

Master's Thesis Sustainable Development
Course manual
2022-2023



Course Code: GEO4-2321/GEO4-2322
Credits: 30 or 45 EC

1. General information

Entrance requirements

- Letter of acceptance MSc Sustainable Development, and
- At least 60 EC passed within the programme, including:
 - Perspectives on SD (GEO4-2301)
 - Systems Thinking, Scenarios & Indicators (GEO4-2331)
 - Research Design (GEO4-2314)

And:

- at least two track-specific courses of which 1 methods course (at least 15 EC in total). These are specified per track:

For track E&M:

- Tools for E&M Analysis (GEO4-2326)

And 1 out of 2:

- Energy Supply Technologies (GEO4-2312)
- Policies for E&M Transitions (GEO4-2311)

For track ECE:

- Environmental Systems Analysis (GEO4-2303), and
- Global Environmental Change (GEO4-2310)

For track ESG:

- Research Strategies ESG (GEO4-2304)

And 1 out of 2:

- Foundations of ESG Research (GEO4-2306)
- Governance theories (GEO4-2332)

For track ID:

- Advanced M&T Development Studies (GEO4-3518)

And 1 out of 2:

- Development Themes (GEO4-3510)
- Development Theories (GEO4-3505)

Students in the SUSD-Joint Programme will need to have passed 60 EC, including one of the mobility tracks.

Topics

For topics see Blackboard:

- *community Master Sustainable Development > Master's thesis*
- for Joint programme students: *community Master Sustainable Development – Joint programme > General Information > Thesis information - JP.*

Track coordinators

For information on suitable topics, consult your track coordinator:

- Earth System Governance: dr. James Patterson, e-mail: j.j.patterson@uu.nl, phone: 030 253 1509
- Energy & Materials: Robert Harmsen, e-mail: R.Harmsen@uu.nl, phone: 030 253 4419
- Environmental Change and Ecosystems: dr. Angeles Garcia Mayor, e-mail: a.garciamayor@uu.nl
- International Development : dr. Kei Otsuki, e-mail: K.Otsuki@uu.nl, phone: 030 253 2311

Overall coordinator: dr. Frank van Laerhoven, e-mail: f.s.j.vanlaerhoven@uu.nl, phone: 030 253 1036

Board of Examiners: Examencommissie.geo@uu.nl

Copernicus Institute secretary's office: secretariat.SD@uu.nl

Course materials

B. Malmfors et al., *Writing and Presenting Scientific Papers*. Nottingham: UP, 2004 (2nd edition).

Note: Due to Covid-19 restrictions, some parts of the Master's thesis process will be different from what has been described in this manual. E.g. presentations may be held online. Please consult your supervisor and/or programme leader for the latest information, regulations and procedures. This course manual will describe the thesis process in normal times.

2. Course position and description

The Master's thesis represents the culmination of the Master's programme, and provides proof of the capability of the student to formulate and carry out (semi-) independent research. Students can apply the knowledge they have acquired in the courses of the programme in an individual research trajectory. The thesis is the ultimate test to see if students fulfill the learning outcomes of programme.

Students will specialise in a subject that fits with the current research within the Copernicus Institute of Sustainable Development. Depending on their ambition and interests, students focus on one of the research themes and develop their own research proposal with support from their supervisor. After the research proposal has been approved the student executes the research and reports the result in the form of a written thesis and an oral presentation.

The supervisor acts an intellectual guide, assessor and main contact with the university during the thesis period. The research can (partly) take place in an organisation other than the university, depending on the data needed to answer the research question (internship). In general, many firms and institutions are possible locations to perform parts of your Master's thesis, including those in other countries. Please consult your track coordinator and/or thesis supervisor about the suitability of the organisation of your choice.

3. Learning objectives

The overall aims of the Master's thesis are to train students to perform research independently and to specialise in a particular sustainability theme. The learning objectives of the thesis are directly linked to all intended learning outcomes of the programme.

After completion the student is able to:

- translate a relevant issue in the field of sustainable development into a research question, based upon the state of art in the scientific literature;
- elaborate a research strategy, using existing theories and methodologies;
- develop a research plan, choosing and justifying appropriate methodologies for data collection;
- conduct the empirical work needed and analyse the collected data;
- interpret the finding in the light of the existing scientific literature;
- write a scientific report about the findings;
- orally present the findings to an audience of both specialists and non-specialists;
- conduct a full research cycle showing adequate autonomy, creativity, time management and cooperation with supervisors.

Assessment matrix:

Master's thesis Sustainable Development (GEO4-2321/GEO4-2322)

After completion the student is able to:	Content written thesis 70%	Oral presentation 10%	Process 20%
translate a relevant issue in the field of sustainable development into a research question, based upon the state of art in the scientific literature	x		
elaborate a research strategy, using existing theories and methodologies	x		
develop a research plan, choosing and justifying appropriate methodologies for data collection	x		
conduct the empirical work needed and analyze the collected data	x		
interpret the findings in the light of the existing scientific literature	x		
write a scientific report about the findings	x		
orally present the findings to an audience of both specialists and non-specialists		x	
conduct a full research cycle showing adequate autonomy, creativity, time management and cooperation with supervisors			x

4. Structure of the course

The course consists of several steps that you have to go through. These are described below. The standard process, if all steps are taken correctly, can also be seen in the chart with process steps (see Appendix 1).

