Course Guide MSc Thesis LUP-80436
Wageningen University - Land Use Planning (LUP)
2023-2024

- Part A: information about MSc theses at WU
- Part B: chair group specific regulations

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Additional information is provided online via Brightspace MSc thesis Land Use Planning.

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Part A: Information about MSc theses at WU

1 General information

This course guide describes the procedures for the MSc thesis supervision and writing process for all chair groups of Wageningen University. This course guide applies to both compulsory and extra theses. It is meant for staff and students. It includes information about the goal of the thesis, the necessary procedures before starting and during the thesis, as well as the assessment procedure.

A separate course guide applies to the *Research Practice*. This is a thesis-like project with additional learning outcomes and related assessment criteria that – depending on the programme and individual arrangements made with the Examining Board – may be done instead of an internship.

1.1 Course profile

The MSc thesis enables the student to put their acquired knowledge and skills into practice by individually and independently conducting a research project within the scope of their programme.

Language: English
Credits: 30 - 39 EC (compulsory theses) or 24 - 33 EC (extra theses)[1]
Period: The start date of your thesis is determined in consultation with your thesis supervisor

Most study programmes require a minimum of 36 credits for the compulsory thesis; see the Study Handbook for more information. As a guideline, a full-time thesis of 36 credits (EC) equals 24 weeks of 42 hours/week or 26 weeks of 40 hours/ week). Only in consultation with the thesis coordinator (of the chair group) and your study adviser, can you extend the length of your (compulsory) thesis to a maximum of 39 credits.

Specific requirements (e.g. mandatory knowledge) for each MSc thesis can be found in the online Study Handbook. Please check with your study adviser for any programme specific requirements. Finally, you should be officially registered as a Wageningen University MSc student.

1.2 Learning outcomes

After the successful completion of your MSc thesis, you are expected to be able to *independently* carry out the following aspects of a research project:

1. Develop a research plan, including: a description of the research topic in relation to the wider scientific context; an identification of the knowledge gap; formulation of research questions and/or a hypothesis, aims and objectives; an explanation of how you intend to conduct the research (e.g. in terms of a design for the project, data-collection and -analysis methods, research tools).
2. Collect, select and process data, using the design for the project, methods and tools described in the research plan.
3. Analyse and synthesise the data in order to answer the research questions and/or test the

[1] You may choose to include an extra thesis as part of the electives in your study programme. The extra thesis has a minimum size of 24 EC: 16 weeks of 42 hours/week or 17 weeks of 40 hours/week. This extra thesis *cannot* replace an internship of research practice.

hypothesis.

4. Formulate answers to the research questions that are supported by the research outcomes; pay attention to potential limitations; critically discuss the outcomes in relation to the wider scientific and societal context.
5. Report on the research, both in writing and in oral presentation.
6. Work in compliance with academic codes of conduct and with proper management of time and resources.
7. Make use of input and feedback for executing the research project and provide feedback to others.

2 Preparation of your thesis

The supervision of your thesis is the responsibility of a Wageningen University chair group. Your study programme determines which chair groups are entitled to supervise your thesis project. Consult the description of your MSc programme in the Study Handbook and contact your study adviser to find out more about the chair group(s) allowed to supervise your thesis. If you find a thesis topic that does not meet these criteria, but which, in your opinion, is extremely relevant for your programme, you should contact your study adviser and ask for approval from the Examining Board.

2.1 People involved in your thesis

Actors involved in the learning process:

- The *thesis coordinator* is the contact person within the chair group. You can find the thesis coordinator of each chair group in the online Study Handbook of Wageningen University (as the coordinator of the thesis course code). The student enters in Osiris who is their main and administrative supervisor.
- The *main and administrative supervisor* is responsible for guiding the thesis project. They are an employee of your chair group. They are often an academic WUR staff member[2], but they can also be an experienced PhD candidate or a post-doc. PhD candidates and post-docs will preferably have taken the courses 'Start to Supervise BSc & MSc thesis students' and 'Supervising BSc & MSc students' from the Education Support Centre, potentially as part of their Training and Supervision Plan. A technician may also be involved.
- A *second supervisor*. If the daily supervisor is a PhD candidate, the second supervisor of the MSc student is usually the supervisor of that PhD candidate. There can also be content-related reasons to appoint a second or third supervisor or advisor.
- *Advisor*(s): other people not involved in supervision.

Actors in the assessment (the main and administrative supervisor assigns the assessors and examiner in Osiris):

- *Assessor 1* is responsible for evaluating the thesis project. This is an academic WU staff member[2]. They are preferably involved in supervision as they assess the student's performance. Hence, assessor 1 will often be the daily supervisor (provided that they match the definition of academic WU staff member).
- *Assessor 2* is responsible for an independent assessment of parts of the thesis project (at least the report). Assessor 2 is often the examiner, but not necessarily. This role has the same requirements as Assessor 1.
- *Examiner* (one of the two assessors[3]), who is responsible for evaluating the thesis project and coordinating grades throughout the chair group. They are appointed by the Examining Board, and they are listed as examiner in the Study Handbook under the MSc thesis course code.

[2] From the EER for the academic year 2023/2024 onwards, the following holds for both supervisors and assessors: 'During the internship, thesis and research practice, the Master's student is supervised by a WUR staff member affiliated with a chair group with a PhD degree or an equivalent research profile, or someone who performs this role under the responsibility of this staff member. The equivalence of the research profile is at the discretion of the examiner of the course under consideration.'.

[3] In previous versions of the course guide, it was stated that the examiner is 'often Assessor 2'. However, the EER states that the 'the examiner is one of the assessors' (article 46b in EER 2023/2024).

Requirements: a PhD degree or other demonstrable experience with the MSc thesis subject[4]. Only examiners listed for the courses in the course catalogue can decide and finalize the grade in Osiris.

2.2 How to find a thesis (topic)

There are differences between chair groups with regard to how theses should be found and arranged. In general, you can take the following steps:

- Attend a thesis information meeting, organised by your MSc programme or the chair group. In a few programmes, you need to participate in a thesis allocation procedure.
- Contact your study adviser to discuss the options for thesis subjects.
- Visit the Wageningen University websites of chair groups that are entitled to supervise an MSc thesis within (the specialisation of) your study programme.
- Find thesis subjects via the thesis database at WU-website (currently this is the TIP database: tip.wur.nl; an alternative is under construction).
- Make an appointment with the thesis coordinator of the chair group and discuss which thesis subject(s) you are interested in. Names of thesis coordinators can be found in the online Study Handbook.

The thesis subject should preferably match the overall research field of your programme. You must discuss both the topic and timing with your study adviser and the thesis coordinator of the chair group in a timely manner, especially if your thesis includes an experiment or field work abroad: this can sometimes take several months to arrange.

2.3 Learning Agreement

Before the thesis starts, you and your supervisor have to discuss and agree on the content and overall planning of your thesis. After this, you can initiate the Osiris administrative process. You can find the instruction on how to initiate the process at https://wur.eu/tir-start.

Subsequently, you and your supervisor have to make more detailed agreements related to your learning process during the thesis. These agreements are written down in the Learning Agreement. To have an overview of the various topics covered in the learning agreement you can consult the checklist learning agreement. You as a student fill in the learning agreement in Osiris. An overview of the entire process in Osiris is available in the form of a presentation with screenshots.

