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|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Degree Programme        | <b>BSc and MEarthSci Environmental Science</b>                                                                                                                                                                                                                  |
| Pathway:                | <b>Pollution and Environmental Processes</b>                                                                                                                                                                                                                    |
| Academic year of study: | <b>2022/23</b>                                                                                                                                                                                                                                                  |
| Document link:          | If you are reading a printed version of this document you should check <a href="http://documents.manchester.ac.uk/display.aspx?DocID=44096">http://documents.manchester.ac.uk/display.aspx?DocID=44096</a> to ensure that you have the most up to date version. |
| Contact:                | If you have any questions about this structure, please contact <a href="mailto:earth.support@manchester.ac.uk">earth.support@manchester.ac.uk</a>                                                                                                               |

| <b>Second Year</b>                                                                                                                                                                                         |                                                                    |            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|------------|
| <b>Core Units</b>                                                                                                                                                                                          |                                                                    |            |
| You will automatically be enrolled on these units by the Earth Support Team.                                                                                                                               |                                                                    |            |
| <b>EART29200</b>                                                                                                                                                                                           | Professional Development and Project Preparation                   | 10 credits |
| <b>EART22001</b>                                                                                                                                                                                           | Environmental Modelling                                            | 10 credits |
| <b>EART23001</b>                                                                                                                                                                                           | Atmospheric Physics and weather                                    | 10 credits |
| <b>EART25001</b>                                                                                                                                                                                           | Ecology and Conservation                                           | 10 credits |
| <b>EART27001</b>                                                                                                                                                                                           | Environmental Chemistry 1: Water-Solid-Air Interactions            | 10 credits |
| <b>EART21102</b>                                                                                                                                                                                           | Environmental Microbiology                                         | 10 credits |
| <b>EART28002</b>                                                                                                                                                                                           | Environmental Chemistry 2: Biogeochemical Cycles                   | 10 credits |
| <b>EART29002</b>                                                                                                                                                                                           | Environmental Enterprise                                           | 10 credits |
| <b>EART29102</b>                                                                                                                                                                                           | Geospatial Techniques                                              | 10 credits |
| <b>EART27102</b>                                                                                                                                                                                           | Field Course: Environmental Science                                | 10 credits |
| <b>Optional Units</b>                                                                                                                                                                                      |                                                                    |            |
| You must select TWO of the following optional units; one in semester 1 and one in semester 2.                                                                                                              |                                                                    |            |
| <b>EART26001</b>                                                                                                                                                                                           | Energy and Resources                                               | 10 credits |
| <b>EART22101</b>                                                                                                                                                                                           | Evolution and Palaeobiology                                        | 10 credits |
| <b>EART27201</b>                                                                                                                                                                                           | Sedimentary Rocks and Fossils                                      | 10 credits |
| <b>EART21202</b>                                                                                                                                                                                           | Global Climate Change                                              | 10 credits |
| <b>BIOL21202</b>                                                                                                                                                                                           | Plants for the Future                                              | 10 credits |
| <b>EART23202</b>                                                                                                                                                                                           | Interpreting the Stratigraphic Record: From Surface to Subsurface* | 10 credits |
| You may also choose 1 unit (up to 20 credits max) – UCIL or Language unit**                                                                                                                                |                                                                    |            |
| <p>* If chosen, students should also choose EART27201 Sedimentary Rocks and Fossils.</p> <p>**Note that BIOL and UCIL units may clash with EART units and we cannot guarantee that this can be avoided</p> |                                                                    |            |

| Third Year                                                                                                  |                                                                                 |            |
|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|------------|
| Core Units                                                                                                  |                                                                                 |            |
| You will automatically be enrolled on these units by the Earth Support Team.                                |                                                                                 |            |
| <b>EART34000</b>                                                                                            | Pollution or Environmental Processes Research Project                           | 30 credits |
| <b>EART31000</b>                                                                                            | Communicating Science                                                           | 10 credits |
| <b>EART39001</b>                                                                                            | Environmental Challenges: Air Pollution in Major Cities                         | 10 credits |
| <b>EART31101</b>                                                                                            | Environmental Challenges: Arctic Climate Warming                                | 10 credits |
| <b>EART33102</b>                                                                                            | Environmental Challenges: Waste Disposal                                        | 10 credits |
| <b>EART32102</b>                                                                                            | Environmental Challenges: Arsenic Contamination in Asia                         | 10 credits |
| <b>EART35302</b>                                                                                            | Field Course: Integration of Environmental Investigations, Tenerife             | 10 credits |
| Optional Units                                                                                              |                                                                                 |            |
| You must select THREE of the following optional units; a maximum of one unit in semester 2.                 |                                                                                 |            |
| <b>EART38202</b>                                                                                            | Resource Projects: Life Cycles, Risk Analysis, Decision Making and Case Studies | 10 credits |
| <b>EART33001</b>                                                                                            | Analytical Techniques in Earth and Environmental Sciences                       | 10 credits |
| <b>EART37202</b>                                                                                            | Remote Sensing of Atmospheres                                                   | 10 credits |
| <b>EART31201</b>                                                                                            | Meteorology and Forecasting                                                     | 10 credits |
| <b>EART35001</b>                                                                                            | Atmospheric Composition                                                         | 10 credits |
| <b>EART34102</b>                                                                                            | Geoenergy                                                                       | 10 credits |
| <b>EART36002</b>                                                                                            | Climate and Energy: Past, Present and Future                                    | 10 credits |
| <b>BIOL31551</b>                                                                                            | Human Impacts on the Biosphere                                                  | 10 credits |
| <b>BIOL31541</b>                                                                                            | Living with Climate Change                                                      | 10 credits |
| You may also choose 1 unit (up to 20 credits max) – UCIL or Language unit*                                  |                                                                                 |            |
| ** Note that BIOL and UCIL units may clash with EART units and we cannot guarantee that this can be avoided |                                                                                 |            |

