Graduation Requirements for AY19/20 and after

Environmental Biology and Geography

<table>
<thead>
<tr>
<th>Summary of Requirements</th>
<th>MCs</th>
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<tr>
<td>UNIVERSITY LEVEL REQUIREMENTS</td>
<td></td>
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<tr>
<td>General Education</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>5 Pillars:</td>
</tr>
<tr>
<td>• Asking Questions (GEQ1000)</td>
<td></td>
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<tr>
<td>• Quantitative Reasoning (GER1000)</td>
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<tr>
<td>• Thinking and Expression (GET1050)</td>
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<tr>
<td>• Singapore Studies (GES)</td>
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<tr>
<td>• Human Cultures (GEH)</td>
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<tr>
<td>UNRESTRICTED ELECTIVES</td>
<td>35 – 36</td>
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<tr>
<td>PROGRAMME REQUIREMENTS</td>
<td>104 – 105</td>
</tr>
<tr>
<td>TOTAL</td>
<td>160</td>
</tr>
</tbody>
</table>

*Students admitted from AY2017/18 onwards and who are enrolled in USP or UTCP programmes are required to read a module from the Quantitative Reasoning (GER1000) and Thinking and Expression pillar (GET1050) in partial fulfilment of the University Level Requirements for General Education. These students are not required to read the General Education Modules from the remaining pillars as they will fulfil their remaining University Level Requirements as part of their USP or UTCP respectively.

**Students in the Residential College 4 (RC4) programme only have to read a module from the Quantitative Reasoning (GER1000) pillar in partial fulfilment of the University Level Requirements for General Education. They will fulfil their remaining University Level Requirements as part of their RC4 programme.

Last update 19/6/19
# Programme Requirements for Bachelor of Environmental Studies
## (For Cohorts AY19/20 and after)
### Environmental Biology Specialisation

<table>
<thead>
<tr>
<th>Level</th>
<th>Programme Requirements</th>
<th>Cumulative MCs</th>
</tr>
</thead>
</table>
| 1000  | CM1402 General Chemistry  
EC1301 Principles of Economics  
ENV1101 Environmental Studies: An Interdisciplinary Overview  
GE1101E Geographical Journeys: Exploring World Environments  
MA1312 Calculus with Applications  
ENV1202 Communications for Environmental Studies | 24 |
| 2000  | ENV2101 Global Environmental Change  
ENV2102 Environmental Law  
ENV2103 The Environment and Public Health  
LSM2252 Biodiversity  
LSM2253 Applied Data Analysis in Ecology and Evolution  
EC2383 Environmental Economics (new)  
Choose 3 modules from the following list:  
ESE2401 Water Science & Technology  
GE2101 Methods and Practices in Geography  
GE2215 Introduction to GIS and Remote Sensing Methods  
GE2218 Leisure, Recreation and Tourism (new)  
GE2220 Terrestrial and Coastal Environment  
GE2221 Nature and Society  
GE2222 Politics and Space (new)  
GE2228 Weather and Climate  
GE2229 Water and the Environment  
GE2230 Energy Futures: Environment and Sustainability  
GE2233 Geospatial Analytics for Biodiversity Conservation  
HY2235 Environmental History  
LSM2251 Ecology & Environment  
PH2216^ Environmental Philosophy  
PH2226 Concept of Nature in Inquiry  
RE2701 Urban Planning  
SC2221 Environment & Society  | 60 |
| 3000  | ENV3101 Environmental Challenges: Asian Case Studies I  
ENV3102 Environmental Challenges: Asian Case Studies II  
Choose any 2 of the following modules with not more than 1 module from List A:  
LSM3252 Evolution and Comparative Genomics  
LSM3254 Ecology of Aquatic Environments  
LSM3255 Ecology of Terrestrial Environments  
LSM3256 Tropical Horticulture  
LSM3262 Environmental Animal Physiology  
LSM3263 Field Studies in Neotropical Ecosystems  
LSM3265 Entomology  
LSM3266 Avian Biology and Evolution  
LSM3267 Behavioural Biology  
LSM3288/LSM3289 Advanced UROPS in Life Sciences I/II or | 76 |

^Students have the choice to read both PH 2216 and PH 2226. However, only 4 MC can satisfy the programme requirements. The other 4 MC will count towards Unrestricted Elective.
**ENV3202 Environmental Studies Internship Programme (4 MC)**

List A modules

* Students have the choice to read both Internship and LSM3288/LSM3289. However, only 4 MC can satisfy the programme requirements. The other 4 MC (if student reads LSM3288 and internship) or 8 MC (if student reads LSM3288 and LSM3289, as well as Internship) will count towards Unrestricted Electives.