One of the aspects covered in the learning agreement is intellectual property rights. The text of the statement you have to sign can be found in Appendix III: Intellectual property statement for student. Related to that, discuss potential confidentiality issues with your supervisor. In principle, your MSc thesis is not considered confidential, however, if part of your results is used in a larger research project, contract research or research that is subject to patenting, then confidentiality agreements may apply. You should be informed by the thesis supervisor prior to starting if your thesis is part of a contract research programme or a patent procedure.

Discuss time, format and transfer of results and data with your supervisor as well. These are part of the **data management plan**. Include these arrangements in the Learning Agreement. If the chair

[4] Rules and Regulations of the Examining Boards, Article 8

group use a specific format for a data management plan, this is included in the chair group specific regulations in this course guide (Part B).

2.4 Information on WU travel policy, insurance and grants

The MSc-thesis is a research project under the responsibility of a WU chair group. However, it is possible that part of the work (e.g. data collection) will take place outside WU, and possible outside the Netherlands.

2.4.1 Travel policy for students

Are you planning to travel abroad or, as an international student, are you temporarily travelling back home in the context of your studies at Wageningen University & Research? Find out in good time whether this trip concerns a **risky area** (source: Dutch Ministry of Foreign Affairs). If so, you will have to receive permission. If this is relevant to you, you should submit a **travel request** together with your thesis coordinator.

You will need to complete a form that also functions as a checklist to ensure that you are well-prepared for your trip. This checklist includes precautions to be taken – both mandatory and otherwise – such as travelling together with a student who is already familiar with the area, (additional WU) insurance, safety training, registration in Kompas (Foreign Affairs), and recommended vaccinations. You can find the form on the website mentioned below.
For actual information on travel policy WU, check the website:
https://www.wur.nl/en/Education-Programmes/Current-Students/Travel-policy-for-students.htm

2.4.2 Travel Insurance

Students participating in internships and/or conducting thesis work abroad as part of their study programme at the University are covered by the collective travel insurance of Wageningen University & Research. You do not need to pay to make use of this collective travel insurance. More information you can find here (heading Collective Travel Insurance):
https://www.wur.nl/en/Education-Programmes/Current-Students/Insurance.htm

2.4.3 Grants

There are some possibilities to apply for grants if your thesis, internship or research practice takes place in a foreign country, but most times the chance to receive a grant is small. For information about grants, see the following websites:

- https://www.wur.nl/en/Education-Programmes/Study-Abroad-and-Exchange-Students/Outgoing-from-Wageningen-University.htm
- http://www.beursopener.nl/content/index.asp (unfortunately in Dutch only)
- https://www.wur.nl/en/Education-Programmes/master/Study-grants.htm
- https://www.wur.nl/en/Education-Programmes/Current-Students/Travel-Funding.htm

3 Points of attention during the thesis

3.1 Well-being

Your MSc-thesis may be challenging for you in many ways. You may need to stretch yourself to master the contents, your academic or general skills may put to the test. Furthermore, the required level of independence may be a new experience for you, and you collaboration skills may be tested in the intensive collaboration within a small team (your supervisor and possible some other people involved in your research).

Given these challenges, it is of utmost importance to monitor your well-being. Make it a topic that you discuss with your supervisor with some regularity, but also with your fellow thesis students. If you feel that you need to discuss things that go beyond what you would like to discuss with your supervisor, do not hesitate to contact your study advisor.

Useful links about student guidance and social safety can be found in Appendix IV: Information on student guidance and social safety.

3.2 Supervision

Each chair group organises the appointment of supervisors differently. Contact the thesis coordinator of the respective chair group to check their specific procedure.

The first (main) supervisor is always a staff member of the responsible chair group, but sometimes, a second or even a third chair group may be involved in the supervision of an MSc thesis. In general, students are entitled to have regular meetings (e.g. every two or three weeks) with the primary supervisor. The actual frequency of meetings may vary depending on the nature of the thesis project. In order to make the meetings effective, the student needs to prepare for them, for example by preparing documents for the meeting (e.g. a chapter of the thesis or a list of discussion points) and by sending the document to the supervisor well in advance of the meeting. The supervisor, in turn, is expected to read the documents sent to them and to discuss them with the student during the meeting. As the thesis project is a learning experience, students are encouraged to act independently when resolving problems or in difficult situations. However, in cases of urgency, the supervisor should be available for feedback and support in between the regular meetings. Agreements on how to deal in such situations should be included in the Learning Agreement.

3.3 Ethical behaviour and plagiarism

Attention to scientific integrity is an important aspect of your academic education, including the various aspects that are relevant for an academic researcher. You always have to be aware of the fact that you could get into an ethical dilemma and you should be prepared if you run into such a situation. We refer to the Netherlands Code of Conduct for Research Integrity (see Appendix I: Netherlands Code of Conduct for Research Integrity).

The main principles described in this code concern:

- **Honesty** means, among other things, reporting the research process accurately, taking alternative opinions and counterarguments seriously, being open about margins of uncertainty, refraining from making unfounded claims, refraining from fabricating or falsifying data or sources and refraining from presenting results more favourably or unfavourably than they actually are.
- **Scrupulousness** means, among other things, using methods that are scientific or scholarly and exercising the best possible care in designing, undertaking, reporting and disseminating research.

- **Transparency** means, among other things, ensuring that it is clear to others what data the research was based on, how the data were obtained, what and how results were achieved and what role was played by external stakeholders. If parts of the research or data are not to be made public, the researcher must provide a good account of why this is not possible. It must be evident, at least to peers, how the research was conducted and what the various phases of the research process were. At the very least, this means that the line of reasoning must be clear and that the steps in the research process must be verifiable.
- **Independence** means, among other things, not allowing the choice of method, the assessment of data, the weight attributed to alternative statements or the assessment of others' research or research proposals to be guided by non-scientific or non-scholarly considerations (e.g., those of a commercial or political nature). In this sense, independence also includes impartiality. Independence is required at all times in the design, conduct and reporting of research, although not necessarily in the choice of research topic and research question.
- **Responsibility** means, among other things, acknowledging the fact that a researcher does not operate in isolation and hence taking into consideration – within reasonable limits – the legitimate interests of human and animal test subjects, as well as those of commissioning parties, funding bodies and the environment. Responsibility also means conducting research that is scientifically and/or societally relevant.

Appendix I: Netherlands Code of Conduct for Research Integrity provides a summary.

You are expected to be familiar with proper citing and referencing techniques before you start writing the thesis and are advised to consult relevant information available on the WUR-website (e.g. 'Citing and referencing'). Improper citing and referencing may be considered as plagiarism, which is a form of fraud. Staff are expected to screen all writings carefully for similarity with known sources; the University has made software available for this purpose. In case of suspicion of plagiarism, either of text, figures, models or data, the Examining Board will be informed. In the Rules and regulations of the Examining Board, procedures and sanctions regarding fraud are described.

3.4 Use of generative artificial intelligence (e.g. ChatGPT, BARD, DALL-E, Elicit)

The use of generative artificial intelligence to create ready-made content in assignments is considered fraud, so it is not allowed to copy-and=paste the output of AI.

