Programme-specific Section of the Curriculum for the MSc Programme in Environmental and Natural Resource Economics at the Faculty of Science, University of Copenhagen 2013 (Rev. 2020)

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1 Title, affiliation and language
A shared section that applies to all BSc and MSc Programmes at the Faculty of Science is linked to this programme-specific curriculum.

1.1 Title
The MSc Programme in Environmental and Natural Resource Economics leads to a Master of Science (MSc) in Environmental and Natural Resource Economics with the Danish title: 
*Cand.scient.oecon* (candidatus/candidata scientiarum oeconomiae).

1.2 Affiliation
The programme is affiliated with the Study Board of Natural Resources, Environment and Animal Science, and the students can both elect, and be elected, to this study board.

1.3 Corps of external examiners
The following corps of external examiners is used for the central parts of the MSc Programme:
- Corps of External Examiners for Agricultural Science (*jordbrugsvidenskab*).

1.4 Language
The language of this MSc Programme is English.

2 Academic profile
2.1 Purpose
The objective of the programme is to offer students a coherent and profession-oriented education within the field of environmental and natural resource economics. On completion of the programme, participants will have acquired the skills required to conduct a broad spectrum of environmental and natural resource economic analyses. Among other things, students will become familiar with environmental policy and project appraisal, and such policy issues as how to use economic instruments to control pollution problems and how to optimise the extraction of natural resources over time.

2.2 General programme profile
Environmental and natural resource economics is the key subject area of the programme. During the programme, students will develop broad and professional competences enabling them to:
- Understand economic theory and assess the validity of economic statements.
- Perform qualitative as well as quantitative analyses based on the theory and methodology of environmental and natural resource economics.
- Understand basic information on environmental phenomena in natural science.
- Assess the statements of environmental and natural resource economics in a comprehensive political, social and ethical context.

A number of compulsory discipline-oriented courses ensures that participants obtain a comprehensive and coherent understanding of environmental and natural resource economics. An introduction to applied ecology and management of ecosystems keeps the focus on the physical and biological conditions and processes underlying environmental and natural resource policy problems.

The programme offered is a two-year Master of Science degree conducted in English. The core curriculum is focused on the theoretical and methodological aspects of environmental
and natural resource economics. The programme is open to students holding a BSc in Social or Natural Science and a good knowledge of mathematics, statistics and basic economics. Admission of students from all around the world with different scientific backgrounds provides the programme with an interdisciplinary anchoring and an international atmosphere. Throughout, the programme maintains an emphasis on incorporating the biophysical aspects of environmental problems into the framework of environmental and resource economics analysis. Teaching is given in the form of lectures, seminars and tutoring in relation to project work. Project work is often carried out in groups.

2.3 General structure of the programme
The MSc Programme is set at 120 ECTS.

There are no defined specialisations in this programme.

2.4 Career opportunities
The MSc Programme in Environmental and Natural Resource Economics qualifies students to become professionals within business functions and/or areas such as:

- A PhD programme
- Environmental and resource economic analyses – for example applied to the implementation of environmental policy instruments.
- Environmental policy and project appraisal.
- Jobs within government agencies.
- Jobs within research institutes.
- Jobs within consulting companies.
- Jobs within industry and private businesses.
- Graduates from this programme will often be in charge of solving broad-spectrum environmental challenges that require interplay between economics, natural science and law.

3 Description of competence profiles
Students following the MSc Programme acquire the knowledge, skills and competences listed below. Students will also acquire other qualifications through elective subject elements and other study activities.

3.1 Generic competence profile
On completion of the programme, an MSc in Environmental and Natural Resource Economics has acquired the following:

Knowledge about:
- The welfare economic foundation of environmental and natural resource economics.
- Environmental and natural resource economic disciplines and the analytical methodologies applied within these disciplines.
- The theoretical frameworks and value concepts underlying environmental and natural resource economics as compared to competing theoretical frameworks and conceptualisations of value.
- Other economic disciplines relevant to the analysis of environmental and natural resource problems.
- Relevant environmental technology and phenomena as well as biophysical processes within natural science.
- Major environmental policy issues and discussions from local to global level.
Relevant policy instruments to manage environmental problems and the utilisation/extraction of natural resources.