<table>
<thead>
<tr>
<th>List B modules</th>
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</thead>
<tbody>
<tr>
<td>LSM4254 Principles of Taxonomy and Systematics</td>
</tr>
<tr>
<td>LSM4255 Methods in Mathematical Biology</td>
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<tr>
<td>LSM4257 Aquatic Vertebrate Diversity</td>
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<td>LSM4260 Plankton Ecology (new)</td>
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<td>LSM4263 Field Studies in Biodiversity</td>
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<tr>
<td>LSM4265 Urban Ecology</td>
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<tr>
<td>LSM4266 Aquatic Invertebrate Diversity (new)</td>
</tr>
<tr>
<td>LSM4267 Animal Communications &amp; Sensory Ecology</td>
</tr>
<tr>
<td>LSM4268 Environmental Bioacoustics (new)</td>
</tr>
</tbody>
</table>

Students who choose to read modules in Lists A and B must ensure that they have the necessary prerequisites.

**List A:**
- GE3210 Natural Resources: Policy and Practice
- GE3216 Applications of GIS and Remote Sensing
- GE3227 Urban Climates
- GE3231 Natural Hazards
- GE3238: GIS Design and Practices
- GE3246 Environmental Pollution
- **GE3226 Tourism and Development (new)**
- XD3103 Planet Earth
- ESE3101 Solid and Hazardous Waste Management
- ESE3201 Air Quality Management
- ESE3301 Environmental Microbiological Principles
- ESE3401 Waste and Wastewater Engineering 1
- PF3302 Energy Management
- PS3274 Environmental Politics
- AR2723 Strategies for Sustainable Architecture
- **DSC3201/DOS3701 Supply Chain Management (new)**
- RE3901 Advanced Urban Planning (new)

**List B:**
- GE4207 Coastal Management (5 MC)
- GE4211 Advanced Hydrology and Water Resources Management (5 MC)
- GE4212 Environmental Modelling (5 MC)
- GE4214 Remote Sensitive to Environment (5 MC)
- **GE4218 Interpreting Tourism Space and Cultures (5 MC, new)**
- GE4219 Development and Environment in Southeast Asia (5 MC)
- GE4220 Field Investigation in Physical Geography (5 MC)
- **GE4221 Field Investigation in Human Geography (5 MC, new)**
- GE4222 Advanced Geomorphology (5 MC)
- GE4223 Development of Geographical Thought (5 MC)
- GE4227 Climate Change: Processes, Impact and Responses (5 MC)
- GE4229 Earth Systems Science (5 MC)
- GE4232 Global and Political Ecologies (5 MC, new)
- **GE4233 Geography in the Contemporary World (5 MC, new)**
- CE4231 Earth’s Climate: Science & Modelling
- ESE4301 Wastewater Biotechnology
- ESE4401 Water & Wastewater Engineering 2
- ESE4402 Treatment Plant Hydraulics

Students can take one Level 2000/3000 YID-coded or YSS3229 Urbanisation and the Environment from Yale-NUS Environmental Studies to count towards your major requirements. Any additional Yale-NUS modules read will be counted towards unrestricted electives.

_Last update 19/6/19_
### Programme Requirements for Bachelor of Environmental Studies

(For Cohorts AY19/20 and after)