However, you are allowed to use AI as a sparring partner, and as a feedback tool for the quality of your text (e.g. as a spell checker or grammar checker). However, the use of AI is always subject to the following rules:

- Acquiring active writing, designing and reflection skills is an important part of your thesis. The use of AI should only be in support of, not as a replacement for these skills.
- You will always be held accountable for the correctness, completeness, and coherence of all your texts. The correctness of the output of AI is never guaranteed. AI chatbots have been known to confidently assert false claims as true. You should always critically evaluate the output.
- When you use AI for your work, acknowledge your use and report how it affects your products.

Your thesis report should contain an **appendix on the use of AI**. In this appendix, you state whether you used AI for your research and report, and if so, how. In case you did not use AI, this appendix can be one sentence in which you state that you did not use AI. In all the other cases you have acknowledge your use and report how it affects your assignment. The appendix should contain a list of the prompts you used, a link to the conversation (see FAQ for ChatGPT) and an explanation of how

you used the output of AI (i.e. in what way did the output of AI affect your text).

3.5 Progress evaluation

The progress of the thesis project should be evaluated according to the schedule in the learning agreement, ultimately before one third of the duration of the thesis project. The principle of two-way feedback applies. The progress evaluation is a moment of reflection to determine which aspects of thesis process are going well, which aspects the student needs to improve on and how supervision should facilitate this.

It is strongly advised to use the applicable criteria in the rubric (available here) to evaluate the student's performance. These cover all aspects of the thesis project at that point (i.e. performance, research proposal) and supervision. Your supervisor may ask you to assess your own level of performance. Additional aspects in the progress evaluation may be your participation in seminars and thesis rings, data management, record keeping, etc. Your supervisor may also ask you to orally present your research plan to colleagues and peer students, which also serves to help you practice presentations. Generally, the conclusion of the progress evaluation will be that you continue with your thesis project, potentially with some adaptations in planning, content, supervision and/or improvements in your knowledge, skills or attitudes.

If your supervisor considers that your progress is such that successful completion of the project is unlikely, you should be given the opportunity to improve. Your supervisor should clearly indicate what improvements are required and within which timeframe. If the lack of progress is the result of a mismatch between your supervisor and your, a switch of supervisor should be considered.

If, after the set timeframe for approvement(s), your supervisor considers your progress as being still not enough to successfully complete your thesis, the supervisor should involve an examiner (four-eyes principle). Together, they could consider termination of the project with a 'no-go' decision. A no-go decision must be taken by the examiner. It must be well explained to you, and the explanation should be recorded in Osiris. The supervisor should ensure that this 'no-go' decisions is taken before half way the nominal duration of the thesis project, to prevent further delay for the student. Your supervisor must inform the study advisor to create a safety net for the student outside the chair group and facilitate a 'warm handover'. Note that the student may disagree with the no-go decision and submit an appeal to Examination Appeals Board (CBE)[5].

Depending on the reason for the no-go decision, there may still be a role for the chair group in the follow-up. In consultation with the study advisor, the supervisor and the examiner, the student may, for example, be recommended to take additional education first (e.g. courses on content or skills, like academic writing). The student can also be assigned a topic that fits their knowledge and skills better. These adjustments require them to restart their thesis.

3.6 Meetings (lab meetings, colloquia, seminars)

During your thesis period, you may participate in work discussions and other meetings of the chair group. Many chair groups have weekly work discussions in which research progress of all group members is discussed. Depending on the chair group, you may be asked to join the discussion group

[5] Rules and Regulations of the Examining Boards, Article 28.2

that is related to your research topic. Ask your supervisor when your chair group holds discussion sessions.

Both students and staff present their results to the other members of the chair group during colloquia. In general, students have to attend these colloquia.
Some chair groups organise literature discussions on papers that are relevant to their field, or organise seminars, during which guest researchers present their research or designs.

4 Thesis activities

This section describes the different stages of the thesis project in general terms. See Part B of the course guide for the specific requirements of your chair group.

4.1 Research proposal/ planning

At the start of the thesis, you will discuss the topic with your supervisor and read literature related to the project. After this initial orientation, you write a research proposal, which has to be discussed in depth with your supervisor(s). The research proposal should include a problem statement, research questions or a hypothesis that is supported by up-to-date literature related to the topic, an explicit and specific plan regarding how the research is to be conducted (e.g. study design, data collection and analysis methods) and a time schedule.
If drafted correctly, sections of the proposal can be used to write the final thesis report (e.g. the Introduction and Methodology sections). However, you cannot start conducting the research project before the research proposal has been approved by your supervisor(s).

When your proposal is completed, you may be asked to present your research proposal to other students and staff members in order to acquire feedback and suggestions for improvement. Discuss format and content for your presentation with your supervisor. The presentation should be given in English in order to allow international students and staff members to participate in the discussion.

4.2 Carrying out the research project

You should document your research activities, findings and sources carefully, including seemingly small details. During data collection, analysis and synthesis, you should follow the agreements made in the data management plan. In experimental research, a lab or field journal has to be kept.
You are recommended to keep in close contact with your supervisor throughout the project. Should unforeseeable circumstances occur, you will have to adapt your research proposal; any changes in planning must be discussed with and approved by your supervisor.

4.3 Feedback

Dealing with feedback and providing feedback to others is one of the learning outcomes of the thesis. While carrying out your project and attending meetings, there will be ample opportunities for you to ask for and receive feedback from staff and students, and to give feedback to others as well. The chair group will request that you participate in thesis rings or other peer-learning sessions. Using this input will help you to further develop your knowledge, skills and attitude and make the best of your project.

4.4 Thesis report

Your research should result in a comprehensive, consistent and concise thesis report. It is important to realise that the thesis is not a chronological account of the project or a summary of the lab-journal. Furthermore, as good scientific writing dictates, the results should be properly organised and data should be correctly processed, analysed and presented. In principle, an MSc thesis report should contain all the elements of a full scientific paper in your discipline (see Part B for specific criteria for your chair group).
In some cases, it may be possible to write your thesis in the format of a scientific article, which is usually much shorter than a regular thesis report. Discuss this with your supervisor. Publication of the results of your research in proceedings or a scientific article is also possible. The supervisor of the chair group will generally be co-author of any publications originating from thesis work.

You usually get one possibility to discuss a draft report with your WU supervisor before handing in the final report. In many chair groups it is common practice to discuss chapters separately in the final stage of the project.

4.5 Oral presentation (colloquium)

Once your research has been completed, you are required to present your thesis and your major findings to other students and staff members of the chair group. Chair groups usually have a fixed schedule for these presentations. Appointments for a date, and the publication of the announcement should be made well in advance. You may discuss the structure and content of your presentation with your supervisor in advance so they can offer feedback and advice. The presentation must be in English so international staff and students can participate in the discussion.

4.6 Oral defence

The final oral defence is a discussion with your supervisor, the examiner and, in some cases, a supervisor from outside the chair group not involved in the grading of the thesis. The discussion focuses on the content of the thesis, in which your knowledge, understanding, insights, as well as creativity and scientific attitude are evaluated. You are expected to be able to place your results and conclusions in the wider context of the field of science. The oral defence will be scheduled ten working days after you have submitted your reports to the supervisor and examiner. You must make an appointment for the oral defence.

