Masters in Sustainable Development and Energy
also Postgraduate Diploma

This is a double Masters programme: the first taken at St Andrews for a year, the second at the Moscow State Institution of International Relations (MGIMO) which involves internship placements at an energy company in Moscow.

Programme Requirements

Postgraduate Diploma: *(this is also the Taught element of the MSc programmes):*

60 credits: SD5001 and SD5003
60 credits: 5000-level modules chosen in consultation with the Programme Director and any other School involved. These may be substituted by credits from Russian language modules at a level appropriate to the student’s skills/knowledge (non-native speakers of Russian Only).

**MSc:**

120 credits, as for the Postgraduate Diploma (taught element)- plus SD5299

**Partner subjects:** In addition to SD coded options modules, students may, with the permission of their advisor and the schools concerned, also ‘dip across’ to some modules in Earth Science, Geography, History, Management and Medicine (details below).

**Compulsory module - Semester 1:**

<table>
<thead>
<tr>
<th><strong>SD5001 Interrogating Sustainable Development</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SCOTCAT Credits:</strong></td>
</tr>
<tr>
<td><strong>Planned timetable:</strong></td>
</tr>
</tbody>
</table>

This module provides an introduction to sustainable development. First, it introduces the history and application of the concept of sustainable development. Second, there is a series of disciplinary-based lectures that describe the nature and functioning of the social, political, economic and physical, and systems that combine to create the world that we can observe around us. Specific material will also be presented that links these various aspects together and explores their interactions.

In addition, this module will have a short induction component to it during the pre-sessional week of term which has a three-fold purpose: (i) to introduce students to the shape of the degree program and St Andrews, (ii) allow students to explore their existing skill base and identify what skills require further work and (iii) provide a context (in the form of a field trip) within which to start an investigation of what interdisciplinarity entails. This will entail two one-day seminars.

**Programme module type:** Compulsory for the Postgraduate Diploma, MSc and MRes Sustainable Development, MSc Sustainable Development and Energy and MSc Sustainable Development and Environmental Economics.

**Learning and teaching methods and delivery:** Weekly contact: 1 x 3-hour seminar

**Assessment pattern:** 2-hour Written Examination = 50%, Coursework = 50%

**Module Co-ordinator:** Dr D McCauley
Compulsory module - Semester 2:

**SD5003 Master Class in Sustainable Development**

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>30</th>
<th>SCQF Level 11</th>
<th>Semester:</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planned timetable:</td>
<td>2.00 pm - 5.00 pm Tue</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This module has four elements: (i) a series of presentations by academic experts in their chosen field of sustainable development along with structured reflection and further exploration of these various topic areas, (ii) the development and presentation (in groups) of case studies of sustainable development problems and/or exemplars of excellence in sustainable development, and (iii) two field trips to examine examples of sustainable development in practice, (iv) the completion of two master class review essays in specialised areas of sustainable development. This module is designed to provide you with an ability to critically reflect on the potential and limitations of sustainable development.

**Programme module type:** Compulsory for the Postgraduate Diploma, MSc and MRes Sustainable Development and MSc Sustainable Development and Energy

Strongly recommended for MSc Sustainable Development and Environmental Economics

**Learning and teaching methods and delivery:**

Weekly contact: 1 x 3-hour seminar weekly plus field trips

**Assessment pattern:** Coursework = 100%

**Module Co-ordinator:** Dr D McCauley

---

Compulsory Module for MSc:

**SD5299 Dissertation in Sustainable Development and Energy**

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>60</th>
<th>SCQF Level 11</th>
<th>Semester:</th>
<th>Whole Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planned timetable:</td>
<td>12.00 noon - 1.00 pm Tue</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This module creates the context within which students are able to investigate a substantive sustainable development topic in considerable depth. It is the capstone module of the Masters degree in sustainable development. The dissertation is an academic evaluation and exploration of a key debate in sustainable development. Its format is an empirically or theoretically driven essay with an upper limit of 15,000 words. The selection of the topic is negotiated between the student and relevant potential supervisors.

**Programme module type:** Compulsory for the MSc Sustainable Development and Energy

**Learning and teaching methods and delivery:**

Weekly contact: 1 x 1-hour seminar.

**Assessment pattern:** Coursework (Dissertation) = 100%

**Module Co-ordinator:** Dr D McCauley
Optional modules:

**SD5023 Economics for the Environment**

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>20</th>
<th>SCQF Level: 11</th>
<th>Semester:</th>
<th>2</th>
</tr>
</thead>
</table>

**Planned timetable:** 11.00 am - 1.00 pm Wed

This module introduces students to the contributions that environmental economics can make to helping us understand and manage a wide range of environmental problems. We also study the insights which economics provides on the relationship between economic growth and environmental quality, and the measurement of sustainability. No prior knowledge of economics is presumed, and a course textbook is available which is co-written by one of the course lecturers.