#### Environmental Geography Specialisation

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        EC1301 Principles of Economics  
        ENV1101 Environmental Studies: An Interdisciplinary Overview  
        GE1101E Geographical Journeys: Exploring World Environments  
        MA1312 Calculus with Applications  
        ENV1202 Communications for Environmental Studies | 24 |
| 2000  | ENV2101 Global Environmental Change  
        ENV2102 Environmental Law  
        ENV2103 The Environment and Public Health  
        LSM2252 Biodiversity  
        GE2101 Methods and Practices in Geography  
        EC2383 Environmental Economics (new)  
        Choose 3 modules from the following list:  
        ESE2401 Water Science & Technology  
        GE2215 Introduction to GIS and Remote Sensing Methods  
        GE2218 Leisure, Recreation and Tourism (new)  
        GE2220 Terrestrial and Coastal Environment  
        GE2221 Nature and Society  
        GE2222 Politics and Space (new)  
        GE2228 Weather and Climate  
        GE2229 Water and the Environment  
        GE2230 Energy Futures: Environment and Sustainability  
        GE2233 Geospatial Analytics for Biodiversity Conservation  
        HY2235 Environmental History  
        LSM2251 Ecology & Environment  
        LSM2253 Applied Data Analysis in Ecology and Evolution  
        PH2216 Environmental Philosophy  
        PH2226 Concept of Nature in Inquiry  
        RE2701 Urban Planning  
        SC2221 Environment & Society  
        ^Students have the choice to read both PH 2216 and PH 2226. However, only 4 MC can satisfy the programme requirements. The other 4 MC will count towards Unrestricted Elective. | 60 |
| 3000  | ENV3101 Environmental Challenges: Asian Case Studies I  
        ENV3102 Environmental Challenges: Asian Case Studies II  
        Choose any 2 of the following modules with not more than 1 module from List C:  
        GE3210 Natural Resources: Policy and Practice  
        GE3216 Applications of GIS and Remote Sensing  
        GE3226 Tourism and Development (new)  
        GE3227 Urban Climates  
        GE3230A Field Studies in Geography: Southeast Asia (8 MC)†  
        GE3231 Natural Hazards  
        GE3238 GIS Design and Practices  
        GE3240 Geographical Research: Developing Ideas  
        GE3246 Environmental Pollution  
        XD3103 Planet Earth | 76 |

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List C modules#

* Students have the choice to read both internship and GE3551. However, only 4 MC can satisfy the programme requirement. The other 4 MC will count towards Unrestricted Electives.

<table>
<thead>
<tr>
<th>4000</th>
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</thead>
<tbody>
<tr>
<td>GE4401 Honours Thesis (15 MC) OR Coursework option: Read an additional 3 Level 4000 GE-coded modules from elective list below (15 MC)</td>
</tr>
<tr>
<td>ENV4101 Environmental Management in Singapore</td>
</tr>
<tr>
<td>Choose any 2 of the following modules with not more than 1 module from List D:</td>
</tr>
<tr>
<td>GE4207 Coastal Management (5 MC)</td>
</tr>
<tr>
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</tr>
<tr>
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</tr>
<tr>
<td>GE4214 Remote Sensing of Environment (5 MC)</td>
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List D modules#

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<tr>
<td>LSM4254 Principles of Taxonomy and Systematics</td>
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<td>ESE4301 Wastewater Biotechnology</td>
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<tr>
<td>ESE4301 Wastewater Engineering 2</td>
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<tr>
<td>ESE4402 Treatment Plant Hydraulics</td>
</tr>
</tbody>
</table>

Students who choose to read modules in Lists C and D must ensure that they have the necessary prerequisites.

**List C:**
- LSM3252 Evolution and Comparative Genomics
- LSM3254 Ecology of Aquatic Environments
- LSM3255 Ecology of Terrestrial Environments
- LSM3256 Tropical Horticulture
- LSM3262 Environmental Animal Physiology
- LSM3263 Field Studies in Neotropical Ecosystems
- LSM3265 Entomology
- LSM3266 Avian Biology and Evolution
- LSM3267 Behavioural Biology
- ESE3101 Solid and Hazardous Waste Management
- ESE3201 Air Quality Management
- ESE3301 Environmental Microbiological Principles
- ESE3401 Waste and Wastewater Engineering 1
- PF3302 Energy Management
- PS3274 Environmental Politics
- AR2723 Strategies for Sustainable Architecture
- DSC3201/DOS3701 Supply Chain Management (new)
- RE3901 Advanced Urban Planning (new)

**List D:**
- LSM4254 Principles of Taxonomy and Systematics
- LSM4255 Methods in Mathematical Biology
- LSM4257 Aquatic Vertebrate Diversity
- LSM4260 Plankton Ecology (new)
- LSM4261 Marine Biology
- LSM4262 Tropical Conservation Biology
- LSM4263 Field Studies in Biodiversity
- LSM4264 Freshwater Biology
- LSM4265 Urban Ecology
- LSM4266 Aquatic Invertebrate Diversity (new)
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