                                         |            |
| <b>Pass 8 units of Compulsory Level 4000:</b> <ul style="list-style-type: none"> <li>- LSM4288E Research Project in Life Sciences (Ecology, Evolution and Biodiversity); OR</li> <li>- GE4401 Honours Thesis; OR</li> <li>- 8 units of Level 4000 Common Core Courses of LSM42xx and/or GE4xxx elective courses listed above.</li> </ul> |                                                                               | 8          |
| <b>Pass 1 ENV-Recognised Course – Refer to *Note 4</b>                                                                                                                                                                                                                                                                                   |                                                                               | 4          |
| <b>Unrestricted Electives</b>                                                                                                                                                                                                                                                                                                            |                                                                               | <b>32</b>  |
| <b>Total Units for Graduation Requirements</b>                                                                                                                                                                                                                                                                                           |                                                                               | <b>160</b> |

**\*Note 1:** For UROP(GE3551)/UOPS(LSM3288/R)/UROPES(ENV3288/R) - only 4 units of these undergraduate research project options can be counted towards the Integrated Core Courses.

**\*Note 2:** An alternative field course can be substituted on approval. An appropriate substitution for the field course would need to be at least 10 days in length, pitched at Level 2000, 3000 or 4000, be themed around environmental issues, and be multidisciplinary or interdisciplinary in content. Field course done during a study abroad segment, if appropriate, can be considered.

The following courses are approved as appropriate substitutes by default:

|                                                                                                                                                                                                                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GEN2007 Resilience in Restoration                                                                                                                                                                                                                 |
| GE3230A Field Studies in Southeast Asia – this course weighs 8 Units, wherein 4 Units will be counted towards the Integrated Core Courses as a substitute for ENV3102, and the remaining 4 Units will count towards the Common Core GE Level 3000 |
| GE4221 Field Investigation in Human Geography                                                                                                                                                                                                     |
| GE4220 Field Investigation in Physical Geography                                                                                                                                                                                                  |

Admission into GE3230A, GE4221, and GE4220 will be approved by the course coordinator and is dependent on the number of vacancies in the course.

**\*Note 3:** Students going on study abroad programmes may map their partner university courses to the ENV exchange enrichment course codes ENV2991, ENV3991, and ENV4991. A maximum of two exchange enrichment courses can be counted towards BES Major requirements:

- One can be counted towards the Common Core elective options, replacing a LSM or GE course of any level.
- One can be counted towards the ENV-Recognised Course.

Any others will be counted as Unrestricted Electives. A course code can only be used once.

**\*Note 4:** Below lists the acceptable ENV-Recognised Courses.

### List of ENV-Recognised Courses

|                                                               |
|---------------------------------------------------------------|
| AN2203 Peoples and Cultures of Southeast Asia                 |
| AN2206 Humans and Natures                                     |
| EC2383 Environmental Economics                                |
| ESE2000 Chemistry for an Environmentally Sustainable Future   |
| ESE3101 Resource Management and Circular Economy              |
| ESE3201 Air Quality in Changing Environments                  |
| ESE3301 Microbiology in Natural and Built Environments        |
| GEN2004 Green Communities in Action: Climate, Species, Crisis |
| GL3203 Global Socio-environmental Entanglements               |
| HY2235 Environmental History                                  |
| JS2234 Japan: The Green Nation?                               |
| LAD2004 Planting Design and Horticulture                      |
| LAD3006 Basics of Ecology                                     |
| PC3442 Weather and Climate Fundamentals                       |

|                                              |
|----------------------------------------------|
| PH2216 Environmental Philosophy              |
| PH2226 Concept of Nature in Inquiry          |
| PF3504 Sustainable Energy Management         |
| PS3274 Environmental Politics                |
| RE3705 Urban Planning                        |
| RE3901 Advanced Urban Planning               |
| SC3212 Southeast Asia in a Globalizing World |
| ENV2991 Exchange Enrichment Course           |
| ENV3991 Exchange Enrichment Course           |
| ENV4991 Exchange Enrichment Course           |