Step 1: Orientation phase

To learn more about possible topics and to get inspired by other students, you attend ten thesis presentations by other students and presentations by members of staff, guest lecturers and possible other lectures connected to the research themes of the Copernicus Institute. It is important that you do this in the 1st year of your Master's programme because there is less time to do this in your 2nd year. You should attend at least 10 presentations in total of which at least 6 presentations of students from your own Master's programme. The other 4 presentations may be attended at other programmes or at presentations by Copernicus and IDS staff members. Presentation dates will be posted on the Blackboard community and the website. Make sure you always sign the attendance list. The attendance will be registered at the Copernicus Institute's secretary's office. You need to have attended at least 10 presentations to be allowed to register for your own presentation and thus to be eligible for a grade for the Master's thesis.

You may also find inspiration for a topic in the university's Master's thesis database: <https://studenttheses.uu.nl>.

The next thing you need to do is to select a topic in consultation with the track-coordinator. Possible topics and potential supervisors are posted on the Sustainable Development Blackboard site. These fit with the contents of the SUSD programme and the research of the connected research groups. Master's theses in the SUSD programme are preferably connected to the research programme and to the research interests of the supervising staff. In this way we aim to achieve more synergy between our research and teaching activities. The track coordinator decides who is available for supervision on the selected topics. You should only contact the suggested supervisor after this discussion with the track coordinator. Supervisors are expected to accept you if you wish to write your thesis on their topic, unless they are already supervising a determined number of students. The supervisor will inform you about this. The supervisor must be a staff member of the Copernicus Institute and hold a PhD. Guest lecturers are not eligible to be thesis supervisors.

If you develop your own topic, supervisors may refuse supervision. The reason for this is that we cannot guarantee sufficient quality of supervision on topics that lie outside the area of expertise of supervisors.

Your thesis can be 30 EC or 45 EC worth. You, in consultation with your supervisor, should envisage a possible research design and planning to estimate the time needed to successfully complete your project. After this consultation, together, you will decide the worth of your thesis (30 EC or 45 EC). The decision will be based on the specific characteristics of your thesis project. You must justify this choice in your research proposal (see Step 2: proposal phase). Once you made the decision it is not possible to change.

The day you and your supervisor agree supervision will start, will be noted as the starting date of your thesis project. Please inform the Copernicus Institute's secretary's office (secretariat.sd@uu.nl) and let them know that you will be starting your thesis work. This is also the time to enroll for the Master's thesis in OSIRIS. If you are writing a 30 EC thesis, please enroll using course code GEO4-2321. If you are writing a 45 EC thesis, please enroll for both GEO4-2321 *and* GEO4-2322. Your thesis proposal will not be approved if you have not enrolled in the course. Based on the starting date as registered at the secretary's office, a deadline for the research proposal will be set. You also have to make decisions on modes of supervision with your supervisor.

If you go abroad for your thesis research it is mandatory to apply for it in OSIRIS.

- [Go to OSIRIS Student](#)
- Click on the 'Stay Abroad' tab*.
- Click on 'New request' (bottom left).
- Select the correct application request: 'Stay abroad other'.
- Fill out the form and upload your approval from the Master programme leader.
- Click on 'Submit'.

*A new window will open in the old OSIRIS student lay-out. In this window, please click on 'stay abroad' again. You may have to log in again in case your session has expired.

Step 1b (optional): Finding an internship

This step is usually taken parallel to the orientation phase. See also appendix 2.

It is possible that you go to an external organisation to conduct part of the research. Working at an external organisation often eases collection of the data, and provides you with professional work experience. However, the internship has to fit with the research theme you selected and the research you conduct will primarily be judged on academic impact. It is therefore of vital importance that you communicate well with both your track coordinator and supervisor, and the internship organisation. If the internship does not fit with the research theme of your supervisor or fails to meet the quality level of academic research, your supervisor may refuse to further supervise your project. Therefore, you need to find an internship that fits with the topic and discuss this well in advance with your track coordinator and supervisor. You can only sign an internship agreement after you have found a thesis supervisor who approves the internship and your research proposal has been approved. Your track coordinator can help or advise you on internships. However, you are primarily responsible for finding an internship yourself. Please see appendix 2 for the steps to take in this process. Internships may also be found on the website <http://internships.geo.uu.nl>. The **university supervisor** will always have the **final responsibility** for the assessment of the Master's thesis resulting from the internship. The internship supervisor at the organisation will give input for the grade regarding 'process' (which counts for 20% of the total grade).

Step 2: Proposal phase

The next step is to write a research proposal. This can take a maximum of 4 weeks (full-time) after the registered starting date. *Note: do NOT start an internship at a host organisation or go abroad until the proposal has been approved.*

The primary aim of the research proposal is to guide you through the rest of the research. However, by writing a good research proposal you also convince others that you are able to conduct high-quality research that is original, relevant and feasible, using appropriate theories and methods. Finally, you demonstrate that you can write the research clearly and attractively. Follow the instructions given by your supervisor carefully and make extensive use of the feedback you receive. In addition you can use the knowledge from the research design oriented courses in your track to help you with writing the research proposal.