5 Completion of your thesis

5.1 Assessment of the thesis

For the Wageningen University assessment, supervisors/examiners use the Wageningen University Thesis Assessment Form (see Appendix II: Assessment form, rubric). The average grade for each category (performance, thesis project report, oral presentation (colloquium), oral defence) should be at least 5.5 for a pass.

The assessment strategy below shows the relation between the learning outcomes and the different parts of the assessment.

			Assessment categories		
Weights	Description	Performance	Research Report	Oral presentation	Oral defence
	% of grade	40%	50%	5%	5%
Learning outcomes	1 Develop a research plan, including: a description of the research topic in relation to the wider scientific context; an identification of the knowledge gap; formulation of research questions and/or a hypothesis, aims and objectives; an explanation of how you intend to conduct the research (e.g. in terms of a design for the project, data-collection and -analysis methods, research tools).	x	x		x
	2 Collect, select and process data, using the design for the project, methods and tools described in the research plan.	x	x		x
	3 Analyse and synthesise the data in order to answer the research questions and/or test the hypothesis.	x	x	x	x
	4 Formulate answers to the research questions that are supported by the research outcomes; pay attention to potential limitations; critically discuss the outcomes in relation to the wider scientific and societal context.	x	x	x	x
	5 Report on the research, both in writing and in oral presentation.	x	x	x	
	6 Work in compliance with academic codes of conduct, and with proper management of time and resources.	x	x		
	7 Make use of input and feedback for executing the research project and provide feedback to others.	x			
Assessors	Assessor 1	x	x	x	
	Assessor 2	optional	x	optional	
	WU Examiner (grade)*	x	x	x	x

* The examiner will determine the final grading after a discussion with the supervisor/second assessor.

A rubric is used for feedback and grading (see Appendix II: Assessment form, rubric). Both assessors independently assess one or more aspects of your thesis work. Subsequently, the examiner, usually in consultation with both assessors will determine the final grade for the different criteria. That assessment, the final grade, as well as an underpinning of the grade will be registerered in OSIRIS. Apart from that, you will generally have a final meeting in which your supervisor and/or examiner will provide you feedback on the overall project (beyond just the assessment).
After the examination, you will receive the reasoning behind your thesis grade, including specific feedback on all assessment categories.

5.2 Delay and possibility to resit

The start and end date of your thesis are recorded in the Learning Agreement. You should complete the thesis project within the time allocated to this programme component (i.e. 6 months for a 36 EC thesis or 6.5 months for a 39 EC thesis). Ensure that the research proposal is realistic and contains a contingency plan ('plan B').

Below we discuss the three acceptable reasons for a longer runtime of a thesis project. There are a three acceptable reasons for a longer runtime of an thesis project: planned longer duration of your thesis project, force majeure or an insufficient result for your thesis. Other causes for delay are *not* acceptable.

5.2.1 Planned longer duration of the thesis project

If the student plans to undertake additional activities next to the thesis, the total runtime of a thesis project can be longer than the nominally allocated time. Examples are you have a job, have planned holidays, or will do a student-assistantship. You can take this into account when registering the expected date of completion (to be filled out in the learning agreement). This situation is *not* considered as delay.

5.2.2 Delay due to force majeur

If the planned period needs to be extended due to *force majeur*, you should submit a request to the student dean. The dean is to decide whether this is a case of *force majeur*, and advises the Examining Board. The Examining Board can then decide to extend the term for the thesis. In that case, the expected date of completion will be moved forward, in accordance with the extent of the delay.

5.2.3 Delay due to an insufficient result

Around the expected date of completion of the thesis, the thesis is assessed, and the grade is registered in Osiris. In this way all students are graded after the same amount of time, which makes the grading fair for all students.

If the assessment is insufficient, but your supervisor and you expect that you will be able to finish the project successfully within two extra months, the examiner registers the grade in Osiris as INCOMPL. Next, you have two months to improve the work to a sufficient level. In the case of *force majeur,* these two months can be extended under the same conditions as above (via student dean and Examining Board).

After two months, the work of the student's work is assessed again (again with two independent assessors, and the examiner determining the final grade). If the result is sufficient, the grade is registered in Osiris. If the result is insufficient, INSUFF will be recorded in Osiris.

In case of an insufficient final grade, you can start a new MSc-thesis, not necessarily with the same supervisor or in the same chair group. This is officially considered a resit but means that the entire thesis needs to be redone.

5.3 Course evaluation for your thesis

Following the assessment, Wageningen University will send you a link to an online evaluation questionnaire. Please complete this, even if your thesis project is finished. The results of the questionnaires help us to improve the quality of the thesis supervision and organisation, and to identify potential (or actual) problems. The evaluation is anonymous.

Part B: Chair group specific regulations

6 Basic requirements Land Use Planning (LUP)

We offer a major thesis Land Use Planning (36 ECTS) in the MLP and MUE programmes and a minor thesis (24 ECTS) for students from other programmes. For the successful completion of a MSc-thesis in Land Use Planning specific knowledge and certain skills are basic requirements. This means that students normally should start to work on their MSc-thesis only after having obtained an adequate coverage of relevant courses in the field of land use planning.

- Students in the MLP programme should have successfully completed the courses GEO37806 Research Methodology for Planning and Design and LUP32806 Political dilemmas of spatial planning. We recommend that you have completed the courses LAR37306 Reflections on Planning and Design Practices, LUP37806 Spatial Planning and Scarce Resources and LUP36806 Landscape Theory and Analysis too.
- Students in the MUE programme should have successfully completed the courses LUP23806 Planning for Urban Quality of Life and LUP32806 Political dilemmas of spatial planning, but for completion of the planning track also the courses LAR37306 Reflections on Planning and Design Practices and ETE33806 Planning and Design of Urban Space.
- Students doing a minor thesis (24 ECTS) should have completed the course LUP32806 Political dilemmas of spatial planning and one other planning course at master level.

In general, knowledge of theory of planning and methodology of research are a prerequisite for starting a thesis in Land Use Planning. It is the student's own responsibility to acquire the necessary knowledge and skills in time before starting with the thesis. By signing the learning agreement, a student acknowledges that he/she has successfully completed the compulsory courses. The learning agreement is filled out online after you have initiated the Osiris administrative process, see Part A (section 2.3).

7 Steps in the process

7.1 Selecting a topic and supervisor

Students are encouraged to start thinking about potential topics for the thesis research at an early stage. The courses offered during the first year of the MSc program may offer some useful starting points. Other ways to identify potential topics are to follow the societal debate in our domain (e.g. Dutch students could look at the website of Platform31, https://www.platform31.nl/) and to collect a few recent scientific papers on a potential topic to see what the scientific debate is about (i.e. what kind of questions are being analysed and what new questions are being raised). The website of the Landscape Architecture and Spatial Planning group includes an overview of recent examples of MSc thesis reports, which you can also use for inspiration. See the links at Brightspace.

Important note: your topic should always fit within the research domain of the Spatial Planning chair group and the expertise of your supervisor, but also in the context of your study programme. For MUE students this means that there should be a clear urban component in your research topic. The final decision to accept the specific topic of a MSc-thesis is always taken by the supervisor.