Skills in/to:
- Carry out quantitative as well as qualitative analyses of environmental and natural resource policy problems based on appropriate theories and methods and using relevant digital technology.
- Use state-of-the-art statistical and analytical techniques used in environmental policy and project appraisals such as economic valuation methods and cost-benefit analysis.
- Integrating new scientific findings in professional or research activities at a high academic level.
- Discuss alternative economic theories and recommendations regarding environmental and natural resource issues.
- Showing awareness of and entering into scientific discussions and political disputes within areas of interest to environmental and natural resource economics.
- Critically assess the validity and limitations of economic theories, models and methodologies when dealing with different scientific problems.
- Communicate issues regarding environmental and natural resource economics effectively to specialist and non-specialist audiences, at a variety of levels.

Competences in/to:
- Assessing environmental and natural resource policy and economic problems and propose solutions based on a solid theoretical foundation in complex economic, biological, political, social and ethical contexts.
- Adapting different analytical approaches to unforeseen problems.
- Plan and coordinate projects.
- Working effectively in teams or on an individual basis in multi-disciplinary settings, exercising initiative, personal and management responsibilities as required.
- Valuing lifelong learning as a principle and demonstrate the independent learning ability to structure ongoing learning processes effectively.

4 Admission requirements
With a Bachelor’s degree in Natural Resources (naturressourcer) with the specialisation in Environmental Economics (miljøøkonomi) from the University of Copenhagen the student is granted reserved access and guaranteed a place on the MSc Programme in Environmental and Natural Resource Economics if the student applies in time to begin the MSc Programme within three years of the completion of the Bachelor's degree.

4.1 Applicants with a closely related Bachelor’s degree
Applicants with a Bachelor’s degree in Natural Resources with the specialisation in Environmental Economics or a Bachelor’s degree in Agricultural Economics or in Economics, from the University of Copenhagen are directly academically qualified for admission to the MSc Programme in Environmental and Natural Resource Economics.

4.2 Applicants with a Bachelor’s degree from the Faculty of SCIENCE
Applicants with a Bachelor’s degree in Natural Resources with a specialisation in Plant Science, Environmental Science or Nature Management or another Bachelor's degree within the natural science area from the Faculty of Science at University of Copenhagen may also be admitted if their programme includes the following:
- LMAB10069U Statistisk dataanalyse 1, 7.5 ECTS
- NIFB14004U Environmental and Natural Resource Economics, 7.5 ECTS
And one of the following two subject elements:
- LOJB10259U Mikroøkonomi, 7.5 ECTS
- LOJB10225U Indledende økonomi, 7.5 ECTS

4.3 Applicants with a related Bachelor’s degree
Applicants with a Bachelor’s degree in a related field from the University of Copenhagen, other Danish or international universities may also be admitted if their programme includes the following:
- Microeconomics (at least 22.5 ECTS)
- Statistics (at least 7.5 ECTS)
- Econometrics (at least 7.5 ECTS)
- Mathematics (at least 7.5 ECTS)

4.4 Other applicants
The Faculty may also admit applicants who, after an individual academic assessment, are deemed to possess educational qualifications equivalent to those required in Subclauses 4.1-3.

4.5 Language requirements
Applicants must as a minimum document English language qualifications comparable to a Danish upper secondary school English B level or English proficiency corresponding to the tests and scores required. Accepted tests and required minimum scores are published online at www.science.ku.dk.

4.6 Supplementary subject elements
The qualifications of an applicant to the MSc program are assessed exclusively on the basis of the qualifying bachelor’s degree. Supplementary subject elements passed between the completion of the bachelor’s program and the admission to the MSc program cannot be included in the overall assessment.