The proposal consists of a **maximum of 5,000 words** (not counting appendices, tables and graphs etc), and the structure of the first chapters follows closely the outline of a scientific report. In each proposal the following points need to be addressed:

- Fill in the research proposal information form
- Add a title page with your name, a title and the name of your supervisor (and for an internship add the internship organisation name, place, and supervisor)
- If you write a 45 EC thesis, write an explicit statement explaining why your thesis cannot be done in a 30 EC thesis. The main difference between a thesis of 30 or 45 EC is the amount of work in terms of time duration (full-time 21 or 31.5 weeks). Since all projects are different, deciding the worth of your master research project should be done after

deliberation with your supervisor. Nevertheless, you can use some of the criteria below to guide you through the process of defining if your master thesis is 45 EC:

- Novelty of the project
- Number of research questions to be answered
- Number of methods to apply
- Amount of data to gather/analyse
- Introduction
 - Societal background or problem
 - Scientific background and previous studies. What is the underlying scientific problem and what are the most important contributions in this area?
 - Identification of the gap in literature: what hasn't been done yet? This is not necessarily exhaustive. A more in-depth literature survey can be part of the research work.
 - Based on this, formulate the research aim, research question (and optional sub-questions) and research framework.
 - Short elaboration on the research questions. If required, clarify your questions and you can briefly state how you approach the problem theoretically and methodically.
 - Scientific relevance, explain how this study contributes to filling the gap in literature and what you add theoretically or methodologically to the field of Sustainable Development.
 - Societal relevance: how do you help solving the societal problem?
 - If required, a brief outline of the proposal
- Theory
 - Explain what theory/concepts you use
 - Explain how you use the theory/concepts, do you build theory, or do you test theory?
 - Background: briefly explain the theory/concepts
 - Why is this theory/concept appropriate?
 - The concepts that you use from the theory and why these are relevant
 - Give definitions of your concepts
 - Argue why concepts are related, if possible state hypotheses
- Methods
 - The methods you use and why (qualitative or quantitative)
 - The type of data you will collect (survey, interviews, patent analysis, etc)
 - The data sources you use
 - How the data will be collected
 - How concepts are measured (e.g. add questionnaire items or give an interview scheme)
 - How will you analyse your data (e.g. modelling multivariate statistics or open coding, etc.)?
 - Ethical issues related to data collection, handling and storage. This includes information on informed consent for interviews and surveys and data management practices in line with GDPR regulations. You can find an informed consent form on the SUSD and SUSD-JP Blackboard community.
 - The reliability and validity of your methods
 - How will this answer your research question?
- Planning and agreements
 - First of all, include the starting date of your thesis which you agreed upon with your supervisor and which was registered at the Copernicus Institute's secretary's office (see step 1). Start planning from this date onwards (see next point).
 - Give a planning in time for all activities of the research. A 30 EC thesis will take 21 weeks of full-time work. A 45 EC thesis will take 31.5 weeks of full-time work. The number of full-time working weeks can be spread over a longer period, e.g. if you are taking a course or have a job alongside your thesis, if you are planning holidays during

the thesis work or other reasons which mean you have to work part-time on the thesis. You have to make this very clear in your time plan in order for the deadline to be set according to your planning and not automatically after 21 or 31.5 weeks full time.

- In the time planning please also make sure you take into account absence of the supervisor, especially the summer holiday. It is the student's responsibility to ask the supervisor about this and include it in the planning. Note that most of July and August are part of the academic vacation period. Absence of your supervisor (especially in August) may make it impossible to finish the thesis process (including presentation and grading) in time before the next academic year.
- You cannot switch from 30 EC to 45 EC or vice versa, after your research proposal has been approved, nor is it possible to write a thesis for any other amount of EC than 30 or 45 EC.
- Take deadlines into account (see chapter 5, Planning and deadlines and chapter 6, Extensions)
- Include other activities that you have, such as holidays or unfinished courses.
- Include the consumption of the available **30** hours (for 30 EC) or **45** hours (45 EC) for **supervision** (including reading hours of your supervisor(s)).
- Include the most important agreements you made about your working relationship and supervision modes. These are important for grading the process.
- References
 - Refer to (peer-reviewed) articles. Use an appropriate way of referencing.
 - It is recommended to use a reference manager (e.g. Mendeley) to generate a consistent list of references.

After finalisation of your proposal, send a **Word** version (to check the maximum number of 5,000 words) for approval to the university and (if applicable) internship supervisor. After your supervisor has approved the proposal, you can send it, together with the *Master's thesis research proposal information form*, to the secretary's office (secretariat.sd@uu.nl). The form is available on the Blackboard community *Sustainable Development > Master's thesis > General information > 2022/2023*. Your supervisor will suggest a second assessor. The secretary's office will send the research proposal to the second assessor (see chapter 7, Examination and requirements). Within 10-15 working days after the submission of your proposal, you will be notified by email whether or not your proposal has been approved. If approved, you will be notified of your thesis deadline (based on the planning you provide in the proposal) and your 2nd assessor.

While you are waiting for the approval of your research proposal, you should continue with conducting the research, as the 10-15 working days will count towards the deadline of your thesis. However, you are strongly advised not to go abroad or start an internship before approval of the research proposal has been received. In principle, students are only allowed to start their internship or go abroad after their proposal has been approved.