**Programme module type:** Compulsory for MSc Sustainable Development and Environmental Economics
Optional for the Postgraduate Diploma, MSc and MRes Sustainable Development and MSc Sustainable Development and Energy

**Learning and teaching methods and delivery:** Weekly contact: 1 x 2-hour seminar weekly plus field trips

**Assessment pattern:** 2-hour Written Examination = 50%, Coursework = 50%

**Module Co-ordinator:** Prof N Hanley

**SD5101 Development and Environment**

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>20</th>
<th>SCQF Level: 11</th>
<th>Semester:</th>
<th>1</th>
</tr>
</thead>
</table>

**Planned timetable:** 10.00 am - 12.00 noon Wed

The world has changed dramatically since the early 1700s, before the onset of modern economic growth starting and the industrial revolution. However, despite rapid advancements the world today is divided between high-income, middle-income and low-income countries. This module takes a broad perspective on economic development and how economic development interacts with the environment. The module introduces key concepts in economic development and natural resource management.

**Programme module type:** Compulsory for MSc Sustainable Development and Environmental Economics
Optional for MSc Sustainable Development
Optional for MSc Sustainable Development and Energy

**Anti-requisite(s):** SD3224

**Learning and teaching methods and delivery:** Weekly contact: 2-hour lectures (x 11 weeks)

**Assessment pattern:** 2-hour Written Examination = 50%, Coursework = 50%

**Module Co-ordinator:** Dr E McLaughlin
SD5102 Public Policy and the Environment

**SCOTCAT Credits:** 20  
**SCQF Level:** 11  
**Semester:** 2

**Planned timetable:** 2.00 pm - 4.00 pm Thu

This module is seminar based and will introduce students to advanced topics in environmental economics. It follows on from SD5023 and SD5101.

**Programme module type:** Compulsory for MSc Sustainable Development and Environmental Economics  
Optional for MSc Sustainable Development  
Optional for MSc Sustainable Development and Energy

**Co-requisite(s):** SDS023

**Learning and teaching methods and delivery:**  
**Weekly contact:** 2-hour seminar (x 11 weeks)

**Assessment pattern:** Coursework = 100%

**Module Co-ordinator:** Dr E McLaughlin

**Lecturer(s):** Dr E McLaughlin

---

**Further optional modules are available from partner Schools/Departments:**

**Partner subjects:** In addition to SD coded options modules, students may, with the permission of their advisor and the schools concerned, also ‘dip across’ to some modules in Earth Sciences, Geography, History, Management and Medicine (details below).

**Earth Sciences:**

**EG3020 Global Climate Change**

**SCOTCAT Credits:** 15  
**SCQF Level:** 11  
**Semester:** 1

**ES5011 Water in the Environment**

**SCOTCAT Credits:** 15  
**SCQF Level:** 11  
**Semester:** 1

**ES5050 Earth’s Greatest Hits**

**SCOTCAT Credits:** 15  
**SCQF Level:** 11  
**Semester:** 2

**IDS011 Geographic Information Systems for Environmental Management**

**SCOTCAT Credits:** 15  
**SCQF Level:** 11  
**Semester:** 1

**Geography:**

**GG5227 Introduction to Geographic Information Science**

**SCOTCAT Credits:** 20  
**SCQF Level:** 11  
**Semester:** 1

**SS5101 Being a Social Scientist**

**SCOTCAT Credits:** 15  
**SCQF Level:** 11  
**Semester:** 1
### Geography & Sustain Development - Sustainable Development and Energy MSc - 2016/7 - August 2016

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>SCOTCAT Credits</th>
<th>SCQF Level</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>SS5102</td>
<td>Philosophy and Methodology of the Social Sciences</td>
<td>15</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>SS5103</td>
<td>Qualitative Methods in Social Research</td>
<td>15</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>SS5104</td>
<td>Quantitative Research in Social Science</td>
<td>15</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>SG4228</td>
<td>Advanced Topics in Geographic Information Science (GISci)</td>
<td>15</td>
<td>11</td>
<td>1</td>
</tr>
</tbody>
</table>

#### History:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>SCOTCAT Credits</th>
<th>SCQF Level</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>MO5223</td>
<td>Disease and Environment (c.1500 - c.2000) (20)</td>
<td>20</td>
<td>11</td>
<td>1</td>
</tr>
</tbody>
</table>

#### Management:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>SCOTCAT Credits</th>
<th>SCQF Level</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>MN5513</td>
<td>Ethics, Organisations and Management</td>
<td>20</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>MN5311</td>
<td>Responsible Investment</td>
<td>20</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>MN5821</td>
<td>Managing Non-Governmental Organisations</td>
<td>20</td>
<td>11</td>
<td>2</td>
</tr>
</tbody>
</table>

#### Medicine:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>SCOTCAT Credits</th>
<th>SCQF Level</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDS201</td>
<td>Issues in Global Health</td>
<td>15</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>MDS202</td>
<td>Principles in Implementation Science</td>
<td>15</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>MDS203</td>
<td>Ten Global Health Problems</td>
<td>15</td>
<td>11</td>
<td>1</td>
</tr>
</tbody>
</table>
### MD5204 Globalisation and Health

| SCOTCAT Credits: | 15 | SCQF Level: 11 | Semester: | 2 |

### MD5205 Inequalities and Inequities in Global Health

| SCOTCAT Credits: | 15 | SCQF Level: 11 | Semester: | 2 |

### MD5206 Evidence Synthesis for Global Health Policy, Programming, and Practice

| SCOTCAT Credits: | 15 | SCQF Level: 11 | Semester: | 2 |