However, students lacking the necessary credits in the field of Econometrics may be admitted on the condition that they pass the approved university level 7.5 ECTS Econometrics subject element (Econometrics1 – LOJB10283U), before the start date of the study programme.

Also, subject elements passed before the completion of the bachelor’s program may be included in the overall assessment. This includes subject elements completed as continuing education as well as subject elements completed as part of a former higher education program. A maximum of 30 ECTS supplementary subject elements can be included in the overall assessment.”

Subject elements passed before completing the BSc programme which are to form part of the MSc programme to which the student has a legal right of admission (§9-courses) cannot be included in the overall assessment.

5 Prioritisation of applicants
If the number of qualified applicants to the programme exceeds the number of places available, applicants will be prioritised as follows:
1) Applicants with a Bachelor’s degree in Natural Resources (naturressourcær with the specialisation in Environmental Economics (miljøøkonomi) from the University of Copenhagen with reserved access to the programme.

2) Applicants with a Bachelor’s degree in Economics, Agricultural Economics or Natural Resources with the specialisation in Environmental Economics from the University of Copenhagen.

3) Applicants with a Bachelor’s degree in Environmental and Natural Resource Economics or similar from other Danish or international universities.

4) Applicants with a Bachelor’s degree in Natural Resources with a specialisation in Plant Science, Environmental Science or Nature Management or another Bachelor’s degree within the natural science area from the Faculty of Science at the University of Copenhagen.

5) Other applicants.

If the number of qualified applicants within a category exceeds the number of places available, applicants will be prioritised according to the following criteria (listed below in prioritised order):

- Total amount of ECTS credits in microeconomics, statistics, econometrics and mathematics, with a special weight on microeconomics.
- Total amount of ECTS credits obtained in other courses that are relevant for understanding and managing environmental and natural resource problems

6 Structure of the programme
The compulsory subject elements, restricted elective subject elements and the thesis constitute the central parts of the programme (Section 21 of the Ministerial Order on Bachelor and Master’s Programmes (Candidatus) at Universities).

6.1 Programme components
The programme is set at 120 ECTS and consists of the following:

- Compulsory subject elements, 52.5 ECTS.
- Restricted elective subject elements, 22.5 ECTS:
  - 7.5 ECTS (thesis 30 ECTS).
  - 7.5 ECTS (thesis 45 ECTS)
- Elective subject elements, 15 ECTS.
- Thesis, 30 or 45 ECTS.

6.1.1 Compulsory subject elements
All of the following subject elements are to be covered (52.5 ECTS):

<table>
<thead>
<tr>
<th>Subject Code</th>
<th>Subject Name</th>
<th>Block</th>
<th>ECTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOJK10272U</td>
<td>Applied Econometrics</td>
<td>Block 1</td>
<td>7.5 ECTS</td>
</tr>
<tr>
<td>NIFK13003U</td>
<td>Applied Environmental and Natural Resource Economics</td>
<td>Block 4</td>
<td>7.5 ECTS</td>
</tr>
<tr>
<td>LOJK10248U</td>
<td>Economic Valuation Methods and Cost-Benefit Analysis</td>
<td>Block 3</td>
<td>7.5 ECTS</td>
</tr>
<tr>
<td>NIFK14003U</td>
<td>Incentives and Regulation</td>
<td>Block 3</td>
<td>7.5 ECTS</td>
</tr>
<tr>
<td>LOJK10229U</td>
<td>Natural Resource Economics</td>
<td>Block 2</td>
<td>7.5 ECTS</td>
</tr>
<tr>
<td>NIGK13008U</td>
<td>Ecology and Ecosystems Science in relation to Environmental Economics</td>
<td>Block 1+2</td>
<td>15 ECTS</td>
</tr>
</tbody>
</table>

6.1.2 Restricted elective subject elements
22.5 ECTS are to be covered as subject elements from the following list (thesis, 30 ECTS):
7.5 ECTS are to be covered as subject elements from the following list (thesis, 45 ECTS):