On rare occasions where the internship needs to start immediately and/or students have to go abroad, the following conditions apply:

- the UU supervisor should give their written approval that you may start your internship/go abroad; the supervisor will only do this if the subject of the internship/research is considered promising with respect to getting approval;
 - the internship/research proposal may still be rejected (!); all risks and possible consequences are your own and your internship provider's responsibility.
- So, if you still do so, this is fully at your own risk.

Step 3: Research phase

During this step you are expected to conduct research and to write your thesis.

The exact content of the research phase depends on the agreements you have made with your supervisor. It is important that you have regular contact with your supervisor and that you follow up on agreements. Please note the initiative for contact with your supervisor is always with the student.

Clear writing is a very important aspect of this phase. Write to the point and be very precise. Ask your supervisor if there is a maximum number of words you can use. Economise on your words and get rid of sections that are redundant; basically, anything that does not contribute to answering the research question is redundant. Further, almost all repetitions are redundant (there is for example no need to repeat the research question throughout the paper). Be transparent in the structure of your writing and your arguments, use consistent terminology and be consistent in the order that you mention things (for example variables) throughout the thesis. Given that the introduction, theory, and methods are already discussed above (step 2) the following elements are required for the remainder of the thesis:

- *Title page*
 - Top of the page start with “*Master’s Thesis – master Sustainable Development*”
 - Title of the research
 - Your name
 - Name of university supervisor
 - Name of internship organisation and –supervisor, if applicable
- Add a summary to the thesis, limit this to **400 words**.
- Preface
- The structure of the introduction, theory and methods chapters of your thesis is very similar to that of your research proposal. Often you can adapt and extend these parts of your proposal to your current work and adapt according to the comments that were given by the second assessor (if any). Most work will probably be a further specification of the methods section. Finally, do not forget to change future tense to past tense or present tense.
- Results
 - Present the actual results you get. Start with general points (overall model performances, general descriptive results or overall impressions). Then become more specific (for example link to hypotheses).
 - Use tables or figures to present results if required and discuss them. In case of qualitative research, illustrative quotes can help explain the context and bring text alive.
 - Link the results back to the theory section or specific hypotheses.
 - Give alternative explanations in case of unexpected findings.
- Conclusions¹
 - Give your research question and a very short summary of what you have done (the only time repetition is allowed).
 - Give the answer to the research question. Do not simply repeat your results!
- Discussion
 - What are the limitations of the research? You can use the concepts of reliability and validity to help you here. You can also perform a sensitivity analysis, if relevant. Be critical, but convince the reader that your research still has an added value.
 - Theoretical implications. How did you extend current theoretical insights and add to the literature? This should link back to your contribution in the introduction. You can give avenues for further research here.

¹ Sections conclusions/discussion may be swapped around according to your scientific discipline’s customs.

- Managerial or policy implications. What advice follows from your research? Make sure that these recommendations follow from your results and that they are in line with your research question. Don't be too speculative and try to avoid normative terms like 'must' or 'should'.
- References
 - See above (step 2, proposal phase)
- Acknowledgements
 - You can include a short word of thanks to those who made this research possible. Please remember that this is part of a professional publication. It is not appropriate to thank all your friends for the great student life you had during the past five years, or to personally thank people for the coffee they drank with you.

Step 4: Completion phase

Registration for final presentation

One month before your final deadline, hand-in a draft version of your thesis to your supervisor, so they can get an impression whether you will be finishing in time and whether you can present at the earliest date *after* your prescribed deadline. For this you need the (verbal) permission of your supervisor. After you receive permission, you can register for a presentation at the secretariat (secretariat.SD@uu.nl). Upon registration, it will be checked whether you have attended the ten required presentations (see chapter 7, Examination and requirements).

Submission of final thesis

Hand in your definitive final report at the latest on the prescribed deadline (see Appendix 1, step 4b). Send a **Word** file to your supervisor and 2nd assessor, and send *the same file* to the Ouriginal 'Receiver address' (your supervisor will supply you with this address). Ouriginal will be used to check your thesis for plagiarism. Send a **pdf** to the Copernicus Institute's secretary's office, sign the Statement of Originality and complete the evaluation form Master's thesis via <https://www.formdesk.com/universiteitutrecht-geo/MScthesisevaluation>. After your thesis has been approved, it has to be uploaded into the thesis archive. Within one month after the grade has been registered in OSIRIS, you will receive a request by email to upload the reviewed thesis (in PDF format) through OSIRIS Case for the purpose of the thesis archive. The thesis archive is only accessible to employees. **This is an obligatory part of your examination.**

In this respect please note the following:

Sometimes companies do not want the content of your thesis to become publicly available. At the same time, you have the obligation to upload your thesis to the master's thesis database.

Utrecht University's policy is one of 'open science'. Therefore, we do not advocate putting a thesis under embargo. If an embargo comes up after you have already started doing research, this may mean you have to stop your research.

If you do mark your report as confidential (embargo), the abstract should be open to the public.

Final presentation

The presentation should be given at the earliest opportunity after the deadline set at the start of the thesis project (see letter of proposal approval), but only with your supervisor's permission and after you have attended at least 10 presentations yourself.