The supervisor of the MSc-thesis LUP has to be a scientific staff member of the Spatial Planning chair group. Spatial Planning is one of the two chairs in the Landscape Architecture and Spatial Planning cluster. You can make an appointment with the MSc-thesis coordinator for a first exploratory discussion, but you can also contact a potential supervisor directly. An overview of potential

supervisors is provided during the yearly thesis information meeting in February (see the Powerpoint presentation at Brightspace).

In some cases it might be necessary to include a second supervisor. A second supervisor can be a PhD student in Spatial Planning, a member of another group of Wageningen University, or a member of an external organization such as a governmental or research organization or consultancy agency. Co-supervision by other groups of Wageningen University means that the supervision time needs to be distributed among different groups, which can be problematic given the limited time available for supervision (see also Section 3). Co-supervision by an expert from an external organization is more common, especially in those situations where the thesis research takes its starting point from a specific problem of an organization in planning practice. An external supervisor cannot have a formal role and cannot be involved in the grading (see section 2 of Part A).

Before the start of your research, you and your supervisor must discuss and sign the Learning Agreement (see Part A, section 2.3). The Learning Agreement and an overview of the entire process in Osiris is available in the presentation with screenshots and the (digital) signed version will be archived in OSIRIS.

7.2 Preparing the research proposal and start colloquium

After the selection of a topic the next step in the thesis work is the preparation of a consistent and comprehensive research proposal of approximately 20 pages. The thesis proposal is a product of a process of preparatory research around the theme that will be developed. Students must become familiar with the theoretical problems, the historical context and the empirical details of the theme to be able to define, in precise terms, what it is that will be studied and how it will be studied. As many researchers have shown, a main challenge of research is to specifically define the research questions. It is necessary to understand and incorporate existing scientific knowledge, departing from the actual problem, to be able to enhance scientific knowledge. Given its importance, this step may require up to 30% of the total thesis research time. For more details see the document "*What's in a research proposal?*" at Brightspace.

The phase of writing your proposal is concluded by a presentation to fellow MSc students and scientific staff members in a start colloquium. You need to organize the start colloquium together with 2 or 3 other students. The secretary of the Landscape Architecture and Spatial Planning group can assist you with sending an invitation by email to MSc students and staff members. In the start colloquium you will present the outline of your research plans and ask the audience to reflect on it. The presentation should take about 10 minutes, with an additional 10 minutes for questions and discussion. Topics to be addressed in the colloquium:

1. Background of the thesis and its scientific interest
2. The scientific objective(s) of the thesis project
3. The most relevant theories (concepts) and what they entail and mean for your research project
4. The types of information you need and how you are going to obtain that information by applying your research methods
5. A clarification of the methodology and related methods that you will use
6. How information to be generated in your research will relate to the objective of your research project
7. Questions or problems that you want to discuss with the audience

To aid the preparation and discussion, you are asked to complete the **information sheet** of the start colloquium, and take some printed copies with you, which can be handed out to the audience. The

information sheet can be downloaded at Brightspace. You should give the sheet and your research proposal at least two days before the start colloquium to one of the other students who is giving a start colloquium and ask this student to review your proposal. This student is given the opportunity to be the first to provide feedback and ask questions after your presentation.

7.3 Progress evaluation

After 6 to 8 weeks, usually upon finalizing the research proposal, the student and supervisor will have a progress evaluation meeting (see Part A, section 3.5). The progress evaluation is intended to evaluate all aspects of the thesis project at that point (i.e. the research proposal, supervision, performance of the student). It is strongly advised to use the applicable criteria in the rubric to conduct the progress evaluation. The student will make a brief report of the main conclusions of the evaluation, including any points for improvement or other arrangements. The student will hand in the report to the supervisor who will check its content. If the student and supervisor both agree with the content, the report is uploaded in Osiris and submitted for archiving.

In *exceptional* cases the progress evaluation can lead to a termination of the process of the thesis if the supervisor considers the progress of the student insufficient to complete the project in time. This decision is taken by the examiner after consultation with the supervisor and student and should be well substantiated.

7.4 Carrying out the research and writing the thesis report

When carrying out the research, special attention should be given to organisational and safety aspects, especially when working abroad (see also Part A). Possible economic, social and technical constrains (e.g. restricted or expensive data, holidays of interviewees) should be considered as much as possible in advance of the research work. If unforeseeable circumstances do occur, the research plan should be adapted after consultation with the supervisor. In any case, the student has to respect social, cultural and interpersonal norms and standards. This holds particularly true for privacy aspects of organisations and persons. It should be avoided that the identity of persons is discernible out of the final text, if not agreed otherwise between the respondents and the researcher. For this purpose, you should use consent forms when dealing with human respondents (such as in interviews). See the module on *Research Ethics* at Brightspace.

It is required to clearly document all research activities, findings and sources, including also seemingly small details. Analytical skills should be accompanied by organisational accuracy. Experience shows that this can save a lot of time when finally preparing the thesis report. Therefore, data management is an important part of the research. See the module on *Research Ethics* at Brightspace.

In the phase of carrying out the research it is recommended to update your supervisor on a regular basis. This is the responsibility of the student.

The research activities should finally result in a comprehensive, consistent and concise thesis report. The thesis report will average approximately 60 to 80 pages, organized in a minimum of four to five chapters (e.g. font Times New Roman, 11 point, and line spacing 1,2). It should be written according to scientific standards, with a clear layout. For more details see the document "*What's in a master thesis report?*" at Brightspace.

7.5 Finalizing the thesis, the final colloquium and examination

The last phase of the thesis research includes a discussion of the draft thesis and the final colloquium and examination. First, a complete final draft of the report should be discussed with the supervisor(s) (and if applicable also with external supervisors) prior to the final colloquium and examination. The discussion of the draft report represents a "*green light*" meeting. At the end of the meeting the supervisor(s) decide(s) if the student can proceed with finalizing the thesis report (taking care of the comments and feedback of the discussion) and setting a date for the final colloquium and examination. This date should be set 10 working days after delivering the final thesis report to the supervisor(s) and the second reviewer of the thesis (see also Part A).

The student is required to present the major findings of his or her research to an audience in a final colloquium. The audience usually includes fellow MSc students, staff members of the Landscape Architecture and Spatial Planning group, and other interested people. The length of the presentation should not exceed 20 minutes, followed by 20 minutes for discussion. The presentation should meet the standards for oral presentations, such as clearly addressing the audience with a comprehensive, consistent and logical structure, typically supported by visual tools, such as a PowerPoint presentation. The secretary of the Landscape Architecture and Spatial Planning group can assist you with sending an invitation by email to MSc students and staff members.

The objective of the final examination is to reflect on the whole scientific training process, which the student has undergone in preparing the MSc-thesis, as well as to place the MSc-thesis within the on-going debates and the larger context within the field of spatial planning. The people taking part in the final examination are the student, the supervisor(s) and a second reviewer. The second reviewer can be the examiner of the MSc thesis (the Spatial Planning chair holder) or another scientific staff member of the Spatial Planning chair group. The examination takes place subsequent to the colloquium. The examination takes about 45 minutes, with 30 minutes for questions and discussion. Following the questions and discussion, the student will be asked to leave the meeting for a short while, during which the supervisor and second reviewer will discuss the tentative grade. The student will then receive oral feedback and the announcement of the tentative grade.

