

**Final Project  
Graduation Guide  
PSTS**

**2024-2025**

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## Contents

Introduction .....	3
1 Aim of the Final Project .....	4
1.1 Objectives of the MSc programme PSTS.....	4
1.2 Final qualifications of the MSc programme PSTS.....	4
2 Fundamentals of the Final Project.....	6
2.1 Milestones along the road to graduation .....	7
2.2 Before the Final Project.....	8
2.3 Preparing the Final Project .....	9
2.4 Literature study.....	11
2.5 Writing a research proposal.....	13
2.6 Writing a thesis .....	15
2.7 Oral examination and colloquium (i.e. public presentation) .....	18
3 Mobility Online .....	19
4 Supervision .....	21
4.1 The graduation committee.....	21
4.2 Mutual obligations between supervisor and student .....	21
4.3 What should you discuss with your supervisor?.....	22
4.4 MasterLab.....	23
4.5 CBL in the Master Thesis project .....	23
4.6 Conflict resolution .....	23
4.7 Examination of the Final Project.....	24
4.7.1 Graduation with distinction (cum laude) .....	27
5 What to do after graduation? .....	28
Appendix A: Choosing year 2 electives (Milestone 1).....	29
Appendix B: Graduation Study Plan (Milestone 2).....	31
Appendix C: Graduation Request (Milestone 3 – ‘Green Light’) .....	33
Appendix D: Final Project assessment form .....	35
Appendix E: Combined final thesis projects in PSTS Link trajectories .....	40

## Introduction

Dear students,

This guide will inform you about the steps that you need to complete before graduating. Formal requirements and procedures are mentioned alongside practical tips. In addition, this document aims to guide students through each phase of the Final Project process and answer the most frequently asked questions.

If you have any further questions, please do not hesitate to contact the PSTS study adviser.

On behalf of the PSTS staff, we wish you success with your Final Project.

Michael Nagenborg  
Programme Director

Legal note:

In case of conflict, no rights can be derived from this guide. For such matters, you need to turn to the *Student Charter, Education and Examination Regulations*, and in particular the PSTS Appendices: <http://www.utwente.nl/psts/master/regulations-documents/>

# 1 Aim of the Final Project

During the final semester of the PSTS programme the Final Project is scheduled. Students are expected to write a thesis, applying – and reflecting on – philosophical, historical and sociological ideas that they have acquired during their PSTS studies.

In this section we list the objectives and final qualifications of the programme, which are central to completion of the Final Project.

**NOTE:**

IN LINE WITH THE PSTS PROGRAMME GUIDE AND THE EDUCATION AND EXAMINATION REGULATIONS (EER), PLEASE BE AWARE THAT YOU ONLY MAY START YOUR FINAL PROJECT AND / OR INTERNSHIP UPON HAVING COMPLETED SUCCESSFULLY 75 ECs OF ALL OTHER PSTS PROGRAMME'S COURSEWORK.

## 1.1 Objectives of the MSc programme PSTS

The aim of the programme is to enable you to perform philosophical and multidisciplinary analyses of the mutual interactions between science and technology on the one hand and human beings, values, society and culture on the other. Two scientific domains contribute to realising this aim: Philosophy, and the multidisciplinary field of Science, Technology and Innovation Studies (STS). Graduates possess sufficient knowledge and skills to participate in professional practices, for example as scientific researchers, consultants, policymakers, educators, or designers. They are also able to independently carry out conceptual, empirical and normative research and could be considered for a PhD position.

## 1.2 Final qualifications of the MSc programme PSTS

### Preamble

The PSTS programme has as its domain the Philosophy of Technology, which is a field that is concerned with the Philosophical study of Technology and its implications for and interactions with society. In the PSTS programme, the Philosophy of Technology is understood broadly as a field that combines conceptual, empirical and normative methods and theories and approaches.

### Knowledge

- K1. Extensive knowledge of the Philosophy of Technology, including its philosophical and STS approaches, and the ability to relate these approaches to each other.
- K2. Good knowledge of the various philosophical subfields, including Ethics of Technology, Social and Political Philosophy of Technology, Philosophical Anthropology of Technology, Epistemology and Metaphysics of Technology, and Philosophy and History of (Engineering) Science and Technology.
- K3. Good knowledge of approaches and themes in STS.
- K4. Good knowledge of empirical research methods in STS and philosophical research methods.
- K5. A basic understanding of the relation between the Philosophy of Technology, including its various subfields, methods and history, to general Philosophy, including its various subfields, methods and history.
- K6. Specialist knowledge of a sub-domain or specialised topic within the Philosophy of Technology (broadly defined).

**Skills**

- S1. Writing and verbal communication skills.
- S2. Skills in reasoning and arguing and in the analysis of arguments.
- S3. Skills in locating, reading and analysing scientific texts from various disciplines in philosophy and STS, as well as professional and popular texts, that reflect on technology, engineering sciences, technological developments, and the relationship between technology and society.
- S4. Skills in the identification and analysis of problems related to the role of technology and science in society, and the ability to formulate a position with regard to these problems from a philosophical and/or STS perspective.
- S5. The ability to perform original scientific research in the field of Philosophy of Technology, using philosophical and/or STS methods. This includes the ability to arrive at a well-considered problem formulation, the selection and development of appropriate theories and (empirical) methodologies, and the proper execution of a research plan.
- S6. Skills in the comparison of differing scientific approaches or paradigms in a sub-domain or specialised topic, the application of these approaches, and the ability to critically analyse them.
- S7. The ability to generate philosophical and/or STS research results that are relevant for scientific, technological, and/or social practices.
- S8. The capacity to collaborate with and communicate research results and solutions to scientists in- and outside one's own academic field, , as well as professionals from societal domains, and the ability to generate learning processes from that interaction.
- S9. Reflective capacity pertaining to one's own work, selecting or altering course, and the ability to translate learning trajectories into the development of more general knowledge and methods.
- S10. Capable to endeavour a career inside or outside of academia wherein philosophical and STS knowledge and skills are required.

## 2 Fundamentals of the Final Project

### *Test or exercise?*

The Final Project is the programme's final learning experience, as well as the programme's final exam. It is a learning experience in which you develop yourself to the level of young academic researchers in the field of PSTS. This happens in the academic tradition of apprenticeship. You work as young professionals, independently and courageously, exploiting all that they have learned, but not completely self-reliantly or solo. They can rely on their supervisors, MasterLab teachers, and programme staff, who will guide them and supervise them. Their Final Project thesis will be evaluated and graded by a graduation committee that is chaired by their supervisor. In this guide you can find detailed information about the Final Project and the process of completing it.

### *Education or research?*

The educational value of the Final Project is considered more important than the research itself. There is, however, no contradiction here and no choice to be made. You demonstrate that you have attained the status of young professional academics in the process of your thesis project. Their work is graded on academic values such as comprehension of relevant theories, a sound problem setting, disciplined thinking and analysing, sound conclusions, good writing, initiative, perseverance, communication, presentation, and learning ability (see for details the assessment form: appendix D).