Please be aware that your supervisor's permission for delivering your final presentation does not imply that your final thesis grade is sufficient. The rubric & assessment form of the report can be found on the Sustainable Development Blackboard community. Read it carefully and use it to pre-assess your own work!

The presentation takes a **maximum of 20 minutes**. You are also expected to take questions during 20 minutes afterwards. The presentation should roughly follow the structure of the research report:

- short outline of the problem
- problem definition and research question
- analytical and theoretical framework
- research method
- main results
- conclusions and discussion

Avoid to treat everything you did in the research project, but rather focus on the highlights. Be sure to think of main messages, and how to convey them to the audience.

Be prepared for questions from audience members who are less familiar with your work.

5. Planning and deadlines

The Master's thesis is 30 or 45 EC, which corresponds to 840 resp. 1260 hours or 21 resp. 31.5 weeks. During your thesis period there are four fixed deadlines that you have to meet (assuming full-time work; you need to adjust this if you are working part-time):

- After 4 weeks: submit the research proposal
- Between 4 and 21/31.5 weeks, regular discussions of individual draft chapters, every 3-4 weeks (initiative is with the student)
- At 21/31.5 weeks: submit the final version of the written thesis
- After 21/31.5 weeks: at the first opportunity present your thesis.

In the time planning please also make sure you take into account absence of the supervisor, especially during the summer holiday. It is your responsibility to ask the supervisor about this and include it in the planning. Note that most of July and August are part of the academic vacation period. Absence of your supervisor (especially in August) may make it impossible to finish the thesis process (including presentation and grading) in time before the next academic year. Therefore, graduating in August is only possible if your supervisor is not on holiday. The supervisor is not obligated to work during the academic vacation period. Note that this can mean you graduate in September and need to stay enrolled for another month.

6. Extensions

If unexpected delays or other problems come up, discuss these with your supervisor and/or study advisor. If required you can ask for an extension. Always give appropriate reasons for the delay. Only in case of delays caused by circumstances beyond your control are you eligible for an extension, e.g. illness, family circumstances and sometimes issues with data collection. Always include a new time plan with your extension request. **Asking for an extension (well in advance of the deadline) is always the responsibility of the student.**

A distinction is made between extensions for less than 2 weeks en extensions for longer than 2 weeks.

- If the requested extension is 2 weeks full-time (80 hours) or less, the supervisor and yourself can come to an agreement together. The supervisor emails the new deadline to the Copernicus secretariat: secretariat.sd@uu.nl.
- Extension requests of more than 2 weeks full-time (80 hours) require the approval of the track coordinator as well. Email the extension request form including proof (if applicable) of the experienced delay and your thesis supervisor's approval to the track coordinator. You can find the form and email addresses of the track coordinators on the SUSD Blackboard community: Master's thesis > General information > 2022/2023.

Note that only requests from students that are enrolled for the course in OSIRIS will be considered. This means that you cannot receive any extension, grade or a judgement on your research proposal, if you are not enrolled.

The maximum extension for the *research proposal* is 4 weeks, full-time. **Note:** your final thesis deadline will remain the same i.e. 21 weeks (30 EC) or 31.5 weeks (45 EC) after the starting date. If no research proposal is handed in on or before the deadline, the proposal will automatically be rejected and you will have to start the course over with a different supervisor and a different topic.

The maximum length of an extension of the *thesis* itself is 6 weeks (30 EC thesis) or 8 weeks (45 EC thesis), full-time. In this case, the deadline is moved by the number of weeks of your extension. The amount of EC cannot be changed.

7. Examination and requirements

During the thesis process there are several deliverables that you have to submit in order to pass the course. All deliverables are judged by your supervisor and an independent second assessor. The second assessor is a member of the staff from the Copernicus Institute or the International Development group and has a PhD. Grades are given within 10 working days. If the supervisor and second assessor cannot come to an agreement on an assessment, they need to contact the programme leader first of all. If no solution can be found, the programme leader will ask the Board of Examiners to appoint a 3rd assessor. The 3rd assessor will give a binding grade. The Board of Examiners may take up to 6 weeks to reach a decision. You need to remain enrolled as a student at Utrecht University for the whole time, until you have graduated.

First of all, you have to have attended **ten presentations** of your fellow students, members of staff, guest lecturers and possible other lectures connected to the research themes of the Copernicus Institute, **before you start working on your own thesis (i.e. in your first year of study)**. At least 6 presentations should be by students from your own Master's programme. The other 4 presentations may be attended at other programmes (Innovation Sciences, Sustainable Business & Innovation, Water Science & Management, Energy Science, or other relevant Master's programmes) or at presentations by Copernicus or IDS staff members. Presentation dates will be posted on the Blackboard community and the website. Do not forget to sign the attendance list on these occasions. You cannot register for your own thesis presentation unless you have attended at least **ten presentations**. The secretary's office has an overview of the number of presentations attended by each student (secretariat.SD@uu.nl).