Afterward, the supervisor and second reviewer will both fill in the Wageningen University Thesis Assessment Form (see Appendix II: Assessment form, rubric). The sheet includes sub-grades for the different aspects of the thesis research, a final grade and extensive written comments and feedback by the supervisor and second reviewer. See also part A (section 5) of this course guide.

8 Administrative issues

8.1 Time available for supervision

The maximum amount of time available for MSc thesis supervision is 50 hours for a major thesis (36 ECTS) and 40 hours for a minor thesis (24 ECTS). However, 2 hours are allocated for general MSc thesis activities such as the thesis information meeting and the intake with the thesis coordinator, and an additional 5 hours for the second reviewer. That leaves 43 hours of supervision for a major thesis (or 33 hours for a minor thesis) by the supervisor(s). His/her time includes time for reading, meetings and assistance in general. Students are asked to include an overview of time management for supervision in their thesis proposal, and to the keep a record of supervision hours throughout the thesis process. It is considered good practice to send a summary of the outcome of the discussion and action points to your supervisor following the meeting.

8.2 Office space and software

The Landscape Architecture and Spatial Planning group provides office space for MSc thesis students, but a student may also decide to work at home or to make use of the general facilities at the educational buildings (Forum and Orion). Students who prefer having office space at the GAIA building can make use of rooms A.208, A.209 and A.210. These rooms has flexible workplaces. You need to take your own laptop, but in the rooms there are a few (old) PCs and some extra screens for MSc thesis students LUP (and LAR). The PCs are installed with general software, such as Microsoft Office. For special software, such as Atlas.ti, you will need a personal licence. Please contact our secretary at an early stage to request access to this software, as it may take some days to handle this request.

8.3 Costs associated with your research

In general, costs related to the thesis research are to be paid by the student him- or herself, with exception of the printed versions of the final thesis report (see below). Local and international travel expenses are not reimbursed by the Landscape Architecture and Spatial Planning group. The only exception are local travel expenses associated with externally funded research projects. For those projects a max of €250 can be reimbursed, but only if arrangements and budget were approved by the thesis supervisor before the start of the field work. For international travel expenses students can apply for external grants, such as an Erasmus+ grant and travel allowance for an internship or thesis abroad to a European county (between €270 and €390 a month + travel allowance) or the EFL foundation (international travel expenses only). See also part A for other grants.

A student should submit printed versions of the final thesis report to the supervisor(s) and second reviewer. For reproducing – generally two but max three – copies of the final report, the Landscape Architecture and Spatial Planning group provides a maximum of € 50,00. The printing costs can only be reclaimed upon delivery of an original receipt. Forms for refund of the printing costs are available at Brightspace.

8.4 Participating in other MSc thesis LUP colloquia

MSc-students are obliged to participate in **at least three final MSc-colloquia of other MSc students**, before giving their own final colloquium. An attendance list is available at Brightspace. MSc students are responsible themselves to print this list, to take the list with them to the colloquium they attend and to ask the supervisor of the colloquium to sign the form. The signed list needs to be handed in during the final examination.

However, following start and final colloquia is strongly recommended in general. Working on a MSc-thesis can sometimes become a rather lonesome business. The idea of the colloquia is therefore to enhance further discussion and exchange between MSc-students and staff members as well as to further train students in oral presentation abilities. Participating in colloquia usually helps to rethink the structure and content of your own research and to improve the quality of your own work.

8.5 Completing the administrative requirements

Before a final grade can be passed on to Osiris, the student must submit digital versions of the thesis report, the PowerPoint presentation and the primary data (such as interview transcripts) to the supervisor. The supervisor will send these documents for archiving.

9 Checklists for organising a LUP thesis

The checklists below summarizes the most important actions and responsibilities during the MSc thesis process.

9.1 Checklist for starting a MSc thesis process

At the start of your thesis research:

- ☐ Check whether you are allowed to start your thesis, i.e. if you meet the mandatory knowledge requirements of the chair group and the requirements of your programme.
- ☐ Think about a thesis topic and supervisor (start 4-3 months before the beginning of your thesis). Check the supervisors' research topics in the presentation of the MSc thesis information meeting on Brightspace.
- ☐ Request an intake meeting with the MSc thesis coordinator to discuss your thesis topic idea and explore potential supervisor (4-3 months before the beginning of your thesis).
- ☐ Discuss the thesis topic with the potential supervisor and agree whether to continue.
- ☐ Check with your supervisor whether the topic is consistent with your study program and the research domain of the Spatial Planning chair group.
- ☐ Check whether the country of research (if applicable) is a risk area or not.
- ☐ Discuss the Wageningen University Thesis Learning Agreement with your supervisor.
- ☐ Start your MSc thesis administrative process in Osiris (see section 2.3 of the course guide) and fill out the Wageningen University Thesis Learning Agreement. Include in the Learning Agreement the name of the MSc thesis coordinator in the field “Coordinator from Chair group”.
- ☐ After completing the Learning Agreement in Osiris, submit it for approval to your supervisor.

Outputs of this phase: (1) Student case in Osiris and (2) Learning Agreement in Osiris approved by supervisor.

9.2 Checklist for preparing a research proposal

- ☐ Discuss the requirements for your research proposal with your supervisor (theme, content, length, depth, etc.).
- ☐ Write a research proposal. See on Brightspace the information on “how to prepare a research proposal” (module proposal writing).
- ☐ Discuss your data management plan with your supervisor. You can find the data management template on Brightspace (in checklists and forms).
- ☐ Ask your supervisor for approval of the final research proposal and to schedule your progress evaluation meeting.
- ☐ Arrange a date for the start colloquium together with 2 or 3 other students who are also ready to present their research proposal (discuss with your supervisor how to do this).
- ☐ Decide which of the students will chair the start colloquium and distribute among you the necessary organizational tasks before and during the start colloquium.
- ☐ Organize the reservation of a meeting room and the schedule of the start colloquium. The secretary of the Landscape Architecture and Spatial Planning group can assist you in booking a meeting room and sending the invitation by email to MSc students and staff members.
- ☐ Fill in the start colloquium information sheet. You can find it on Brightspace (in checklists and forms). Take some printed copies with you to distribute them among the participants during the start colloquium.
- ☐ Send your proposal and the information sheet to one of the other students who is giving the start colloquium with you and ask this student to review your proposal (at least two days before the start colloquium).

- ☐ Organize a progress evaluation meeting with your supervisor (green light meeting) and make a brief report based on the results of the meeting. You can find a progress evaluation form on Brightspace (in checklists and forms).
- ☐ Ask your supervisor to register the decision of the progress evaluation meeting in Osiris.
- ☐ Upload your final research proposal and data management plan in Osiris in the section "optional documents during the process".
- ☐ Send the research proposal, including the data management plan, and progress evaluation report for archiving in the LUP group.

Outputs of this phase: (1) Research proposal, (2) Data management plan, (3) start colloquium presentation, and (4) progress evaluation report.