### *Timeframe*

The Final Project should be completed in due period, i.e. the time needed to gain 20 ECs (short Final Project) or 30 ECs (regular Final Project). Both you and the supervisor are responsible for ensuring that the thesis project progresses as planned, taking into account the quality of the research. Finishing (almost) all other courses before starting with the Final Project is pivotal for finishing the Final Project in due time. Note that the last week of July is the standard guideline for graduations.

### *Internal or external?*

In most cases you complete your research within the Philosophy or KiTeS sections, but it is possible to do this externally (e.g., at a research facility or a company). In such cases, you will first need to discuss the possibilities with your MasterLab teachers and your intended Final Project supervisor as soon as you can. Especially if you plan to go abroad, it is wise to start the preparation early, which is at least six months in advance. A necessary condition for conducting externally-based research is that the external host is qualified for, or at least familiar with, academic supervision and that this person accepts co-supervision from the supervisor from PSTS. The external supervisor cannot grade the Final Project

### *Internship possibilities*

It is possible to do a brief internship (10 ECs). The internship's objective is to facilitate an orientation on the professional field. The internship also takes place in the second semester of the second year. Possibly (but not obligatory) it is related to the envisaged Master's Final Project. Please see the PSTS Internship Guide for details:

<https://www.utwente.nl/en/psts/master/internship/psts-internship-guide.pdf>

**Note 1:**

In the 4TU track Ethics and Technology (see: PSTS Programme Guide for details) a formal internship is only possible as an extra-curricular activity (since the track does not include the option of a 20 ECs Final Project).

**Note 2:**

Likewise, in the so-called *PSTS-Link* trajectories (see: PSTS Programme Guide for details), a formal internship is only possible as an extra-curricular activity (since the Link-programme does not include the option of a 20 ECs joint Final Project) on top completing the full 2-year, 120 EC programme (thus implying a study duration of at least 2.5 years). However, instead of doing a separate internship you can do your Final Project externally (see pg. 6) in the context of an organisation. But be aware that adding a third party to your thesis can make things more complex and time consuming.

**Attendance requirements MasterLab**

The course MasterLab is meant to guide you towards a Final Project topic, supervisor and proposal (MasterLab-semester 1), and to support you while you carry out the Final Project (MasterLab-semester 2). In both cases you not only receive guidance from the involved teachers, but also give feedback on and support each other's work. For this reason, the course is obligatory and attending the meetings is crucial. In case you are doing a full-time internship elsewhere, you have to arrange with the teacher(s) of the course how to make up for the absence (for example by participation at a distance or by a substitute assignment)

**2.1 Milestones along the road to graduation**

The process of Final Project completion is outlined in the following table, which identifies the different phases and formal procedures. The student's progression is marked by **three Milestone forms**, which need to be handed in at the PSTS Educational Affairs Office (EAO), ([BOZ-PSTS@utwente.nl](mailto:BOZ-PSTS@utwente.nl)). You can find these forms in the appendices A, B and C of this Final Project guide, and on the website <https://www.utwente.nl/psts/master/graduation/>. In this chapter the different phases will be discussed and some tips and tricks will be given that could help to realise them.

Period	Activity	Result	Milestone
<b>Year 1</b>			
End of Year 1	Explore electives in year 2	Choose set of electives	Deadline for choice electives: no later than June 15 Send in Milestone 1 (Appendix A) to EAO
<b>Year 2</b>			
Semester 1 General structure: <ul style="list-style-type: none"> <li>• 5 Electives</li> <li>• MasterLab</li> </ul>	Explore thesis subjects Discuss with MasterLab teachers possible topics and supervisors	Approved thesis proposal Supervisor Graduation Committee	Deadline Final Project Contract and Study Plan: February 1 Send in Milestone 2 (Appendix B) to EAO

	Meet potential supervisors Literature research and analysis Write thesis proposal (during MasterLab) Plan the Final Project		
<b>End Semester 1</b>	Register your Final Project in <b>Mobility Online</b> (see Chapter 3 of this guide)	Digital approval of start Final Project	Send in signed, by both examiners, Mobility Online registration form to EAO
<b>Semester 2</b> General structure: MasterLab Regular meetings with supervisor Green light meeting Graduation	Literature research and analysis and/or empirical work and analysis. Work on thesis: writing and rewriting Be aware of the assessment criteria (Appendix D)	Approved thesis Oral examination Public defence of Final Project	Deadline graduation request: at least 15 working days before envisaged graduation Send in Milestone 3 (Appendix C, 'Green Light',) to EAO
Upon having submitted your thesis at the EAO	Finalise your Mobility Online registration	Digital approval of completion of the Final Project	

## 2.2 Before the Final Project

Starting the Final Project is only possible if you have completed at least 75 ECs from the PSTS courses and, in any case, the courses TechnoLab (201400575), Research Methods (202400551) and the Skills Portfolio (202000102). The curriculum in the second year prepares you for your Final Project by enabling them to specialise via a set of PSTS electives and/or electives from other UT or non-UT programme's. For details in this regard, check the attached Milestone 1 form (appendix A).

### Study abroad

You may do part of your programme at a university in another country. Depending on your interests, you study at one of our associated universities (i.e. Erasmus partners). It is possible to take courses at another university and also to complete the Final Project there. However, going abroad requires a lot of planning. Besides personal arrangements such as visa, housing and finances, it is also important that there is someone available that is willing and capable to supervise you at the university of your choice, and that the courses, in terms of contents and level, comply with the PSTS standards and requirements (to be assessed by the Examination Board). If you would like to go abroad, it is required to discuss your ambitions timely with the programme's study adviser, as well as with the MasterLab teachers. Timely means in the fourth quarter of the first year, so before the summer holidays. Please note that you need approval from the Examination Board to incorporate courses that are not standard in your programme.

After the Examination Board has granted permission and the courses abroad have been completed, you should ensure to supply the University of Twente with an official transcript of records (ToR) that states the course code and title of the course(s), the study load in ECs; grades

or marks (preferably according to ECTS standards) and the signature of the local examiner or institution stamp. The ToR should be submitted at the PSTS Educational Affairs Office (EAO).

### **Attending Colloquia**

PSTS students have to attend colloquia at the section of Philosophy and/or KiTeS, as well as PSTS graduation colloquia, as part of their academic training. This is compulsory throughout the whole programme. In total you have to attend at least eight colloquia during your studies. The PSTS-EAO will track record of the attendance at colloquia, and it is obvious that you cannot list your own final colloquium. Attendance is monitored and registered. You have to sign the attendance form at the colloquium. In case there is no attendance form present, PSTS students have to make their own list with all attendees (incl. date, name of the speaker and topic of the colloquium), and have this list signed by the coordinator of the colloquium.

In any case: you need to make sure that you can prove attendance.

## **2.3 Preparing the Final Project**

Students have to make sure that they have completed (almost) all their courses of the first and second year (at least 75 ECs, including TechnoLab, Research Methods and the 1<sup>st</sup> semester part of MasterLab) in order to start their Final Project. In exceptional situations you could be allowed to start your Final Project before you have finished all your courses. This is dependent on planning and progression conditions and can only be allowed by the programme director in consultation with the MasterLab teachers.

### **How to find a Final Project topic?**

Apart from possibly already having a clear picture of what you would like to focus on during your Final Project, you may take the following into account.