Secondly, there are three deliverables:

- The first product is the **research proposal**, which can be graded as "approved", "approved if conditions are fulfilled" or "rejected". While waiting for the 2nd assessor's assessment of your proposal, please continue working on the thesis. It is not allowed to go abroad or start an internship before the proposal has been approved. If you still do so, this is fully at your own risk (see step 3, research phase). If the proposal is approved, you can continue with the research, but the 2nd assessor might give you some additional advice. If the proposal is judged "approved if conditions are fulfilled", then there is a list of concerns that needs to be addressed. Students then have a maximum of four weeks to address these issues and to hand in an adjusted proposal. Your deadline for the final thesis will not be adjusted, so your deadline will still be 21 weeks (30 EC) or 31.5 weeks (45 EC) after the starting date. If a proposal is rejected, you will have to start the course over with a different supervisor and a different topic.

- The second is the **written final thesis**, which makes up 70% of the course grade. The thesis needs to be handed in before the deadline (or extended deadline). If no (further) extensions are possible you need to hand in the thesis on the day of the deadline for grading. Your thesis will be checked for plagiarism, using advanced anti-plagiarism software (see step 4 Completion phase).
- Thirdly, you give an **oral presentation**² about the research *after you have handed in the final version of your thesis*. Your supervisor and second assessor are both present at the presentation. The supervisor chairs the presentation. If one of them is not available, they are responsible for finding a replacement. The supervisor and second assessor jointly give a grade for the presentation which counts as 10% of the final grade.

Finally, you receive a grade for the process, which is 20% of the final grade. This grade is given by your supervisor who may decide to include opinions of other supervisors who were involved in your project, such as internship supervisors. However, this is at the discretion of your supervisor.

The supervisor and the 2nd assessor sign the rubric & assessment form, which means they take responsibility for all the grades given and comments supplied. The rubric & assessment forms for both the proposal and the thesis can be found in the SUSD Blackboard community, in the folder Master's thesis > General Information, and in the SUSD-JP Blackboard community in the folder General Information > Thesis Information - JP.

To pass the course, the grade for the written thesis must be at least 5.50 (counting for 70% of the final grade) AND the weighted average of the grades for the thesis, process and presentation has to be sufficient (≥ 5.50).

If the thesis grade is satisfactory (≥ 5.50) but the weighted average is unsatisfactory, but within reparation limits ($4.00 \leq \text{grade} \leq 5.49$), the student may re-write the thesis within 4 weeks and/or redo the presentation at the next opportunity. The supervisor decides what elements need to be revised/re-done. After satisfactory reparation, the final grade for the entire course is a 6.00.

If the thesis grade is below 5.50 but the weighted average is satisfactory (≥ 5.50), the student may re-write the thesis within 4 weeks. After satisfactory reparation, the grade for the thesis is determined as 5.50 and this will be used to calculate the new weighted average final grade.

If the thesis grade is below 5.50 and the weighted average is unsatisfactory, but within reparation limits ($4.00 \leq \text{grade} \leq 5.49$), the student may re-write the thesis within 4 weeks. After satisfactory reparation, the final grade for the entire course is a 6.00.

Summarizing:

Thesis grade	Weighted avg	Repair	Final grade
≥ 5.50	≥ 5.50	n/a	= weighted avg
			Final grade if repair is satisfactory
≥ 5.50	$4.00 \leq \text{grade} \leq 5.49$	Thesis and/or presentation	6.00
< 5.50	≥ 5.50	thesis	= weighted avg, where thesis counts as 5.50 (70%)
< 5.50	$4.00 \leq \text{grade} \leq 5.49$	thesis	6.00

² For online presentations, please see instructions in the SUSD Teams environment.

If the weighted average is below 4.00 or the reparation is not satisfactory, the student has failed the course and the project ends. In that case, the student will have to start the course over with a different topic and possibly a different supervisor.

If no *final* thesis has been handed in by the deadline (+ extension if applicable), the student has to hand in the thesis as it stands at that moment (i.e. on the day of the deadline) and it will be graded for product (i.e. thesis itself) and process. If the thesis is handed in after the deadline, your supervisor can decide that you have not fulfilled the effort requirements and therefore grade your thesis with NVD (Niet Voldaan; not fulfilled). In effect, that means you have to start a new project with possibly a new supervisor.

Students need to follow-up on agreements made with the supervisor or other external parties. Further, the student is expected to operate in a professional manner towards the supervisor and external parties. If the student fails to follow-up on agreements, behaves unprofessionally too often or if the working relationship becomes unworkable, the supervisor can end the project. Ending the project means that the student will have to start the course over with a different supervisor and a different topic.

If the student has made a formal complaint regarding the supervisor's inability to follow up on agreements or regarding unprofessional behaviour, they may ask the track coordinator to continue the project with a different supervisor. If this request is honoured a new supervisor is appointed. The student can use the data that was already collected for the thesis to finish the project.

If the supervisor is unable to continue supervision for reasons that are not related to the student and their behaviour (for example, medical reasons), the student can continue the project, but the track coordinator appoints a new supervisor. The student can use the data that was already collected for the thesis to finish the project.

If a student drops out during the course, the programme leader, track coordinator and the study advisor will be notified by the thesis supervisor. To make sure that students in this situation are well taken care of, the study advisor will invite the student for a meeting in order to discuss and provide advice on which further steps to take.

8. Course feedback group

Not applicable

9. Course evaluation

After completing the course, please fill out the Master's thesis evaluation form via <https://www.formdesk.com/universiteitutrecht-geo/MScthesisevaluation>.