<table>
<thead>
<tr>
<th>Subject Code</th>
<th>Subject Name</th>
<th>Block</th>
<th>ECTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>NIFK14031U</td>
<td>Behavioural and Experimental Economics</td>
<td>Block 1</td>
<td>7.5 ECTS</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Block</td>
<td>ECTS</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------</td>
<td>-------</td>
<td>------</td>
</tr>
<tr>
<td>NIFK14026U</td>
<td>Entrepreneurship and Innovation</td>
<td>Block 1</td>
<td>7.5 ECTS</td>
</tr>
<tr>
<td>NIFK14022U</td>
<td>Industrial Organization</td>
<td>Block 1</td>
<td>7.5 ECTS</td>
</tr>
<tr>
<td>NIFK14023U</td>
<td>Advanced International Trade</td>
<td>Block 1</td>
<td>7.5 ECTS</td>
</tr>
<tr>
<td>NIFK14025U</td>
<td>Contracts and Cooperatives</td>
<td>Block 2</td>
<td>7.5 ECTS</td>
</tr>
<tr>
<td>NIFK14001U</td>
<td>Microeconomic and Econometric Production Analysis</td>
<td>Block 2</td>
<td>7.5 ECTS</td>
</tr>
<tr>
<td>NIFK16005U</td>
<td>Advanced Development Economics</td>
<td>Block 2</td>
<td>7.5 ECTS</td>
</tr>
<tr>
<td>NIFK16007U</td>
<td>Computational Methods for Policy Analysis in AgriFood Markets</td>
<td>Block 2</td>
<td>7.5 ECTS</td>
</tr>
<tr>
<td>NIFK16001U</td>
<td>Economic Efficiency and Benchmarking</td>
<td>Block 2</td>
<td>7.5 ECTS</td>
</tr>
<tr>
<td>LOJK10282U</td>
<td>Applied Economics of Forest and Nature</td>
<td>Block 2</td>
<td>7.5 ECTS</td>
</tr>
<tr>
<td>NIFK14032U</td>
<td>Business Development and Innovation</td>
<td>Block 3</td>
<td>7.5 ECTS</td>
</tr>
<tr>
<td>NIFK15003U</td>
<td>Applied Economics of Consumption</td>
<td>Block 4</td>
<td>7.5 ECTS</td>
</tr>
<tr>
<td>NIFK14026U</td>
<td>Entrepreneurship and Innovation</td>
<td>Block 4</td>
<td>7.5 ECTS</td>
</tr>
<tr>
<td>LOJK10255U</td>
<td>Agricultural and Food Policy</td>
<td>Block 4</td>
<td>7.5 ECTS</td>
</tr>
<tr>
<td>NIFK19001U</td>
<td>Working as a Consultant</td>
<td>Block 4</td>
<td>7.5 ECTS</td>
</tr>
<tr>
<td>NIFK19006U</td>
<td>Managing and Analyzing Data in Social Science</td>
<td>Block 5</td>
<td>7.5 ECTS</td>
</tr>
<tr>
<td>NFKK14006U</td>
<td>Project in Practice</td>
<td>Block 1-5</td>
<td>15 ECTS</td>
</tr>
</tbody>
</table>

6.1.3 Elective subject elements

15 ECTS are to be covered as elective subject elements.

All subject elements at MSc level may be included as elective subject elements in the MSc Programme.

BSc subject elements corresponding to 7.5 ECTS may be included in the MSc Programme.

Projects outside the course scope may be included in the elective section of the programme by up to 7.5 ECTS. The regulations are described in Appendix 5 to the shared section of the curriculum.

Projects in practice may not exceed 30 ECTS in total on the restricted elective and elective section of the programme. Project in practice may be written as a combination of the restricted elective and elective section of the programme. The regulations are described in Appendix 4 to the shared section of the curriculum.

Thesis preparation projects may not be included in the elective section of the programme. The regulations are described in Appendix 6 to the shared section of the curriculum.