- One route towards finding a thesis topic is to build on the courses that you have taken in combination with their particular interests.
- Lecturers do their research within the framework of the research programme of their sections. A student might engage with them to explore taking on a (specific) assignment(s) that is/are part of those research activities.
- Societal actors and institutions (including companies) may have interesting questions and project, in which you can engage in. Keep your eyes and ears open! The institutions on the list of internship providers is a good starting point.
- You can try to relate your Final Project closely to your own professional background and setting (if applicable). This option needs to be discussed with the MasterLab teachers upfront!
- You may ask the MasterLab teachers or lecturers about possibilities of doing your Final Project externally, at a relevant (research) institute.

### **Finding a supervisor**

The MasterLab teachers act as the programme's 2<sup>nd</sup> year advisers when it comes to the preparatory phase of your Final Project.

More specifically, and next to their role in guiding students to clarify and to articulate their Final Project ambitions, questions, and methodological orientations, they coordinate the matching of students with Final Project supervisors and second readers (examiners).

This embodies the following procedure:

- a. At the beginning of year 2 the MasterLab teachers organise a session where PSTS teachers (and other staff that may serve as Final Project supervisors) are invited to present their fields of interest (including methodological orientations) and where you can have short chat sessions with them, exploring e.g. whether their ambitions fit with the staff's expertise and/or the (methodological) nature of their research, and to check whether there is a personal click.
- b. By the end of October you submit your proposed Final thesis question and list of preferred supervisors to the MasterLab teachers (see MasterLab assignment for details.)
- c. By mid-November the MasterLab teachers will match students with supervisors and second readers (typically based on research interests and fair distribution among staff members).
- d. Before the end of November you need to have met with your assigned supervisor. During this meeting the time planning needs to be addressed explicitly and in detail. You should also make contact with your second reader, informing them of your topic, plans and work schedule.
- e. You have to submit a final research proposal before the end of January. (See MasterLab schedule for specific date.)

This procedure will ensure that you will begin working on your Final Project in earnest by the start of the 2<sup>nd</sup> semester.

Note:

For both you and the supervisor it is important to know in advance what you can expect from each other. If you, for example have a part-time job, this should be taken into account in the time frame planning. At the same time, you should be aware that a supervisor gets assigned a maximum of 32 hours on a 30 ECs Final Project (the 2<sup>nd</sup> reader/examiner max. 8 hours). For a shortened (20 ECs) Final Project, the supervisor may spend 24 hours (and the 2<sup>nd</sup> reader/examiner max. 6 hours).

*During the first or second meeting with your supervisor you can agree on a time schedule for your meetings and already set a date for your colloquium. Putting up, and adhering to this schedule is very helpful for your thesis writing process. All students are encouraged to graduate before the start of the summer holiday period in order to ensure that they are finished before the end of the academic year, and that their supervisor/second reader is also available for the entire process.*

If you encounter delay and you would like to start your Final Project at a later stage, you need to inform your MasterLab teachers, the Final Project supervisor and the study adviser timely about the new timeframe of the project.

The formalisation of the Final Project process is done by filling in the appropriate form (Milestone 2, appendix B) and letting the concerned members of the graduation committee sign the form before the end of the 2<sup>nd</sup> quarter in the context of MasterLab. The student is responsible to submit the filled-in and signed form to the PSTS Educational Affairs Office and send a copy of this form to the MasterLab teachers and the PSTS study adviser.

### Second reader/examiner

Together with your supervisor, you discuss the choice for the already aforementioned 2<sup>nd</sup> reader. The second reader is assigned before you start your Final Project. The second reader has a different status than the supervisor. The supervisor is responsible for the 'daily supervision' and comments on every aspect of the thesis. The second reader is in collaboration with the supervisor involved in the thesis project at three moments:

- 1) co-approve the research question(s) and the research proposal of the Final Project;
- 2) co-evaluate if the thesis is good enough for the so-called 'green light';
- 3) co-grade the thesis. The second reader is not a supervisor but a neutral and independent assessor.

Note that, from 2024-2025 onward and in adherence to the recommendations of the 2023 PSTS accreditation, the second reader does not attend the green light meeting in person but submits an independent report to the PSTS supervisor at least one day before the green light date. If the supervisor and the second reader do not concur on whether to proceed to the graduation event, the case is referred to the PSTS programme director for appointing a third or external reader, whose evaluation will determine a final green light decision.

### Assessment of the ethical permissibility of the proposed research

In case a Final Project involves human subject research, you have to submit the research proposal to the Faculty's Ethics Committee **before starting the part of the work involving humans**. This applies in case of observations and experiments, but also in case of interviews and surveys, among others. You have to discuss and decide in close collaboration with the project's supervisor whether this is the case.

Full information on the (web-based!) procedure can be obtained from the following webpage: <https://www.utwente.nl/en/bms/research/ethics/>. Here you will find all rules and regulations in this regard.

## 2.4 Literature study

A literature study starts with searching for and selecting appropriate literature. The supervisor is well informed about the literature in your field of research but has not always read everything about their specific research topic.

Because students need to situate their topic and their approach to it in a historical context, it is often good to first read about the general field of research before focusing on the very specific literature. The supervisor can help by pointing out particular books or scientific articles. Naturally, you should also search for literature yourself. There are several places where you can do this:

- The library: the University Library. Website: <https://www.utwente.nl/en/service-portal/university-library>. It is possible that the University Library does not hold a book. In that case the database *Picarta* ([www.picarta.nl](http://www.picarta.nl)) can indicate if the book is available in another Dutch university library. The book can then be ordered using a so-called *IBL account* and will be sent to the UT. In consultation with the supervisor, you can request this book via the supervisor's section in order to avoid associated costs. The library also offers e-journals and an updated list of available data-bases and internet resources (such as specialized search engines).
- The bookshop: sometimes it might be best to purchase a book that you plan to use intensively. The advantage is that you can add remarks and make notes in the book.
- Fellow students: fellow students might have good tips. Sometimes they might have books about the inquired subject that can be borrowed.

Once you have found the first few useful books or articles, it often becomes easier to advance their search using the bibliography and references. Also (inquire after the library staff) the use of citation indexes can be considered. Together with your supervisor, you can make a selection of the literature that they need to read. When selecting, you need to pay close attention to the background of the writer, the context of the book (why and when is it written?) and the references that the writer draws on.

It is always preferred to read a book in the language in which it was written. Translations may come with subtle (or less subtle) changes of meaning. If you are not able to read a book in its original language, you need to consult your supervisor about which translation they should read. Also the internet could provide reviews of translations. It is also necessary to consult your supervisor in case you need to use non-English sources.

When you have made a selection of the literature, it is wise to make a schedule. Setting deadlines can help to maintain some speed and prevent becoming 'stuck' in a book. Because reading 40 hours a week is almost impossible to achieve, it is important to find a good balance between searching, reading, writing and discussing.

It is really important to read systematically: only read what you need to read and don't read (very thoroughly) what is not or less relevant. You should also prevent reading without really processing the information. You need to ask yourself what you want to accomplish before you start studying a book and make notes! There are multiple ways to do this:

- Keep a logbook with notes;
- Underline fragments in the text and add remarks on the sides of the pages in order to quickly find important fragments;
- Make excerpts of articles and books.