10. Deadlines for graduation

If you have fulfilled all the requirements of your study programme, the Board of Examiners will approve your graduation. If so, they will send you an email confirming your graduation and informing you of your official graduation date.

Please note: you must still be enrolled for your study programme on the graduation date. So do not terminate your enrolment before you have received the email informing you of your graduation date. Also (if applicable), if you have not received the email in August, you have to re-enroll for the next academic year.

Don't forget to hand in all necessary information for your graduation in time. You will be notified by the Student Affairs Office Geosciences when you have nearly completed your programme. On the SUSD website you can find important information on the dates and deadlines you'll have to respect: <http://students.uu.nl/en/geo/susd/practical-information/graduation>.

In order to graduate, you need to make sure that all grades are entered correctly in OSIRIS and you have fulfilled all requirements of the programme. This means checking your academic progress report in OSIRIS. Also check that your name is spelled correctly and your date and place of birth are mentioned correctly. If you have any questions or doubts about your file, please consult the study advisor or the Student Affairs Office Geosciences.

Please note: when you wish to graduate at the end of a month, there are strict deadlines in place for handing in grades, checking files and graduation which are generally 10-15 days *before* the end of the month. You can find the deadlines on the student website and in the table below. Go to the website of your programme, click Practical Information > Graduation for all the necessary information. In case of any questions or uncertainties: ask Student Affairs or the study advisor.

Graduation deadlines for 2022-2023 are:

Deadline hand in grades at Student Affairs Office	Graduation date
23 September 2022	30 September 2022
21 October 2022	31 October 2022
18 November 2022	30 November 2022
16 December 2022	23 December 2022
20 January 2023	31 January 2023
17 February 2023	28 February 2023
24 March 2023	31 March 2023
21 April 2023	28 April 2023
19 May 2023	31 May 2023
23 June 2023	30 June 2023
21 July 2023	31 July 2023
25 August 2023	31 August 2023

The *graduation ceremony* (when you get your degree certificate) is held four times a year; generally in September, January, April and June. This is not the same as the graduation date (which is once a month as explained above). Therefore, it is possible that you receive your diploma a few months after your official graduation date. The dates for the graduation ceremonies can be found on the website, under Practical Information > Graduation. Again, strict deadlines apply. It depends on your graduation date when you can attend the graduation ceremony.

Appendix 1:

Phases and steps in the Master's thesis process – Sustainable Development

1. Orientation phase

- a. student attends 10 thesis presentations by fellow students and/or staff (in 1st master year)
- b. student searches for appropriate subjects
- c. student discusses potential subjects with track coordinator, who will:
 - redirect student to a supervisor (when subjects are potentially feasible)
 - ask for better subjects (when subjects not yet feasible)
 - agree on the credits for the thesis (30 EC or 45 EC)
- d. when supervisor accepts description of the subject, student and supervisor inform the secretary's office (secretariat.sd@uu.nl) and mark the start of the Master's thesis
- e. student enrolls via OSIRIS (GEO4-2321/GEO4-2322)



2. Proposal phase

- a. student elaborates a research proposal in *Word* (max. 4 weeks after registered start date)
 - If this is a 45 EC thesis, write an explicit statement explaining why the work cannot be done in a 30 EC thesis
- b. when supervisor agrees, proposal is sent to the 2nd assessor via the secretary's office
- c. the 2nd assessor assesses the proposal
- d. when proposal is accepted the date for submission of the final thesis is set



3. Research phase

- a. student starts the research and works according to proposal
- b. student regularly convenes with supervisor (initiative is prime responsibility of student)
- c. the proposal may be adjusted during the research (after consent of supervisor)



4. Completion phase

- a. student registers for thesis presentation at Copernicus secretary's office, at the earliest one month before thesis deadline (approval supervisor is needed!)
- b. student hands in final thesis (at the latest on deadline set), comprising of:
 - **Word** copies for supervisor, 2nd assessor and Ouriginal
 - digital **pdf** version for the secretary's office (secretariat.SD@uu.nl)
 - upload **pdf** of thesis via OSIRIS
- c. student gives final presentation at first available presentation date
- d. supervisor and 2nd assessor agree on grade for thesis content (70%) and presentation (10%), and supervisor determines grade for process (20%)
- e. supervisor sends in signed rubric with final mark and plagiarism assessment report to student administration, education coordinator and student.
- f. Student fills in course evaluation and uploads **pdf** of thesis via OSIRIS.

Appendix 2: How do I find a Master's Thesis subject/internship?

Master Sustainable Development, Utrecht University

1. Introduction

The Master's thesis within the master's programme Sustainable Development may be performed as an internship at an organisation in the professional field, or at a university. In this document instructions are given on how to find a Master's thesis research subject or a place to do the Master's thesis as an internship.

The best place to start are the Master's thesis and internships folders on Blackboard, in the Community *Sustainable Development*. In these folders research subjects and internship possibilities will be posted which are received by the programme leader or track coordinators. Internships may also be found on the website <http://internships.geo.uu.nl>, but these are not specifically intended for Sustainable Development.

If the research subjects and internships offered on Blackboard are not appealing enough, students may try to find their own internship location and subject. Please note however, the process of finding an internship takes time and therefore should start well ahead of the actual start of the internship/Master's thesis itself (usually in November, period 2 in the second year). This means students will have to start thinking about their internships preferably in period 4 of the first year, but at the latest at the start of the second year in September.