9.3 Checklist for preparing the final phase of your research and final colloquium

- ☐ Arrange a date to discuss the draft thesis report with the supervisor (green light meeting, 4 to 3 weeks before the expected date for the final colloquium and examination).
- ☐ Arrange with you supervisor and second reviewer the date for handing in the thesis report and the date for the final colloquium and examination. The date for handing the thesis report should be 10 working days before the final colloquium and examination.
- ☐ Arrange the final colloquium presentation. Request the booking of a meeting room 4 to 3 weeks before the final colloquium and examination date. The secretary of the Landscape Architecture and Spatial Planning group can assist you in the reservation of the room and sending the invitation by email to MSc students and staff members.
- ☐ Provide the supervisor and second reviewer with a final version of your thesis report (ten working days before the final colloquium and examination).
- ☐ Upload the final version of your thesis report in Osiris. Make sure you upload the correct version and that there is no sensitive data in the document (to avoid privacy issues).
- ☐ Send the digital versions of the final thesis report, the attendance list to MSc colloquiums* LUP, the PowerPoint presentation and primary data files for archiving in the LUP group.
- ☐ Complete the thesis evaluation questionnaire.

Outputs of this phase: (1) Final thesis report, (2) PowerPoint presentation, (3) attendance list to LUP final colloquiums and (4) primary data files.

***Reminder**: You must attend at least 3 final colloquiums of other LUP master's students during your thesis process before your own final colloquium. You can find the attendance list on Brightspace.

Names	
MSc thesis coordinator	Dr Zayra Ramos Bendana
MSc thesis examiner	Staff member Spatial Planning chair group
Second reviewer	Staff member Spatial Planning chair group
Secretariat	Carla Wagter-van Rooijen
Financial administrator	Annelies Bruinsma
Archiving	Ir Monique Jansen

10 Appendices

10.1 Appendix I: Netherlands Code of Conduct for Research Integrity

Students and staff at Wageningen University Research are bound to the Netherlands Code of Conduct for Research Integrity (it is part of the Student Charter).

10.1.1 Principles

The main principles described in this code concern: Honesty, Scrupulousness, Transparency, Independence, Responsibility.

Chapter 2 of the Code of Conduct summarizes the principles as follows:

Honesty means, among other things, reporting the research process accurately, taking alternative opinions and counterarguments seriously, being open about margins of uncertainty, refraining from making unfounded claims, refraining from fabricating or falsifying data or sources and refraining from presenting results more favourably or unfavourably than they actually are.

Scrupulousness means, among other things, using methods that are scientific or scholarly and exercising the best possible care in designing, undertaking, reporting and disseminating research.

Transparency means, among other things, ensuring that it is clear to others what data the research was based on, how the data were obtained, what and how results were achieved and what role was played by external stakeholders. If parts of the research or data are not to be made public, the researcher must provide a good account of why this is not possible. It must be evident, at least to peers, how the research was conducted and what the various phases of the research process were. At the very least, this means that the line of reasoning must be clear and that the steps in the research process must be verifiable.

Independence means, among other things, not allowing the choice of method, the assessment of data, the weight attributed to alternative statements or the assessment of others' research or research proposals to be guided by non-scientific or non-scholarly considerations (e.g., those of a commercial or political nature). In this sense, independence also includes impartiality. Independence is required at all times in the design, conduct and reporting of research, although not necessarily in the choice of research topic and research question.

Responsibility means, among other things, acknowledging the fact that a researcher does not operate in isolation and hence taking into consideration – within reasonable limits – the legitimate interests of human and animal test subjects, as well as those of commissioning parties, funding bodies and the environment. Responsibility also means conducting research that is scientifically and/or societally relevant.

10.1.2 Standards

Chapter 3 of the Code of Conduct provides standards for good scientific practice on the following phases of the research process: design, conduct, reporting, assessment and peer review and communication.

Design

- Consider the interests of science and scholarship and/or society when determining the subject and structure of your research.

- Conduct research that can be of scientific, scholarly and/or societal relevance.
- Do not make unsubstantiated claims about potential results.
- Take into account the latest scientific and scholarly insights.
- Make sure that your research design can answer the research question.
- Ensure that the methods you employ are well justified.
- If the research is conducted on commission and/or funded by third parties, always specify who the commissioning party and/or funding body is.
- Be open about the role of external stakeholders and possible conflicts of interest.
- In research with external partners, make clear written agreements about research integrity and related matters such as intellectual property rights.
- As necessary, describe how the collected research data are organized and classified so that they can be verified and reused.
- As far as possible, make research findings and research data public subsequent to completion of the research. If this is not possible, establish valid reasons for their non-disclosure
- In the event of an investigation into alleged research misconduct, make all relevant research and data available for verification subject to the confidentiality safeguards established by the board of the institution.
- In highly exceptional cases, there may be compelling reasons for components of the research, including data, not to be disclosed to an investigation into alleged research misconduct. Such cases must be recorded and the consent of the board of the institution must be obtained prior to using the components and/or data in question in the scientific or scholarly research. They must also be mentioned in any results published.
- Ensure that the required permissions are obtained and that, where necessary, an ethical review is conducted.
- Accept only research assignments that can be undertaken in accordance with the standards in this Code.
- Enter into joint research with a partner not affiliated with an institution which has adopted this or a comparable Code only if there is sufficient confidence that your own part of the research can be conducted in compliance with this Code and the joint research results meet generally accepted principles of integrity in research.

Conduct

- Conduct your research accurately and with precision.
- Employ research methods that are scientific and/or scholarly.
- Make sure that the choice of research methods, data analysis, assessment of results and consideration of possible explanations is not determined by non-scientific or non-scholarly (e.g. commercial or political) interests, arguments or preferences.
- Do not fabricate data or research results and do not report fabricated material as if it were fact.
- Do justice to all research results obtained.
- Do not remove or change results without explicit and proper justification. Do not add fabricated data during the data analysis.
- Ensure that sources are verifiable.
- Describe the data collected for and/or used in your research honestly, scrupulously and as transparently as possible.
- Manage the collected data carefully and store both the raw and processed versions for a period appropriate for the discipline and methodology at issue.
- Contribute, where appropriate, towards making data findable, accessible, interoperable and reusable in accordance with the FAIR principles.
- Take into consideration the interests of any humans and animals involved, including test subjects, as well as any risks to the researchers and the environment, while always observing the relevant statutory regulations and codes of conduct.

- Keep your own level of expertise up to date.
- Take on only those tasks that fall within your area of expertise.

Reporting
- Do justice to everyone who contributed to the research and to obtaining and/or processing the data.
- Ensure a fair allocation and ordering of authorship, in line with the standards applicable within the discipline(s) concerned.
- All authors must have made a genuine intellectual contribution to at least one of the following elements: the design of the research, the acquisition of data, its analysis or the interpretation of findings.
- All authors must have approved the final version of the research product.
- All authors are fully responsible for the content of the research product, unless otherwise stated.
- Present sources, data and arguments in a scrupulous way.
- Be transparent about the method and working procedure followed and record them where relevant in research protocols, logs, lab journals or reports. The line of reasoning must be clear and the steps in the research process must be verifiable. This usually means that the research must be described in sufficient detail for it to be possible to replicate the data collection and its analysis.
- Be explicit about any relevant unreported data that has been collected in accordance with the research design and could support conclusions different from those reported.
- Be clear about results and conclusions, as well as their scope.
- Be explicit about uncertainties and contraindications, and do not draw unsubstantiated conclusions. Be explicit about serious alternative insights that could be relevant to the interpretation of the data and the research results.
- When making use of other people's ideas, procedures, results and text, do justice to the research involved and cite the source accurately.
- Avoid unnecessary reuse of previously published texts of which you were the author or co-author. Be transparent about reuse by citing the original publication. Such self-citation is not necessary for reuse on a small scale or of introductory passages and descriptions of the method applied.
- Always provide references when reusing research material that can be used for meta-analysis or the analysis of pooled data.
- Avoid unnecessary references and do not make the bibliography unnecessarily long.
- Be open and complete about the role of external stakeholders, commissioning parties, funding bodies, possible conflicts of interest and relevant ancillary activities.
- As far as possible, make research findings and research data public subsequent to completion of the research. If this is not possible, establish the valid reasons for this.