Every student has own preferences. Discover what way is best for you and discuss it with your supervisor at an early stage.

### **Tips for the literature study**

1. Do not just read, also write.

*When you only collect more and more literature and do not write down what this information has to do with your problem, chances are that you will find it difficult to tackle your problem. It is often easier to structure thoughts in the process of writing. Furthermore, while writing, you can formulate new questions that can help you to grasp the problem and think up new questions for further research.*

2. Talk to others.

*Especially in this phase, it is important to talk to others. Similar to writing, talking to others can help to structure your thoughts and find out which presuppositions might have been wrong. It may generate new ideas. MasterLab will also offer you a platform to discuss these ideas.*

3. Make excerpts and notes of the literature.

*Since you will read a lot of articles and books, it is helpful to make excerpts and notes, including why you think that this specific article or book is useful for you. Make notes of strong and weak points in a text and problems you have with the text. Also make clear what parts you can or cannot use. Questions that you have about a text can often be used as a starting point of a discussion with your supervisor.*

Note:

The BMS Faculty also has its own information specialists for assisting you in searching literature. <https://www.utwente.nl/en/lisa/contact/specialist/>

## 2.5 Writing a research proposal

Once you have proceeded some way with your literature study you should have enough basic knowledge to formulate a Final Project research proposal. The Final Project research proposal is written in the context of MasterLab, where the MasterLab teachers will address in their course issues like:

- What constitutes a good research question?
- How to construct a thesis?
- How to write an effective and reflective conclusion?

But the actual content of the research topic, research question(s) and specific methodological orientations are dealt with collaboratively between you and your supervisor.

This means that the MasterLab teachers will, after consultation with your supervisor, note that this semester-1 part of MasterLab – the writing of your research proposal – has been completed.

Furthermore, based on the approval of the research proposal and your obtained ECs in the 1<sup>st</sup> + 2<sup>nd</sup> year of PSTS, the MasterLab teachers (in collaboration with the intended supervisor and after having consulted the PSTS study adviser) are also the ones who will decide whether you may continue with your Final Project and the semester-2 part of MasterLab in the 2<sup>nd</sup> semester.

Once the Final Project research proposal has been approved (and graded as sufficient) you 'arrive' at Milestone 2 (see appendix B), where you have to submit the "Graduation Study Plan".

### Structure of the Final Project research proposal

Good proposals have often the following structure:

1. Introduction (1-1½ pages).  
The introduction introduces the topic of the thesis and sketches the background conditions that have prompted the problem statement.
2. Problem statement (½ - 1 page)  
A clearly formulated research problem with related key questions that could be satisfactorily investigated in the time that is available for the thesis. Usually, the thesis has one main research question, which is then divided up into a number of sub-questions that, when answered individually, jointly answer the main question.
3. Thesis outline in the form of a preliminary table of contents which lists titles and brief descriptions of the chapters (1-1½ pages).
4. Discussion of Approach and Significance (½ page)  
An account of the methodological approach to be used and significance of the problem, in relation to the fields of concern covered by the PSTS programme ("How and why is this a PSTS thesis?")
5. Scientific/technological justification (½ page).  
An account of the scientific or technological domain that is involved in the problem.
6. Bibliography (1 page).  
An overview of research works that are consulted and will be consulted for the thesis
7. Time schedule (½ page).

A timeline which contains an inventory of research tasks for the thesis and dates by which the tasks will be completed.

8. Composition of the graduation committee (½ page)  
The members of the committee (usually the supervisor and the second reader).

Four important criteria for a good Final Project proposal are:

- It should have a clearly visible scientific or technological component (it is not a purely philosophical thesis!).
- The main research question and sub-questions and the approach should be clear.
- The relevance of the research should be clear.
- The main research question and sub-questions should be adequately specific for a project to be completed in five months.

### Tips for writing a research proposal

1. Start on time!  
*A good Final Project proposal usually has several versions that precede it. Beginning early helps you to formulate your thoughts at an early stage. After you have handed in your draft, it will be easier for the supervisor to help you further.*
2. Be as concrete and clear as possible.  
*In your Final Project proposal you present the research you want to conduct and the research question(s) that you would like to answer. When you can explain this in a concrete and clear manner, it becomes much easier for your supervisor to judge whether the proposed research question is feasible. Furthermore, if you write in a concrete and clear manner, it becomes easier to discover presuppositions and tackle possible problems.*
3. Do not be afraid to make choices.  
*Doing scientific research requires making choices, especially in the process of formulating your problem statement. In the research question(s) you will describe what exactly you would like to investigate. To obtain a point of focus you will need to draw boundaries between what you will and what you will not investigate. There are often multiple ways of approaching a subject. It is usually not a choice between what is right or wrong. You need to be able to defend your choices. Making choices at an early stage prevents you from reading too much general literature and allows you to focus on more specific books and articles.*
4. Discuss your problem statement and adjacent research question(s) with others.  
*If you can explain your research question(s) to an outsider, the chances increase that you are on the right track. It often indicates that a question is relevant and important enough for investigation. If an outsider doesn't know what you are talking about, this of course does not have to suggest that your question isn't any good!*

#### Tip:

If you plan doing an empirical informed thesis and want to employ methods from the social sciences, have a look at BMS' methodology shop.

Check: <https://www.utwente.nl/en/bms/m-store/>

Or explore the opportunities provided by BMS Lab (<https://bmslab.utwente.nl>) and DesignLab (<https://www.utwente.nl/en/designlab/>).

## 2.6 Writing a thesis

The thesis has to be written in approximately twenty weeks. In the beginning this may seem like more than enough time; however, it rarely is. You should bear in mind that a Final Project will require a lot of iterations before the desired results are achieved. Before the final version of the thesis is completed, there probably will have been several versions of it. You need to start writing on time and realise that you really will need the approx. 20 weeks to finish it. A good and realistic scheme with soft and hard deadlines is pivotal for achieving the desired results. In this way you structure your activities and force yourself to make choices. A good study plan helps to make the graduation process more concrete.