**PLEASE NOTE:**

When selecting your course units you must ensure you enrol on:

- 120 credits in total (including any core units)
- A minimum of 50 credits per semester
- A maximum of 70 credits per semester

## MEnvSci (All pathways)

**2<sup>nd</sup> and 3<sup>th</sup> year:** Same as regular BSC programmes

| Fourth Year                                                                  |                                                                                                    |            |
|------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|------------|
| Core Units                                                                   |                                                                                                    |            |
| You will automatically be enrolled on these units by the Earth Support Team. |                                                                                                    |            |
| <b>EART40000</b>                                                             | Research Project in Environmental Sciences                                                         | 60 credits |
| <b>EART40012</b>                                                             | Integrated Earth and Environmental Science field course                                            | 15 credits |
| <b>EART40031</b>                                                             | Communicating Earth and Environmental Science                                                      | 15 credits |
| <b>EART40130</b>                                                             | Topics in Earth, Planetary and Environmental Sciences                                              | 15 credits |
| Optional Units                                                               |                                                                                                    |            |
| Select 15 credits from the following                                         |                                                                                                    |            |
| <b>UCIL60312</b>                                                             | Creating a Sustainable world: Interdisciplinary Applications of the sustainable Development Goals† | 15 credits |
| <b>EART4XXX0</b>                                                             | Option in Earth and Planetary Sciences                                                             | 15 credits |

## MEnvSci (All pathways) with Industrial Experience

**2<sup>nd</sup> year:** Same as regular BSC programmes

**3<sup>th</sup> year**

EART39970      Core Environmental Science

EART39990      Placement in industry

| Fourth Year                                                                  |                                                                                                    |            |
|------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|------------|
| Core Units                                                                   |                                                                                                    |            |
| You will automatically be enrolled on these units by the Earth Support Team. |                                                                                                    |            |
| <b>EART40000</b>                                                             | Research Project in Environmental Sciences                                                         | 60 credits |
| <b>EART40012</b>                                                             | Integrated Earth and Environmental Science field course                                            | 15 credits |
| <b>EART40031</b>                                                             | Communicating Earth and Environmental Science                                                      | 15 credits |
| <b>EART40130</b>                                                             | Topics in Earth, Planetary and Environmental Sciences                                              | 15 credits |
| Optional Units                                                               |                                                                                                    |            |
| Select 15 credits from the following                                         |                                                                                                    |            |
| <b>UCIL60312</b>                                                             | Creating a Sustainable world: Interdisciplinary Applications of the sustainable Development Goals† | 15 credits |
| <b>EART4XXX0</b>                                                             | Option in Earth and Planetary Sciences                                                             | 15 credits |

## MEnvSci (All pathways) with International Study

**2<sup>nd</sup> year:** Same as regular BSC programmes

**3<sup>th</sup> year**

EART39950 Study at University Abroad

| Fourth Year                                                                  |                                                                                                    |            |
|------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|------------|
| Core Units                                                                   |                                                                                                    |            |
| You will automatically be enrolled on these units by the Earth Support Team. |                                                                                                    |            |
| <b>EART40000</b>                                                             | Research Project in Environmental Sciences                                                         | 60 credits |
| <b>EART40012</b>                                                             | Integrated Earth and Environmental Science field course                                            | 15 credits |
| <b>EART40031</b>                                                             | Communicating Earth and Environmental Science                                                      | 15 credits |
| <b>EART40130</b>                                                             | Topics in Earth, Planetary and Environmental Sciences                                              | 15 credits |
| Optional Units                                                               |                                                                                                    |            |
| Select 15 credits from the following                                         |                                                                                                    |            |
| <b>UCIL60312</b>                                                             | Creating a Sustainable world: Interdisciplinary Applications of the sustainable Development Goals† | 15 credits |
| <b>EART4XXX0</b>                                                             | Option in Earth and Planetary Sciences                                                             | 15 credits |

## MEnvSci (All pathways) with a Research Placement

**2<sup>nd</sup> year:** Same as regular BSC programmes

**3<sup>th</sup> year**

EART39970 Core Environmental Science

EART39980 Year in Research

| Fourth Year                                                                  |                                                                                                    |            |
|------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|------------|
| Core Units                                                                   |                                                                                                    |            |
| You will automatically be enrolled on these units by the Earth Support Team. |                                                                                                    |            |
| <b>EART40000</b>                                                             | Research Project in Environmental Sciences                                                         | 60 credits |
| <b>EART40012</b>                                                             | Integrated Earth and Environmental Science field course                                            | 15 credits |
| <b>EART40031</b>                                                             | Communicating Earth and Environmental Science                                                      | 15 credits |
| <b>EART40130</b>                                                             | Topics in Earth, Planetary and Environmental Sciences                                              | 15 credits |
| Optional Units                                                               |                                                                                                    |            |
| Select 15 credits from the following                                         |                                                                                                    |            |
| <b>UCIL60312</b>                                                             | Creating a Sustainable world: Interdisciplinary Applications of the sustainable Development Goals† | 15 credits |
| <b>EART4XXX0</b>                                                             | Option in Earth and Planetary Sciences                                                             | 15 credits |

† Available to all except those who completed the unit at undergraduate level