6.1.4 Thesis

The MSc Programme in Environmental and Natural Resource Economics includes a thesis corresponding to 30 or 45 ECTS as described in Appendix 2 to the shared curriculum. The thesis must be written within the academic scope of the programme.

6.1.5 Academic mobility

The curriculum makes it possible to follow subject elements outside the Faculty of Science.

For students admitted in September the academic mobility in the MSc Programme in Environmental and Natural Resource Economics (thesis, 30 ECTS) is placed in block 1+2 of the 2nd year.
For students admitted in February the academic mobility in the MSc Programme in Environmental and Natural Resource Economics (thesis, 30 ECTS) is placed in block 3+4 of the 1st year.

Academic mobility requires that the student follows the rules and regulations regarding pre-approval and credit transfer.

In addition the student has the possibility to arrange similar academic mobility in other parts of the programme.

7 Exemptions
In exceptional circumstances, the study board may grant exemptions from the rules in the curriculum specified solely by the Faculty of Science.

8 Commencement etc.
8.1 Validity
This subject specific section of the curriculum applies to all students enrolled in the programme – see however Appendix 2.

8.2 Transfer
Students enrolled on previous curricula may be transferred to the new one as per the applicable transfer regulations or according to an individual credit transfer by the study board.

8.3 Amendment
The curriculum may be amended once a year so that any changes come into effect at the beginning of the academic year. Amendments must be proposed by the study board and approved by the Dean.

Notification about amendments that tighten the admission requirements for the programme will be published online at www.science.ku.dk one year before they come into effect.

If amendments are made to this curriculum, an interim arrangement may be added if necessary to allow students to complete their MSc Programme according to the amended curriculum.
## Appendix 1 Tables

### Table for students admitted to the programme in September (summer):

Table - General profile in Environmental and Natural Resource Economics (thesis 30 ECTS)

<table>
<thead>
<tr>
<th></th>
<th>Block 1</th>
<th>Block 2</th>
<th>Block 3</th>
<th>Block 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st year</td>
<td>Ecology and Ecosystems Science in relation to Environmental Economics</td>
<td>Incentives and Regulation</td>
<td>Restricted elective</td>
<td>Applied Environmental and Natural Resource Economics</td>
</tr>
<tr>
<td></td>
<td>Applied Econometrics</td>
<td>Natural Resource Economics</td>
<td>Economic Valuation Methods and Cost Benefit Analysis</td>
<td>Applied Environmental and Natural Resource Economics</td>
</tr>
<tr>
<td>2nd year</td>
<td>Restricted elective</td>
<td>Elective</td>
<td>Thesis</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Restricted elective</td>
<td>Elective</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table illustrates the recommended academic progression. The student is allowed to plan an alternative progression within the applicable rules.

Table - General profile in Environmental and Natural Resource Economics (thesis 45 ECTS)

<table>
<thead>
<tr>
<th></th>
<th>Block 1</th>
<th>Block 2</th>
<th>Block 3</th>
<th>Block 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st year</td>
<td>Ecology and Ecosystems Science in relation to Environmental Economics</td>
<td>Incentives and Regulation</td>
<td>Restricted elective</td>
<td>Applied Environmental and Natural Resource Economics</td>
</tr>
<tr>
<td></td>
<td>Applied Econometrics</td>
<td>Natural Resource Economics</td>
<td>Economic Valuation Methods and Cost Benefit Analysis</td>
<td>Applied Environmental and Natural Resource Economics</td>
</tr>
<tr>
<td>2nd year</td>
<td>Elective</td>
<td></td>
<td>Thesis</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

The table illustrates the recommended academic progression. The student is allowed to plan an alternative progression within the applicable rules.
Table for students admitted to the programme in February (winter):

Table - General profile in Environmental and Natural Resource Economics (thesis 30 ECTS)*