### Tips for writing the thesis

1. Before starting writing, make an outline of the chapters and paragraphs that should be included in your thesis.  
*Your Final Project research proposal contains a thesis outline. Determine continuously whether your outline is still adequate. Your thesis needs to have a clear structure. A house is also not built without an architect's detailed drawing. Such a framework should contain the topics of the different chapters, sections and paragraphs in a logical order. Be at the same time flexible and make necessary adjustments: an outline helps you to structure your thesis but should not hinder your research process.*
2. Kill your darlings.  
*Sometimes you will have to chuck out entire pages of your thesis and start writing all over again. Often this may prove to be more fruitful than trying to tweak a text over and over again.*
3. Do not forget the relation between what you are writing and your problem statement and research question(s).  
*At the beginning things are not always clear. However, after a while, you should have a clear idea about the direction you want to pursue. You will always keep adjusting little things in your thesis, but keep asking yourself: what am I working towards and am I doing that right now?*
4. Read large amounts of text on paper.  
*Although it is not good for the environment and it costs you money, text on paper sometimes reads easier than on screen and, more importantly, helps to spot mistakes and spelling errors that you often do not see on a screen.*
5. Use a good system of annotations.  
*Do not write your notes on loose papers but use a notebook (paper or digital). Furthermore, keep a register of topics and literature references. It is impossible to remember everything that you have read in detail. When you need that specific quote that seemed to fit so well in your text, you will be thankful for having documented it. Programmes such as Endnote are valuable tools for documenting references. Making excerpts also helps a lot when you need to find something that you have read somewhere. If you do this electronically (preferably with the original page numbers of the book added), you can easily search for words and phrases. This can be very handy for finding relevant quotes!*
6. The books that you have bought and read during your study will not suffice for your thesis.  
*The electronic journals of the University Library are a fantastic source of knowledge. Use them. The same goes for Google Scholar, the Social Sciences Citation Index, the Philosopher's Index, and Routledge.*  
*Tip: if you cannot access an article, try to Google the title. Many authors post their articles on their websites.*

7. Take into account the style of your references and the lay-out of your whole thesis. *Although different styles of references are used in the academic world, APA is very common (and recommended).*  
*In addition, our Faculty prescribes that the **final version** of the thesis needs to embody the following standard settings:*

<b>Volume</b>	16,000 – 24,000 words for a 30 ECs Final Project 12,000 – 20,000 words for a 20 ECs Final Project	
	[Note that table of contents, bibliography, acknowledgements and appendices are not to be included when calculating the amount of words]	
<b>Lay-out:</b>	Font:	either Times New Roman or Arial or Calibri
	Font size:	11 points or 12 points
	Line spacing:	1.5
	Tables and figures:	to be included in the text
	Margins:	top, bottom, left, right: 2.5 cm
	Standard tabs:	1.25 cm
	Justify:	the whole document (i.e. also the marginal line at the right-hand side)

For draft versions of the thesis or other documents that need to be submitted to the MasterLab teachers:

- Check upfront with the MasterLab teachers and your Final Project supervisor about their lay-out preferences.
- In case they have different requirements and this unduly complicates your work as a student, arrange a meeting with the three of you to sort things out.

8. Be disciplined.  
*If there are other things that require your attention (a job, the last couple of courses that you need to complete, other courses that you are taking, private circumstances, etc.), try to estimate how much time you have to spend on these matters. Most supervisors will accept that you sometimes cannot work full-time on your thesis, as long as it is clear what they can expect. If you have a job that takes up 15 hours, make sure that you can work the other 25 hours on your Final Project. Consider the Final Project as a full-time job of (at least) 40 hours per week, with the responsibilities that come with it. Most students work best in a regular rhythm, for example from 9 to 5. Your Final Project is very demanding. Make sure that you spend enough time on it. Please also note that the hours of supervision cannot be extended if you cannot work full time on your Final Project. These hours remain 32 for the supervisor and 8 hours for the 2<sup>nd</sup> reader.*
9. Graduate before the summer break.  
*During the first or second meeting with your supervisor you can agree on a time schedule for your meetings and already set a date for your colloquium. Putting up, and adhering to this schedule is very helpful for your thesis writing process. All students are encouraged to graduate before the start of the summer holiday period (July/August) in order to ensure that they are finished before the end of the academic year, and that their supervisor/second reader is also available for the entire process.*
10. Make sure that the following information is on the cover page of your thesis:

- *Title (and sub-title)*
- *Full name student*
- *Qualification (Master thesis)*
- *Institution (University of Twente, Faculty of Behavioural, Management, and Social Sciences, Enschede, the Netherlands)*
- *Date*
- *Full name supervisor and second reader/examiner*
- *Programme (MSc Philosophy of Science, Technology and Society - PSTS)*

**Note:**

In addition, the UT Language Centre <https://www.utwente.nl/en/ces/language-centre/> may provide professional support in languages, communicative skills, academic writing, thesis writing, study and employability skills.

## **Plagiarism**

Plagiarism will not be tolerated. Be aware that your supervisor will have to declare your thesis to be conform current academic practices and will therefore do an intensive plagiarism check. Any suspicion of plagiarism will be reported to the examination board. In accordance with general PSTS policy, regarding the distinct and central role of writing skills in philosophical research, the use of so-called generative AI to produce text and images (e.g., ChatGPT) in writing the master's thesis is not allowed, unless approved by your supervisor.

For information about plagiarism and how to avoid it, have a look at the following website:

<https://www.utwente.nl/en/service-portal/university-library/referencing-copyright/referencing-plagiarism>

### **MasterLab meetings 2<sup>nd</sup> semester**

During the thesis writing process you attend the MasterLab 2<sup>nd</sup> semester meetings where you discuss your progress with the MasterLab teachers, and give and receive peer feedback to and from your fellow students. These meetings help you stay on track and support you during the writing process, and the feedback can help you improve the thesis.

### **Publication and confidentiality of the thesis**

Theses are public and published in the university repository. Confidential data can be added in annexes open only to selected bodies in the university and to the accreditation authorities. The examination board involved can deviate under specific circumstances from this rule. Students have to submit a request at the Examination Board as soon as possible after the start of the graduation project if they think their thesis should be archived confidentially. For more information: <https://www.utwente.nl/en/bms/examboard/for-students/publicity-thesis/#rules>

In the *Milestone 2 form* (see: *Appendix B of this Final Project guide*), the graduation committee and you mark whether you agree upon the thesis being made available through open access, or whether you submit a request to the Examination Board.

## 2.7 Oral examination and colloquium (i.e. public presentation)

You complete the process of graduation with an oral examination AND a colloquium. During the oral examination the graduation committee will ask questions about or related to the thesis (about the premises, your understanding of the literature, the way you have formulated and answered the research question, etc.). You need to remember that you have worked on your Final Project for half a year, and that you are considered to be (to a certain degree) expert on your topic. Often questions will, however, not address what students have already answered in their thesis. “Why did you include this?” and “Have you considered that?” are typical questions that you can expect. Be assured that the oral examination is not an inquisition. It is, however, an exam and an important part of the process where ideas and decisions are evaluated. The oral examination will last approximately 45 minutes and is not public.

The public presentation (the colloquium) should last 30 minutes, after which there is about max. 20 minutes left for the audience to ask questions. The graduation committee might also take part in the discussions or ask questions. It is important that your presentation meets the usual demands. If you use visual aids, you should make sure that these are clear and readable. It is smart to rehearse the presentation several times aloud (even if you think that you are an experienced speaker), so that you can talk fluently for 30 minutes. You should not forget to introduce the graduation committee before you start your presentation (if the supervisor has not already done so).

During your colloquium you will present the topic of your Final Project to a broader audience. Ensure that your presentation is clearly structured and that it contains the most important elements and results. Often you will not have time to discuss (not very important) details. Furthermore, if you want to make sure that the audience is able to fully grasp what you have been working on, it is advisable to keep your presentation simple and to the point.

After the presentation and the questions of the audience, the graduation committee (briefly) retreats to evaluate how it went, to complete the parts of the Final Project assessment form pertaining to the colloquium, and to determine the final grade. After they have come to a conclusion, you will receive their grade and appropriate certificates.

