Master Thesis (45 ECTS)

Title Master Thesis (45 ECTS)

Semester E2024

Master programme in

Environmental Science

Type of activity

Master Thesis

Teaching language

English

Study regulation

Read about the Master Programme and find the Study Regulations at $\frac{1}{2}$ ruc.dk

Læs mere om uddannelsen og find din studieordning på <u>ruc.dk</u>

REGISTRATION AND STUDY ADMINISTRATIVE

Registration

Tilmelding sker via <u>STADS-Selvbetjening</u> indenfor annonceret tilmeldingsperiode, som du kan se på <u>Studieadministrationens</u> <u>hjemmeside</u>

Registration through <u>STADS-Selvbetjening</u>within the announced registration period, as you can see on the <u>Studyadministration homepage</u>.

Number of participants

ECTS 45

Responsible for the activity

Per Meyer Jepsen (pmjepsen@ruc.dk)

Head of study

Per Meyer Jepsen (pmjepsen@ruc.dk)

Teachers

Study administration

INM Registration & Exams (inm-exams@ruc.dk)

Exam code(s)

U60104

ACADEMIC CONTENT

Overall objective

The master thesis is an interdisciplinary research project. The exemplary nature of the master thesis ensures that students acquire knowledge, skills and competences that can be used in a broader context than the master thesis itself. Students choose the topic and research question of the master thesis within the framework of the study regulation and its objectives. The ability to critically assess the quality of their efforts and their own acquired knowledge in relation to a given research question is

an important objective of the problem-oriented thesis work. In the thesis report, the student must document knowledge and skills in using scientific theories and methods while working with a well-defined, academic research question. The student must document skills in analysing, categorizing, discussing, arguing, evaluating, and reflecting on a scientific basis as well as being able to choose and relate critically to sources, literature, theory, and methods used in the master's thesis. The master thesis must demonstrate proficiency in communicating an academic subject to colleagues and demonstrate competences in initiating, managing, and completing a long-term academic study.

Detailed description of content

The exemplary nature of the master's thesis ensures that the students acquire knowledge, skills and competences that they can use in a wider context than the master's thesis itself. The students are free to choose the contents of the master's thesis within the framework of the study regulation and its objectives. The ability to critically assess the quality of their own efforts and their own knowledge base in relation to a given research question is an important objective of the participatory and problem-oriented thesis work.

Course material and Reading list

Students themselves select relevant literature for their project work.

Overall plan and expected work effort

Master Thesis 45 ECTS / 1215 hours

- Master Thesis Seminar: 4 hoursExam and assessment: 1 hour
- Supervision: 25 hours
 Report writing: 225 hours
- Literature search: 175 hours
 Practical project work (laboratory, model design, analysis, field work): 735 hours
- Exam preparation: 40 hours

Format

Evaluation and feedback

All master thesis' processes will include ongoing dialogue-based (oral) evaluation between the students and the supervisor. Both students and supervisors are expected to provide constructive feedback and viewpoints during the process.

Feedback concerning the academic content and progression, process and collaboration. When the master thesis is handed in, there will also be an evaluation through a questionnaire in SurveyXact concerning the master thesis process and the master program in general. The Study Board will handle all evaluations.

Furthermore, students can, in accordance with RUCs 'feel free to state your views' strategy through their representatives at the study board, send evaluations, comments or insights form their project process to the study board during or after the master thesis process.

Programme

The student must attend the preparatory thesis seminar. Information is available on study and moodle.

ASSESSMENT

Overall learning outcomes

After finishing the master thesis, graduates will be able to:

- demonstrate knowledge that integrates the subject of the thesis into the broader academic context, including the integration of the underlying theory and combination of the results of the thesis into the present state-of-art
- identify relevant scientific questions within the scope of the thesis as well as skills to integrate relevant scientific theories and methods
- identify, select, modify, invent, design and apply relevant experimental (or survey) methods
- generate, analyse and evaluate scientific data and combine such data to integrate it in existing scientific theory
- formulate scientific texts and participate in the scientific discussions
- independently plan, manage and execute long-term academic research projects and communicate the findings in a proper, relevant and professional way to experts within the field, as well as to colleagues from other fields and to a broader public
- take responsibility for own professional development and specialisation.

Form of examination

master's thesis exam based on the written product and the oral exam

The master's thesis can be written individually or in a group. Permitted group size: 2-3 students.

The oral exam is individual for students that have written the thesis alone or students that have requested an individual exam. All other oral master's thesis exams are conducted as group exams.

The assessment is individual and based on the student's individual performance.

The assessment is an assessment of the master's thesis and the oral performance.

The character limits of the master's thesis are:

For 1 student: 48,000-180,000 characters, including spaces. For 2 students: 48,000-180,000 characters, including spaces. For 3 students: 48,000-192,000 characters, including spaces.

The character limits include the cover, table of contents, summary, bibliography, figures and other illustrations, but exclude appendices.

The master's thesis must include a summary.
The summary can either be written in English or Danish.
The summary is included in the overall assessment.

Time allowed for the exam including time used for assessment for:

1 student: 45 minutes. 2 students: 90 minutes. 3 students: 110 minutes.

Writing and spelling skills in the thesis are part of the assessment.

Permitted support and preparation materials at the oral exam: All.

Assessment: 7-point grading scale Moderation: External examiner

Form of Reexamination

Samme som ordinær eksamen / same form as ordinary exam

Type of examination in special cases

Examination and assessment criteria

The oral presentation can include new extra findings that has been discovered after handing in of the final report.

Assesment criteria:

The thesis is evaluated based on the students ability to

- discuss and analyze the selected subject areas and understand and reflect on one's own thesis research and how it fits into an academic context
- use and master scientific theories and methods while working with a specific, academic and relevant research question
- analyze, categorize, discuss, argue, reflect and evaluate complex data on a scientific basis
- critically view and select scientific sources, literature, theory and methods.
- write in accordance with academic text norms and for an academic target group
- use experimental methods in a research process

The assessment of the oral exam is based on the student's ability to meet the criteria mentioned above and their ability to

- demonstrate proficiency in communicating an academic subject, by communicating relevant selfchosen parts of the study
- clearly present and communicate the scientific content of the thesis
- engage in a scientific dialogue and discussion with the supervisor and assessor

Furthermore, whether the performance meets all formal requirements in regard to both for the written og oral exam.

Exam code(s)

Exam code(s): U60104