Graduation Requirements for AY16/17

Environmental Biology

Summary of Requirements | MCs
---|---
UNIVERSITY LEVEL REQUIREMENTS | 20
General Education | 5 Pillars:
- Quantitative Reasoning (GER1000)
- Asking Questions (GEQ1000)
- Human Cultures (GEH)
- Singapore Studies (GES)
- Thinking and Expression (GET)
UNRESTRICTED ELECTIVES | 23-24
PROGRAMME REQUIREMENTS | 116-117
TOTAL | 160

Environmental Geography

Summary of Requirements | MCs
---|---
UNIVERSITY LEVEL REQUIREMENTS | 20
General Education | 5 Pillars:
- Quantitative Reasoning (GER1000)
- Asking Questions (GEQ1000)
- Human Cultures (GEH)
- Singapore Studies (GES)
- Thinking and Expression (GET)
UNRESTRICTED ELECTIVES | 18-19
PROGRAMME REQUIREMENTS | 121-122
TOTAL | 160

Students admitted from AY16/17 onwards and who are enrolled in USP or UTCP programmes are required to read a module from the **Quantitative Reasoning (GER1000)** 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.

Module offerings varies every academic year. Students are advised to check the latest list of modules offered from NUSMods. A list of BES electives that will be offered in the subsequent academic year will be emailed to you by July of each year.
## Programme Requirements for Bachelor of Environmental Studies
(For Cohorts AY16/17 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  
       ESE1001/ESE1001 FC Environmental Engineering Fundamentals  
       GE1101E Geographical Journeys: Exploring World Environments  
       MA1312 Calculus with Applications  
       ST1232 Statistics to Life Sciences  
       ENV1202 Communications for Environmental Studies | 32 |
| 2000  | ENV2101 Global Environmental Change  
       ENV2102 Environmental Law  
       ENV2103 The Environment and Public Health  
       LSM2252 Biodiversity  
       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  
       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  
       ENV3103 Environmental Economics*  
       Choose any 3 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 | 84 |
**ENV3202 Environmental Studies Internship Programme (4 MC)**

* List A modules*

* ENV3103 will not be offered from AY19/20 onwards. Students who have yet to read the module will read EC2383 *Environmental Economics* instead.

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

<table>
<thead>
<tr>
<th>LSM4199 Honours Project (16 MC) OR LSM4299 Applied Project (16MC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose any 3 of the following modules with not more than 1 module from List B:</td>
</tr>
<tr>
<td>LSM4254 Principles of Taxonomy and Systematics</td>
</tr>
<tr>
<td>LSM4255 Methods in Mathematical Biology</td>
</tr>
<tr>
<td>LSM4257 Aquatic Vertebrate Diversity</td>
</tr>
<tr>
<td>LSM4260 Plankton Ecology (new)</td>
</tr>
<tr>
<td>LSM4261 Marine Biology</td>
</tr>
<tr>
<td>LSM4262 Tropical Conservation Biology</td>
</tr>
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<td>LSM4263 Field Studies in Biodiversity</td>
</tr>
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<td>LSM4264 Freshwater Biology</td>
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<tr>
<td>LSM4265 Urban Ecology</td>
</tr>
<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>

List B modules*

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 Sensing of 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.
# Programme Requirements for Bachelor of Environmental Studies
(For Cohorts AY16/17 and After)
Environmental Geography Specialisation

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      | EC1301 Principles of Economics
      | ENV1101 Environmental Studies: An Interdisciplinary Overview
      | ESE1001/ESE1001 FC Environmental Engineering Fundamentals
      | GE1101E Geographical Journeys: Exploring World Environments
      | MA1312 Calculus with Applications
      | ST1232 Statistics to Life Sciences
      | ENV1202 Communications for Environmental Studies | 32 |
| 2000  | ENV2101 Global Environmental Change
      | ENV2102 Environmental Law
      | ENV2103 The Environment and Public Health
      | LSM2252 Biodiversity
      | 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
      | 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
      | ENV3103 Environmental Economics*
      | GE3240 Geographical Research: Developing Ideas
      | Choose any 3 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
      | GE3246 Environmental Pollution | 88 |
XD3103 Planet Earth
GE3551 FASS UROP or
ENV3202 Environmental Studies Internship Programme (4 MC) **

List C modules#

*ENV3103 will not be offered from AY19/20 onwards. Students who have yet to read the module will read EC2383 Environmental Economics instead.

† If students read GE3230A, they will be deemed to have fulfilled 2 out of the 3 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.

GE4401 Honours Thesis (15 MC) OR
Coursework Option: 3 Additional Level 4000 GE-coded modules from elective list below (15MC)

Choose any 3 of the following modules with not more than 1 module from List D:

GE4207 Coastal Management (5 MC)
GE4211 Advanced Hydrology and Water Resources Management (5 MC)
GE4212 Environmental Modelling (5 MC)
GE4214 Remote Sensing of 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)

List D modules#

121 - 122

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

<table>
<thead>
<tr>
<th>List C:</th>
<th>List D:</th>
</tr>
</thead>
<tbody>
<tr>
<td>LSM3252 Evolution and Comparative Genomics</td>
<td>LSM4254 Principles of Taxonomy and Systematics</td>
</tr>
<tr>
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<td>ESE3101 Solid and Hazardous Waste Management</td>
<td>LSM4266 Aquatic Invertebrate Diversity (new)</td>
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<tr>
<td>ESE3201 Air Quality Management</td>
<td>LSM4267 Animal Communications &amp; Sensory Ecology</td>
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Last update 16/9/19
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.