Please inform your supervisor, if you don't want the grade to be announced in public.

In chapter 5 of this guide, the graduation protocol and the examination of the Final Project is discussed in detail.

### 3 Mobility Online

After handing-in the Milestone 2 form (Appendix B) you are required to register your Final Project in the UT programme *Mobility Online*. *In order to logon to Mobility Online you will need to use the link via this page: [Educational systems for students \(Osiris, Canvas, TimeEdit, etc\) \(utwente.nl\)](#).*

You have to register using the course code of your Final Project. These codes are:

Name	Course code
PSTS Final Project 30 EC	201300088
PSTS Final Project 20 EC (together with Internship)	201300089
JEP-PSTS-BA Final Project	201900178 *
JEP-PSTS-PA Final Project	201900179 *

\* You should register a Joint Education Programme final project twice in MO; also for the other programme next to PSTS, using the course code that applies for the final project in the Joint Education Programme of BA / PA.

Please note that the registration process consists of several steps which you all have to complete before you can actually graduate.

**Option A:** Steps to complete in the Mobility Online's "Graduation – standard pipeline" – in case of a regular thesis:

*At the start of your Final Project:*

**Step 1:** Fill in the application form.

The application form needs to be completed as soon as your research proposal has been approved by your supervisor (Milestone 2). Despite the fact that this Mobility Online form requires the signature of your supervisor, for PSTS students this is not mandatory (since the Milestone 2 form has already been signed). The Educational Affairs Office staff will sign this Mobility Online form upon having checked the Milestone 2 form.

**Please submit this application form simultaneously with the Milestone 2 form at the Educational Affairs Office (EAO)**

*At the end of your Final Project:*

**Step 2:** Mark your Final Project as *finished*

As soon as you have completed your Final Project (thesis), and you have submitted your thesis at the Educational Affairs Office, login to the system to **mark your project as finished**.

**Option B:** Steps to complete in the Mobility Online's "Graduation –extended pipeline" – in case you are conducting your thesis externally and you are spending substantial time in-house at that organisation:

*At the start of your Final Project*

**Step 1:** Fill in the application form

- The application form needs to be completed as soon as you are **starting to work on your Final Project**.

**Step 2:** Answer question regarding type of thesis

- Answer the question whether you have an internal Final Project (at the UT) or an external Final Project (in a company or organisation).

**Step 3:** Send an e-mail to the Educational Affairs Office ([BOZ-PSTS@utwente.nl](mailto:BOZ-PSTS@utwente.nl)) and inform them about your Mobility Online registration**Step 4:** (upon having received a confirmation of your application via Mobility Online), fill in the proposal form

- The proposal form needs to be completed as soon as your research proposal has been approved by your supervisor (Milestone 2). Despite the fact that this Mobility Online form requires the signature of your supervisor, for PSTS students this is not mandatory (since the Milestone 2 form has already been signed). The Educational Affairs Office staff will sign this Mobility Online form upon having checked the Milestone 2 form.

**Please submit this proposal form simultaneously with the Milestone 2 form at the Educational Affairs Office (EAO).**

**Step 5:** Answer the scholarship question

- If you are working on your Final Project at the UT, or in a company/an organisation within the Netherlands, or in a company/an organisation in your home country, **indicate 'No'**.
- If you are working on your Final Project in a company/an organisation outside of the Netherlands or your home country, **indicate 'Yes'**.

**Step 6:** Fill in your address

- Fill in your home address where you will stay during the Final Project.

*At the end of your Final Project***Step 7: Optional:** in case of changes to the duration or content of your thesis project.

- In case the content of your Final Project has changed (title or thesis description), please alter the information during this step.
- In case the duration of your Final Project changes (project takes longer than expected), you can change the expected end date during this step.

**Step 8:** Mark the 'Deliverables as *submitted*'

- Send in the Evaluation Form at the Educational Affairs Office ([BOZ-PSTS@utwente.nl](mailto:BOZ-PSTS@utwente.nl)).
- Upload your thesis in the UT repository, and send it to the EAO.
- After you have completed these actions, you can mark the deliverables as submitted in Mobility Online.

**Step 9:** Project finished, end of Mobility Online registration

- The EAO office will check the deliverables and will register your grade for the Final Project in Osiris.  
Afterwards the Mobility Online registration will be marked as 'finished'. This is the end of the registration.

## 4 Supervision

This chapter focuses on the interaction between supervisor and student because the contact with the supervisor has the greatest influence on the content of the thesis and the process of completing the Final Project.

### 4.1 The graduation committee

In the Final Project, the role of the supervisor is embedded in a graduation committee. The graduation committee consists of at least the first two members, but can be extended.

1. the supervisor in the role of chair ;
2. a second reader, in the role of second examiner
3. a second and/or external supervisor (if applicable)
4. an external subject expert (if applicable)

The supervisor and second reader should be academic staff of the Philosophy or KiTeS section of the University of Twente.

In case of an external Final Project, an external supervisor may be added (in an advisory, not assessing role!) as a member of the graduation committee. Besides these supervisor(s) and examiners, an external subject matter expert may be added or consulted. This external subject expert may be consulted to advice (so: also no assessing role!) on a specific part of the research (often related to a specific technology or technological practice).

The student is coached by the supervisor on a regular basis. You and your supervisor meet frequently according to the time planning you agreed on. You discuss the progression on the basis of text that is submitted earlier. The second reader is kept informed about the progress of the Final Project. The same procedure holds for the external supervisor and the external subject expert.

Before graduation the Examination Board verifies whether you have met all requirements, including all the courses that are finished.

### 4.2 Mutual obligations between supervisor and student

The supervisor and the student have duties and responsibilities towards each other.

A supervisor:

- will judge whether the research can be done within the timeframe and whether the quality of the thesis is sufficient;
- will give directions;
- will supervise the literature study;
- will give constructive commentary on chapters and sections;
- will ensure that suitable progress is maintained;
- will stimulate and motivate;
- will evaluate results.

Although the supervisor needs to invest a lot of time in the Final Project, remember that the supervisor nominally only has max. 32 hours available for the entire process (the 2<sup>nd</sup>

reader/examiner max. 8 hours). [For a shortened 20 ECs Final Project, the following time investment for supervision has to be taken into account: 24 resp. 6 hours].

Your supervisor can expect that you:

- will honour agreements/promises;
- will show initiative and do your best;
- will ensure that suitable progress is maintained

Graduate before the summer break.

*During the first or second meeting with your supervisor you can agree on a time schedule for your meetings and already set a date for your colloquium. Putting up, and adhering to this schedule is very helpful for your thesis writing process. All students are encouraged to graduate before the start of the summer holiday period in order to ensure that they are finished before the end of the academic year, and that their supervisor/second reader is also available for the entire process.*

### **4.3 What should you discuss with your supervisor?**

#### **In the beginning**

Important agreements should be set at the beginning of the Final Project. This reduces the chance for both parties that unpleasant surprises and misunderstandings will occur at a later stage. One of the first things you need to discuss with your supervisor is the frequency of the meetings. If you spend 40 hours a week on the project, it would be advisable to meet once every two weeks.