<table>
<thead>
<tr>
<th></th>
<th>Block 3</th>
<th>Block 4</th>
<th>Block 1</th>
<th>Block 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st year</td>
<td></td>
<td></td>
<td>Restrict elective</td>
<td>Ecology and Ecosystems Science in relation to Environmental Economics</td>
</tr>
<tr>
<td>Restricted elective</td>
<td>Elective</td>
<td></td>
<td>Applied Econometrics</td>
<td>Natural Resource Economics</td>
</tr>
<tr>
<td>Restricted elective</td>
<td>Elective</td>
<td></td>
<td>Applied Econometrics</td>
<td>Natural Resource Economics</td>
</tr>
<tr>
<td>2nd year</td>
<td></td>
<td></td>
<td>I incentives and Regulation</td>
<td>Thesis</td>
</tr>
<tr>
<td>Economic Valuation</td>
<td>Restricted elective</td>
<td></td>
<td>Applied Environmental and Natural Resource Economics</td>
<td>Thesis</td>
</tr>
<tr>
<td>Methods and Cost Benefit Analysis</td>
<td></td>
<td></td>
<td>Applied Environmental and Natural Resource Economics</td>
<td>Thesis</td>
</tr>
</tbody>
</table>

*This table is only relevant for students who begin the MSc Programme in February (block 3)

Table – General profile in Environmental and Natural Resource Economics (thesis 45 ECTS)*

<table>
<thead>
<tr>
<th></th>
<th>Block 3</th>
<th>Block 4</th>
<th>Block 1</th>
<th>Block 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st year</td>
<td></td>
<td></td>
<td>I incentives and Regulation</td>
<td>Thesis</td>
</tr>
<tr>
<td>Incentives and Regulation</td>
<td>Applied Environmental and Natural Resource Economics</td>
<td>Ecology and Ecosystems Science in relation to Environmental Economics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>Restricted elective</td>
<td></td>
<td>Applied Econometrics</td>
<td>Natural Resource Economics</td>
</tr>
<tr>
<td>2nd year</td>
<td></td>
<td></td>
<td>Economic Valuation Methods and Cost Benefit Analysis</td>
<td>Thesis</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td>Applied Environmental and Natural Resource Economics</td>
<td>Thesis</td>
</tr>
</tbody>
</table>

*This table is only relevant for students who begin the MSc Programme in February (block 3)

The table illustrates the recommended academic progression. The student is allowed to plan an alternative progression within the applicable rules.
Appendix 2 Interim arrangement

The Shared Section of the BSc and MSc Curricula for Study Programmes applies to all students.

The interim arrangements below only consist of parts where the current curriculum differs from the rules and regulations that were previously valid. Therefore, if information about relevant rules and regulations are missing, it can be found in the curriculum above.

Different competence profiles may apply to students admitted to the programme in different academic years. Competence profiles applicable to previous admissions can be found in Revision History for Competence Profiles at SCIENCE.

1 General changes for students admitted in the academic year 2019/20

Students admitted to the MSc Programme in the academic year 2019/20 must finish the programme as listed in the curriculum above with the following exceptions.

Table – General profile in Environmental and Natural Resource Economics (Summer: thesis 45 ECTS, part time)

<table>
<thead>
<tr>
<th></th>
<th>Block 1</th>
<th>Block 2</th>
<th>Block 3</th>
<th>Block 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st year</td>
<td>Ecology and Ecosystems Science in relation to Environmental Economics</td>
<td>Incentives and Regulation</td>
<td>Restrictive elective</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Applied Econometrics</td>
<td>Natural Resource Economics</td>
<td>Economic Valuation Methods and Cost Benefit Analysis</td>
<td>Applied Environmental and Natural Resource Economics</td>
</tr>
<tr>
<td>2nd year</td>
<td>Elective</td>
<td>Elective</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*This table only applies to students who start the thesis before 20 August 2020.