Assessment and peer review
- Be honest and scrupulous as an assessor or peer reviewer, and explain your assessment.
- Do not use information acquired in the context of an assessment without explicit consent.
- Do not use the system of peer review to generate additional citations for no apparent reason, with the aim of increasing your own or other people's citation scores ('citation pushing').
- Refrain from making an assessment if any doubts could arise regarding your independence (for example, because of possible commercial or financial interests).
- Refrain from making an assessment outside your area of expertise, or do so only in general terms.
- Be generous in cooperating with internal and external reviews of your own research.
- Do not establish a journal that does not apply the required standards of quality to its

publications, and do not cooperate with any such journal.

Communication

- Be honest in public communication and clear about the limitations of the research and your own expertise. Only communicate to the general public about the research results if there is sufficient certainty about them.
- Be open and honest about your role in the public debate and about the nature and status of your participation in it.
- Be open and honest about potential conflicts of interest.

Standards that are applicable to all phases of research

- As a supervisor, principal investigator, research director or manager, provide for an open and inclusive culture in all phases of research.
- As a supervisor, principal investigator, research director or manager, refrain from any action which might encourage a researcher to disregard any of the standards in this chapter.
- Do not delay or hinder the work of other researchers in an inappropriate manner.
- Call attention to other researchers' non-compliance with the standards as well as inadequate institutional responses to non-compliance, if there is sufficient reason for doing so.
- In addressing research misconduct, make no accusation that you know or should have known to be incorrect.
- Do not make improper use of research funds.

10.2 Appendix II: Assessment form, rubric and learning agreement

The WU-thesis assessment form and rubric will be used to grade your thesis after completion. We encourage you to look at the assessment criteria at the start of your project. You can download the most recent version of the from this page: https://www.wur.nl/en/education-programmes/current-students/msc-thesis-msc-internship-and-msc-research-practice.htm.

The learning agreement is filled out in OSIRIS. To have an overview of the various topics covered in the learning agreement you can consult the checklist learning agreement. Information about the process in OSIRIS can be found in an interactive visual guide.

10.3 Appendix III: Intellectual property statement for student

In the learning agreement, one of the steps is that the student has to read and confirm the intellectual property statement below[6].

Introduction

It is important for you as a student to understand your rights and obligations concerning intellectual property and confidentiality. Please read this declaration and accept it by selecting 'yes' at the bottom of this page. If you have any further questions about intellectual property, consult info.eship@wur.nl.

[6] Note that the text of this statement differs from the text used in academic year 2022-2023 and before

Declaration

1. The student shall own the (rights to the) MSc Thesis / Research Practice. This does not encompass the information and materials provided by Wageningen University (and others) to the student. The student hereby grants Wageningen University the right to use the MSc Thesis / Research Practice for education and internal research purposes and the right to publish the MSc Thesis / Research Practice in the WUR e-depot.
2. Wageningen University remains entitled to and the owner of the information and materials provided to the student for the MSc Thesis / Research Practice project. The student shall keep these information and materials confidential for a period of five (5) years, starting on the date that this declaration is accepted.
3. The student will perform the MSc Thesis / Research Practice in accordance with the Netherlands Code of Conduct for Research Integrity.
4. The student will process any personal data in connection with the MSc Thesis / Research Practice in accordance with the instructions and regulations given by Wageningen University. More information can be obtained from privacy.student@wur.nl.
5. The student and Wageningen University can agree on an alternative ownership agreement, for example in case of a specific research assignment or in case of an internship. In that case, the other agreement shall take precedence over this declaration.

The acceptance and execution of this declaration by selecting 'yes' in the box below, recorded in the Student Information System of Wageningen University, Osiris), shall be deemed to be an acceptance with the same validity, enforceability and admissibility as an original signature.

I, the student, have read the above declaration, I fully understood it, and I agree to it.

10.4 Appendix IV: Information on student guidance and social safety

- Resources about student guidance, including the student deans, student psychologists, online training, etc.
- Information about social safety.

10.5 Appendix V: (WU) Checklist for organising a thesis

The checklist below serves as guideline of the steps involved. Please note that the you chair group may have additional/different steps. You should be informed about that in the chair group specific part of the course guide.

- ☐ Are you allowed to start your thesis in terms of required study progress (some programmes require a minimum progress before you can start your thesis?
- ☐ Does the chair group(s) you would like to do your thesis occur in your programme (and specialization)?
- ☐ Do you meet the mandatory knowledge requirements for a thesis in the chair group? You can find those in the course description of that particular MSc thesis in the study handbook. Consult the thesis coordinator of the chair group, if in doubt.
- ☐ If you select courses to meet the mandatory knowledge requirements of the chair group, also check whether you still meet the requirements of your programme (consult your study adviser, if in doubt).
- ☐ Find a thesis topic.
- ☐ Check whether the topic of your thesis is consistent with your study programme (some

programmes have requirements regarding admissible topics)
- ☐ Discuss the thesis topic with the supervisor.
- ☐ Start the OSIRIS process (https://wur.eu/tir-start)
- ☐ Check whether the country of research (if applicable) is a risk area or not.
- ☐ Discuss the requirements for your research proposal with your supervisor (length, depth etc.).
- ☐ Discuss your data management plan with your supervisor.
- ☐ Fill out the thesis learning agreement in OSIRIS and submit to your supervisor.
- ☐ Write a research proposal
- ☐ Ask your supervisor for feedback and approval of the research proposal.
- ☐ If applicable: arrange a date for the presentation of the research proposal.
- ☐ Arrange a meeting for a progress evaluation (the approximate date you already registered in the learning agreement)
- ☐ Arrange dates for the final assessment (handing in thesis report, final colloquium, examination).
- ☐ Provide the supervisor and examiner with a final version of your thesis report.
- ☐ Complete the thesis evaluation questionnaire.

10.6 Appendix VI: Plagiarism

The definition of plagiarism in the online Oxford Dictionary is: “The practice of taking someone else's work or ideas and passing them off as one's own” (Oxford University Press, 2017). All published and unpublished material is included in this definition. Plagiarism is an act of fraud, and one of the most serious violations of integrity in the academic world. Common types of plagiarism are:

- “turning in someone else's work as your own;
- copying words or ideas from someone else without giving credit;
- failing to put a quotation in quotation marks;
- giving incorrect information about the source of a quotation;
- changing words but copying the sentence structure of a source without giving credit;
- copying so many words or ideas from a source that it makes up the majority of your work, whether you give credit or not”.

http://www.plagiarism.org/article/what-is-plagiarism, accessed 18 October 2017