Be clear on what the supervisor can expect from you. Are you able to spend these 40 hours per week on researching or are there other activities that require your attention? Discuss how and when you can contact each other. For example, if you or your supervisor go on a holiday for a couple of weeks or attends a conference, you should make sure whether (and how!) you can contact each other if required. Can you simply drop into the supervisor's office if you have a question or do you need to make an appointment? What is the preferred means of communication?

#### **Further down the road**

During the process of the Final Project you will have to set several appointments with your supervisor (do schedule and set these appointments in time!). Usually, before a meeting there will be a deadline for you to send in the necessary material for the supervisor to read. If you have been unable to meet the deadline, you should contact the supervisor who can then decide whether the meeting will continue or will be rescheduled. Before the end of the meeting you should make an appointment for the following meeting and set deadlines.

To put it very briefly: despite individual preferences and style, it is advised to have regular meetings, to plan pre-agreed deadlines for submitting paperwork, to keep record of supervisors comments, to have in-between assessments of the proceedings, and to plan ahead continuously. Be aware of delays, especially if you experience difficulties, and bear in mind that supervisors and examiners will take holidays in July or August. Put any concerns immediately on the agenda for the next meeting, and try to work out a solution.

Do not forget meetings, do not ignore comments, do not hide or avoid difficulties.

#### **4.4 MasterLab**

During the Final Project, you attend the MasterLab meetings. You can participate upon having completed in 75 ECs, including at least the courses TechnoLab, Research Methods, and the first semester part of MasterLab.

In the MasterLab meetings you report on your progress and share advice with peer students on practical matters. Moreover, during each seminar, you present and discuss drafts of your work. At the end of the academic year, when you have fulfilled all the requirements of MasterLab, the MasterLab teachers will have your result (pass/fail) for this course registered in Osiris.

#### **4.5 CBL in the Master Thesis project**

Challenge-based-Learning (CBL) is a novel approach in education, which requires the learner to work on a real-life challenge in a transdisciplinary team. PSTS is one of the first MSc programmes at UT to utilize CBL in the final thesis. We believe that the openness of CBL allows our students to demonstrate the value of PSTS in non-academic settings and allows us to build bridges between the researchers at UT and other societal actors.

CBL is, however, a rather demanding approach and the implementation in the final project is still in the pilot phase. However, if you are up for a challenge, pay special attention to announcements about special courses and projects employing CBL at the end of the first and beginning of the second year.

#### **4.6 Conflict resolution**

It might occur that a student has the feeling that they are not getting the kind of supervision expected or that the student and/or supervisor have different expectations. Always first discuss possible problems (including also interpersonal constraints) with your supervisor.

In case these discussions do not lead to a workable outcome, then contact the study adviser.

If there is a disagreement within the graduation committee about the quality of a student's work, the Examination Board can ask a third reader to give an independent verdict.

## 4.7 Examination of the Final Project

The actual graduation phase begins when the graduation committee accepts the final draft of the thesis and allows you to request graduation: **the so-called “green light”** (Milestone 3). The criterion is that the draft (almost) fulfils all requirements. During the green light meeting, the supervisor communicates to you whether or not you receive green light, and clarifies where and how you could (further) improve your work.

This green light meeting takes place at least 15 working days before the planned graduation date. The graduation committee shows confidence in your capability to deliver a thesis that matches with the requirements according to the final evaluation of the committee. In adherence to the recommendations of the 2023 PSTS accreditation, the second reader does not attend the green light meeting in person but submits an independent report to the supervisor at least one day before the green light date. If the supervisor and the second reader do not concur on whether to proceed to the graduation event, the case is referred to the PSTS programme director for appointing a third or external reader, whose evaluation will determine a final green light decision.

In the green light meeting, the graduation committee confirms that your thesis draft is sufficient. Making major revisions after the greenlight meeting undermine the purpose of the meeting and may lead to a non-passing-grade in the assessment of the final thesis.

After having received a green light decision, a lot of actions have to be taken and you should take the initiative:

1. You fill in the form *Milestone 3, Request for graduation* (see: Appendix C) and submit this form, together with a final draft version of the thesis, a summary of the thesis (see below), and a transcript of records (ToR) from Osiris (in order to allow the supervisor to check whether you meet all requirements, i.e. completed all coursework and participated in a sufficient number of colloquia) to the graduation committee.
2. The summary must not exceed 800 words (approx. 1 A-4) and recapitulates:
  - a) The research question
  - b) The research method(s)
  - c) The major results
  - d) Discussion
  - e) The major conclusions
3. The second reader (i.e. examiner) independently assesses the final draft. Make sure that the examiner has sufficient time for the task. If no previous arrangement has been made, the examiner should have 10 working days for evaluating the thesis.
4. The supervisor will check the final thesis draft for plagiarism (including an automated plagiarism check).
5. The supervisor (upon having checked the transcript of records, and having concluded that you meet the requirements) signs the *Milestone 3, Request for Graduation* form (received from you), and hands it over to you.
6. In case you would like to include extra-curricular courses on the transcript of records (courses that exceed the 120 EC of the standard PSTS programme), then you have to submit a request at the Examination Board, and communicate this to the Educational Affairs Office.
7. You submit the signed *Request for Graduation* form at the Educational Affairs Office at least 15 working days before the envisaged examination date.
8. In collaboration with your graduation committee, you set the examination date and time (i.e. date and time of the oral examination and the date and time of the colloquium).

9. The Educational Affairs Office prepares the certificate, arranges the rooms (for the oral examination and colloquium), prepares the convocation for the graduation committee and student, and publishes the colloquium announcement on the Student Portal. *(Note: the official transcript of records will be issued at a later stage, in practice a couple of weeks later. The Educational Affairs Office informs the student timely)*
10. You distribute the thesis (including appendices), one for each member of the graduation committee at least one week before graduation. Furthermore you upload the thesis to the UT Student Theses and UT Archive online <http://essay.utwente.nl/>. Besides the PSTS Educational Affairs Office receives two (2) digital copies: 1 in MS-Word and 1 in \*.pdf format, ultimately 3 days before the colloquium takes place.

The Final Project is examined on aspects like the scientific quality of the work (thesis and project); creativity, level of own input, level of independency, working speed; quality of writing (thesis), and quality of the oral explanation of research (oral exam and colloquium).

### **The scientific quality**

Has the research been performed in a proper manner?

The scientific quality will be judged upon:

- subject matter and main research question;
- theoretical framework;
- research methods and approaches;
- analysis and argumentation;
- drawn conclusions, reflection, discussion.

### **The level of a student's input and the level of independency**

Although the product of the research is more important than the path towards it, it is taken into account if students:

- work relatively independently, making effective use of supervision and feedback;
- comply with deadlines and agreements;
- complete the final project within the set timeframe.

### **The thesis**

The thesis is the most important part of the Final Project and will be evaluated on the basis of the following criteria:

- the language used is correct and clear;
- there is a logical and relevant structure, consisting of the following: title page, table of contents, summary (max. 1 page), main research question, results, discussion, conclusion and references;
- there is a consistent and clear chapter structure that is relevant to the main research question;
- the chapters and sections are provided with suitable titles;
- references are complete, consistent and correct, and comply with the applicable academic standards.