Table – General profile in Environmental and Natural Resource Economics (Winter: thesis 45 ECTS, part time)*

<table>
<thead>
<tr>
<th></th>
<th>Block 3</th>
<th>Block 4</th>
<th>Block 1</th>
<th>Block 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st year</td>
<td>Incentives and Regulation</td>
<td>Restricted elective</td>
<td>Ecology and Ecosystems Science in relation to Environmental Economics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>Elective</td>
<td>Applied Econometrics</td>
<td>Natural Resource Economics</td>
</tr>
<tr>
<td>2nd year</td>
<td>Economic Valuation Methods and Cost Benefit Analysis</td>
<td>Applied Environmental and Natural Resource Economics</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*This table only applies to students who start the thesis before 20 August 2020.
Restricted elective subject elements

7.5 ECTS are to be covered as subject elements from the following list (thesis, 45 ECTS):

- Restricted elective subject elements offered as part of the curriculum (see above)
- NIFK17003U Managing and Analysing Cross Sectional and Spatial Data in Social Science Discontinued* 7.5 ECTS
- LOJK10258U Economic Growth and Development Discontinued* 7.5 ECTS

* See course specific changes below

2 General changes for students admitted in the academic year 2018/19

Students admitted to the MSc Programme in the academic year 2018/19 must finish the programme as listed in the curriculum above with the following exceptions

Table – General profile in Environmental and Natural Resource Economics (Summer: thesis 45 ECTS, part time)

<table>
<thead>
<tr>
<th>1st year</th>
<th>Block 1</th>
<th>Block 2</th>
<th>Block 3</th>
<th>Block 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st year</td>
<td>Ecology and Ecosystems Science in relation to Environmental Economics</td>
<td>Incentives and Regulation</td>
<td>Restrictive elective</td>
<td></td>
</tr>
<tr>
<td>2nd year</td>
<td>Elective</td>
<td>Elective</td>
<td>Thesis</td>
<td></td>
</tr>
</tbody>
</table>

*This table only applies to students who start the thesis before 20 August 2020.

Table – General profile in Environmental and Natural Resource Economics (Winter: thesis 45 ECTS, part time)*

<table>
<thead>
<tr>
<th>1st year</th>
<th>Block 3</th>
<th>Block 4</th>
<th>Block 1</th>
<th>Block 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st year</td>
<td>Incentives and Regulation</td>
<td>Restricted elective</td>
<td>Ecology and Ecosystems Science in relation to Environmental Economics</td>
<td></td>
</tr>
<tr>
<td>2nd year</td>
<td>Economic Valuation Methods and Cost Benefit Analysis</td>
<td>Applied Environmental and Natural Resource Economics</td>
<td>Thesis</td>
<td></td>
</tr>
</tbody>
</table>

*This table only applies to students who start the thesis before 20 August 2020.

Restricted elective subject elements

7.5 ECTS are to be covered as subject elements from the following list (thesis, 45 ECTS):

- Restricted elective subject elements offered as part of the curriculum (see above)
- NIFK17003U Managing and Analysing Cross Sectional and Spatial Data in Social Science Discontinued* 7.5 ECTS
- LOJK10258U Economic Growth and Development Discontinued* 7.5 ECTS

* See course specific changes below
### General changes for students admitted in the academic year 2017/18

Students admitted to the MSc Programme in the academic year 2017/18 must finish the programme as listed in the curriculum above with the following exceptions.

#### Table – General profile in Environmental and Natural Resource Economics (Summer: thesis 45 ECTS, part time)

<table>
<thead>
<tr>
<th>Block 1</th>
<th>Block 2</th>
<th>Block 3</th>
<th>Block 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1st year</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ecology and Ecosystems Science in relation to Environmental Economics</td>
<td>Incentives and Regulation</td>
<td>Restrictive elective</td>
<td></td>
</tr>
<tr>
<td>Applied Econometrics</td>
<td>Natural Resource Economics</td>
<td>Economic Valuation Methods and Cost Benefit Analysis</td>
<td>Applied Environmental and Natural Resource Economics</td>
</tr>
<tr>
<td><strong>2nd year</strong></td>
<td>Elective</td>
<td>Elective</td>
<td>Thesis</td>
</tr>
</tbody>
</table>

*This table only applies to students who start the thesis before 20 August 2020.