The student is expected to take the initiative of reflecting on their own interests, possible organisations and locations of the internship. To aid this process some process steps of finding an internship are presented below. The track coordinators are available for assistance, but students are expected to have performed the process steps first.

2. Process steps

To find their own internship (not listed on Blackboard) students are expected to perform the following steps in a timely manner.

a) Ask yourself questions about the characteristics of your desired internship, e.g.

<i>Type of organization</i>	<i>(often this is where you consider working after graduation)</i>
<i>Netherlands or abroad</i>	<i>(any specific country/ place?)</i>
<i>Methods</i>	<i>(modelling, fieldwork, policy related, ..)</i>

b) Make a decision tree, or ordering of preferences,

in which you determine what is most important, and what is successively less important. For instance, if you want to go abroad this might be the first selection criterion, then type of organisation, etc.

If you cannot decide what is most important, skip this step.

Example of decision tree/ordering of preferences:

a) Must be in The Netherlands

b) Consultancy firm

c) Preferably something with solar energy and policy.

c) Look on the internet for types of organisations, projects, etc. which interest you,

and keep a log of what you found and whether you want to contact them.

Fill in a table that looks like this:

Organisation	Place/Country	Interesting Project/Task	Methods applied	Elements that interest me	Contact them ?

d) Contact the preferred internship organisation.

Try to find a contact person as close as possible to the subject you are interested in. Usually it does not work to send an email to a general address of an organisation (such as Info@organisation.com). Instead, try to find the email address of a contact person on the webpage that describes a project (or multiple projects) that you are interested in. These people are more likely to appreciate your interest in their work, and may try to think of a suitable internship for you, even when they actually do not have internships posted on their website. Indicate in your mail what you like about their work.

e) Approach your track coordinator

when you think you have found a relevant internship, or when you have too much trouble in finding one. Their names and contact details can be found on page three of this manual.

If you have found an internship the track coordinator will evaluate if it is suitable for a Master's thesis (subject, research question, available data, methods applied, time frame, supervision at place of internship) and give further suggestions on how to prepare a Master's thesis proposal.

f) No success. If you have taken all process steps above and are not able to find an internship yourself you may approach the track coordinator for help.

Legal aspects internships

Data collection for a thesis can be done via an internship. The internship can be at a company, a research institute, a NGO etc ("the company" in this paragraph).

The student, Utrecht University and the company sign the internship contract. An internship contract is mandatory! There are different contracts available.

- If you are an EU student and you are doing your internship in The Netherlands, it is preferable you use the standard UU contract, to be found on Blackboard.
- If you are a non-EU student and you are doing your internship in The Netherlands, you need a Cospa-contract. This is approved by the IND. With this internship contract, you do not need a work permit. You can find it on Blackboard.
- There is no standard contract available for doing an internship abroad. Be careful what agreements you enter into. If you are going to do an internship in an "code orange or red" area (as indicated by the Ministry of Foreign Affairs), the university will in general not approve the internship as it is too dangerous. This also goes for risks associated with Covid-19.

Fill in all the details of the internship contract and send it to the internship coordinator (Jantien Minderhoud, (j.p.minderhoud@uu.nl)) to be checked and signed. Only sign it yourself after approval by the internship coordinator.

Who signs the contract?

As you are undertaking your internship as part of a Master's programme, Utrecht University has to sign it. *Under no circumstances sign it yourself before Utrecht University has signed!*

Every time that a student agrees to collaborate with a company they should immediately show the UU contract or Cospa contract. If the company does not want to sign it or wants to use its own contract, inform Jantien Minderhoud (j.p.minderhoud@uu.nl) and your thesis supervisor.

If you are unclear about any details of the contract, please contact Jantien Minderhoud well before the proposed start date of your internship.

If any part of the contract is unclear, legal advice will be sought, which can delay the signing and the start of your internship, or may even mean this specific collaboration will be stopped.

Payment

Most students get paid by the company for doing an internship. Utrecht University is not a party in that agreement, and any payments are between you and the company only.

Insurance

Utrecht University has a liability insurance policy for students causing damage at their place of internship. Only if the student is actually liable, the insurance will pay out. The insurance does not pay the first 50.000,- euros. The university does not have an insurance for accidents ("ongevallenverzekering"), so it may be a good idea that you arrange this yourself.

Non-disclosure agreements (NDA)

A Non-Disclosure Agreement (NDA) is a contract between Utrecht University and a company, which says that it is not allowed to disclose any information of your work at the company to other parties. This is certainly not preferred by the university as your work needs to be properly assessed and you have to give a public presentation about your thesis. If the company insists on a NDA, make sure it does not last longer than the remainder of your study time. Otherwise you and the university are still liable after you have graduated. A NDA can be a disadvantage for you, e.g. if you want to use your research to publish an article or to continue your research after graduation (PhD, work at a research institute).

If, according to Utrecht University, the content of a NDA is unacceptable it will not be signed by a representative of Utrecht University. This may mean your project at the company cannot take place. The UU standard internship contract contains a clause regarding confidentiality, which is acceptable for Utrecht University. It is highly preferred you use that contract.