

Course Specifications

Valid as from the academic year 2023-2024

Α

Master's Dissertation (1002199)

Course size (nominal values; actual values may depend on programme)

Credits 30.0 Study time 900 h

Course offerings in academic year 2023-2024

A (year) English Gent

Lecturers in academic year 2023-2024

Du Laing, Gijs LA24 lecturer-in-charge

Offered in the following programmes in 2023-2024 crdts offering

International Master of Science in Sustainable and Innovative Natural Resource 30

Management

Teaching languages

English

Keywords

Scientific research, research techniques, scientific reporting, written manuscript, oral presentation

Position of the course

The master dissertation is an integration course that forms the final part of the master's program in which the scientific final competences are applied to the programme-specific knowledge competences. Students can choose the topic for their master' dissertation (thesis) in a broad range of disciplines in which the scientific staff of the master programs is active. In general, the students become involved in ongoing research within the research laboratories of their promoter(s). They can however also propose their own research topic. Students have to conduct research with the appropriate expertise in order to contribute to the development of a particular research domain. The ultimate goal is to initiate students into research at an academic level so that, upon completion of their master program, they are able to carry out scientific research in a proper way.

Contents

A master's dissertation is the result of an extensive literature study based on scientific sources and independently conducted research. This research can be carried out in in-house laboratories or in collaboration with industry or in a scientific institution. The literature review and research deepen a domain-specific problem, map it and propose (partial) solutions. The results of the literature review and the independent research are written down in a thesis. This thesis consists at least of table of contents, abstract, introduction, literature review, materials and methods, results and a critical discussion of the results obtained. If possible, the conclusions should be based on statistical analysis. The bibliography shall refer to the international literature in the covered specific research area. The thesis and in particular the obtained results of the research are presented and defended orally before a jury.

More information about the practical procedure for the master's dissertation and about the properties, rights and duties of those involved in the master's dissertation can be obtained from the local SINReM coordinator and/or found on the website of the local institution/faculty/department.

For UGent: All information regarding the content and implementation of the master's

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dissertation and the rights and obligations of all those involved can be found on the portal (regulations, timetables,...): https://www.ugent.be/bw/en/for-students/curriculum/master-dissertation/masterdissertation.htm

Initial competences

A thorough scientific basic knowledge and knowledge of research techniques in the field of the master program.

Final competences

- 1 Establish a well-defined research problem
- 2 Formulate clear research questions and/or hypotheses
- 3 Establish a suitable methodology in accordance with the prevailing scientific standards of the research field
- 4 Systematically collect, search, critically interpret and integrate scientific literature
- 5 Collect data in an accurate way (existing and/or obtained through personal laboratory and/or fieldwork and/or surveys)
- 6 Process data in a correct way
- 7 Analyze data critically in a scientific context
- 8 Adjust independently the research process based on feedback from experts and critical selfassessment
- 9 Summarize and present data in a concise manner
- 10 Write a report on scientific and technical information, materials and methods, results and findings, critical interpretation and decision-making
- 11 Handle a problem critically, creatively, quantitatively with attention for ethical, social, international and sustainability aspects
- 12 Act according to the principles and good practices of scientific integrity
- 13 Show independence, motivation, commitment, a drive for innovativeness and creativity, initiative and perseverance to achieve learning outcomes 1 to 12
- 14 Present, defend and frame the research results vis-à-vis peers and experts

Conditions for credit contract

This course unit cannot be taken via a credit contract

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Master's dissertation

Learning materials and price

References

Practical Research: Planning and Design by Paul D. Leedy & Jeanne Ellis Ormrod, 2009, Prentice Hall. ISBN 9780137152421

Course content-related study coaching

The master' dissertation is actively coached by the promoter(s) and tutor(s) during counseling meetings, during which the work as well as the ongoing learning process involved are reviewed.

Information is to be found on the portal: https://www.ugent.be/bw/en/for-students/curriculum/master-dissertation/guidance-dissertation

Evaluation methods

end-of-term assessment

Examination methods in case of periodic evaluation during the first examination period

Assignment, oral assessment

Examination methods in case of periodic evaluation during the second examination period

Assignment, oral assessment

Examination methods in case of permanent evaluation

Participation

Possibilities of retake in case of permanent evaluation

examination during the second examination period is possible

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Extra information on the examination methods

The examination method depends on the institution/faculty/department where the Dissertation is defended. More information can be obtained from the local SINReM coordinator.

For UGent: See https://www.ugent.be/bw/en/for-students/curriculum/master-dissertation/masterdissertationevaluation

Calculation of the examination mark

30 % of the evaluation for the process: scientific approach, technical elaboration, commitment, problem approach, adjustment of the research process

 $40\,\%$ of the evaluation for the Master's dissertation report: scientific quality, technical quality, design, structure, use of language

30 % of the evaluation for the oral defence assessment: presentation (content, structure and design) (10 %) and the answers to the questions (20 %)

Note: following deliberation the jury can defer from the calculated score. This will always be motivated.

Students who eschew periodic and/or permanent evaluations may be failed by the examiner.

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