#### Table – General profile in Environmental and Natural Resource Economics (Winter: thesis 45 ECTS, part time)*

<table>
<thead>
<tr>
<th>Block 1</th>
<th>Block 2</th>
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<tr>
<td><strong>1st year</strong></td>
<td></td>
<td></td>
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<tr>
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*This table only applies to students who start the thesis before 20 August 2020.

**Restricted elective subject elements**

- 7.5 ECTS are to be covered as subject elements from the following list (thesis, 45 ECTS):
  - Restricted elective subject elements offered as part of the curriculum (see above)
  - **NIFK14018U**  Applied General Equilibrium Analysis  Discontinued*  7.5 ECTS
  - **NIFK17003U**  Managing and Analysing Cross Sectional and Spatial Data in Social Science  Discontinued*  7.5 ECTS
  - **LOJK10258U**  Economic Growth and Development  Discontinued*  7.5 ECTS

* See course specific changes below
## Course specific changes

<table>
<thead>
<tr>
<th>Discontinued course</th>
<th>Interim arrangement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied General Equilibrium Analysis (NIFK14018U), 7.5 ECTS</td>
<td>The course was restricted elective in the academic year 2017/18. Offered for the last time: 2017/18 Last exam if applicable (cf. SCIENCE's Teaching and exam rules): 2018/19</td>
</tr>
<tr>
<td>Economic Growth and Development (LOJK10258U), 7.5 ECTS</td>
<td>The course was restricted elective in the academic year 2019/20, 2018/19 and 2017/18. Offered for the last time: 2019/20 Last exam if applicable (cf. SCIENCE's Teaching and exam rules): 2020/21</td>
</tr>
<tr>
<td>Managing and Analysing Cross Sectional and Spatial Data in Social Science (NIFK17003U), 7.5 ECTS</td>
<td>The course was restricted elective in the academic year 2018/19 and 2017/18. Offered for the last time: 2018/19 Last exam if applicable (cf. SCIENCE's Teaching and exam rules): 2019/20</td>
</tr>
</tbody>
</table>
Appendix 3 Description of objectives for the thesis

After completing the thesis, the student should have:

Knowledge about:
   - Societal as well as scientific problems related to environmental and natural resources.
   - Theory and state-of-the-art methods and models based on international research within the field of environmental and natural resource economics that is relevant for dealing with the abovementioned problems in an interdisciplinary setting.

Skills in/to:
   - Apply and critically evaluate theories/methodologies, including their applicability and limitations for specific cases and topics related to the use and management of environment and natural resources.
   - Assess the extent to which the production and interpretation of findings depend on the theory/methodology chosen and the delimitation chosen.
   - Discuss academic issues arising from the thesis with fellow environmental and natural resource economists as well as with experts in other fields of science and non-expert laymen.
   - Communicate conclusions in a clear and academic manner in relation to the problem formulation and, more generally, considering the topic and the subject area.
   - Reflect on the academic and social significance, if any, of the thesis findings.
   - Identify areas for further research based on the thesis findings

If the thesis includes experimental content/own data production, the student should also have acquired the skills to:
   - Substantiate the idea of conducting experimental work/producing own data in order to shed light on the thesis topic as formulated in the problem formulation.
   - Process data through a choice of academic analysis methods and present findings objectively and in a concise manner.
   - Assess the potential impacts of the data collection and processing on the credibility of the thesis findings.

Competences in/to:
   - Taking responsibility and solving complex problems and carrying out development assignments in a scientific and potentially interdisciplinary work context where unforeseen situations may arise and require new solutions.
   - Independently initiating and performing academic research in the interdisciplinary context of a problem related to the management and use of environmental and natural resources.
   - Taking responsibility for own learning and scientific specialisation.