**Note:**

The graduation committee uses a standard assessment form that lists all assessment aspects in detail, including the relevance (weight) of these aspects (see Appendix D).

The supervisor and the second reader (examiner), after having received the final version of a student's thesis, and prior to the oral exam/colloquium, independently assess the thesis, each filling out the aforementioned PSTS Final Project assessment form.

Both supervisor and second reader give preliminary scores for each assessment category, and provide qualitative feedback to explain and justify their scores. The supervisor fills out the items on content (category 1-5), writing skills (category 6), as well as process and functioning of the student (category 7). The second reader fills out the items on content and writing skills.

Subsequently the second reader sends the assessment form to the supervisor (preferably in electronic form).

The supervisor is responsible for collating the (preliminary) scores and feedback of both assessors in one (preferably electronic) document.

Prior to the oral exam, the members of the Graduation Committee meet to compare and discuss their assessment of the thesis. In case of disagreement, the PSTS Final Project Rubric may facilitate the discussion. A member may adjust the preliminary scores (and feedback) if convinced by the other member's arguments.

Please note that external members of the Graduation Committee may advise the supervisor and second reader about grading and feedback, but do not grade themselves.

If applicable, the supervisor (in their role as chair of the Graduation Committee) adjusts the scores for and feedback on categories 1-7 in the ultimate (joint) assessment form. If divergences remain, the score for the categories 1-5 and 7 will be based on the average of both assessor's scores. In such a case, the chair ensures that the qualitative feedback explains the difference.

**Oral examination**

During the oral examination (the exam) you will be evaluated on the basis of the following criteria:

- the student convincingly justifies the choices made in and conclusions drawn from the final project;
- the student demonstrates in-depth knowledge of the research subject;
- the student is able to reflect on and respond to critical questions;
- the student is able to reflect on the implications of potential weaknesses, and to suggest ways to address them;
- the student is able to put his or her work in a broader theoretical and or societal perspective.

Immediately after the oral exam, the members of the Graduation Committee discuss the student's performance during the exam and jointly fill out this part in the assessment form pertaining to the exam.

Again, external members have an advising role only.

**Colloquium (public presentation)**

Important aspects of the colloquium are:

- the student gives a clear oral explanation of the research for a non-expert audience;

- the student answers questions about the research in a clear and convincing manner;
- the student uses media resources in an adequate way.

After the colloquium, the Graduation Committee (briefly) retreats in order to complete the remaining part of the Final Project assessment form pertaining to the colloquium, and to determine the final grade. This final grade is calculated on the basis of the weighed, average scores assigned to the performance on the different categories for the thesis, the process and functioning, the oral exam, and the colloquium. At this moment the Graduation Committee determines whether the student satisfies the criteria for awarding 'cum laude' (see: below).

#### 4.7.1 Graduation with distinction (cum laude)

If upon completing the master's examination the student has shown evidence of exceptional capabilities, 'cum laude' will be recorded on the degree certificate.

A student is considered to have exceptional capabilities if all of the following conditions are met:

- the mark for the Final Project is at least a 9.0;
- the (unweighted) average mark awarded for all courses of the master's examination (including the Final Project) is at least an 8.0;
- no course was graded less than a 7.0;
- each grade must be obtained at the first opportunity to do so within the course;
- in the determination of the average grade, the courses that were not graded with a numerical mark (and the non-numerical grade is at least a Pass) or courses for which an exemption was granted are not considered;
- the number of courses for which no numerical mark has been given or for which exemption has been granted, spans max. 30 EC;
- The study duration is maximally the nominal duration plus 25%.

In special cases and despite not fulfilling these conditions, the student is entitled to submit a request for 'cum laude' to the Examination Board.

## 5 What to do after graduation?

### **Please return the questionnaire**

We need your feedback on the PSTS programme, now from you as a graduate, looking back on your recent experiences in this programme. Therefore, please complete the digital exit-questionnaire that the PSTS Educational Affairs Office will send to you.

### **De-register and refund of tuition fees**

De-register from the University of Twente via Studielink, starting the first month after the one in which you graduate. Submit your de-registration request within one month after graduation.

If you graduate before the end of the academic year, you can request a refund of tuition fees. The months July and August are not included. So you can get a refund divided over 10 months. Refund of tuition fees will be executed after the Student Services desk has received an official date of graduation from the faculty.

If you have any doubts about the procedure you can contact the Student Services desk for further information ([StudentServices@utwente.nl](mailto:StudentServices@utwente.nl) / 053-4892124).

If you are a Dutch student and you make use of a public transport card (in Dutch: *OV-kaart*), make sure that you hand it in on time (within five working days after your right to the study finance or loan has ended).

## Appendix A: Choosing year 2 electives (Milestone 1)

**To be submitted at the Educational Affairs Office before 15 June**

Family name: \_\_\_\_\_

Given name(s): \_\_\_\_\_

Student number: \_\_\_\_\_

I choose the following **5 PSTS electives** in the academic year 2024-2025 from the set of 8 courses **(Please tick - ✓)** (or: I choose only 3 or 4 PSTS electives, in combination with other electives – see below)

Quartile 1:

	Course code	Course name
	201800145	Technologies in use
	201800146	Transformations of knowledge in a digital age
	202100093	Technologies and discourse
	201800148	Good technology for users and society

Quartile 2:

	Course code	Course name
	201800149	Anticipation and evaluation of emerging technologies
	201800150	Minds, bodies and technologies
	201800151	Rethinking science-technology relations
	202200010	Ethics and Epistemology of AI and Robotics

I choose **1 of the two alternative courses** from other UT programmes that have been approved as suitable elective by the Examination Board:

Quartile 1:

	Course code	Course name
	201100077	Policy analysis in public and technological domains (from the UT MSc programme Public Administration - PA)
	201600012	Management and governance of innovation and creativity (from the UT MSc programme Business Administration - BA)

Check if applicable:

- I am considering/applying to the 4TU E&T track so therefore my choice of electives may change according to the E&T Track's programme.

*Note: deadline for this 4TU E&T application is 21 July 2025*

**Note:**

Instead of choosing 5 electives from the lists above, other electives on master's degree level can (up to a **maximum of 10 EC**) be selected, upon approval of the PSTS programme staff, mandated by the Examination Board. Written requests in this regard have to be submitted to the PSTS study adviser before 15 June 2025.

I choose **another elective course\***:

Course name (and course code)	Name University/programme	ECs	Quartile

- \* Please be aware that you yourself have to inquire whether you are eligible to take this course/these courses and arrange your admission, with the staff of the other programme/university.

Students are expected to be familiar with the University's policy on plagiarism, cheating and other forms of academic misconduct. If an examiner has a motivated suspicion of fraud, the Examination Board will be notified. The Examination Board will start a procedure according to the Rules and Guidelines: <https://www.utwente.nl/en/bms/examboard/general/>

Student:	Signature:
Date:	
Submit before the 15 <sup>th</sup> of June 2025** at the PSTS Educational Affairs Office (EAO), with cc to the PSTS study adviser.	

- \*\* Students who need to submit their elective(s) request to the PSTS programme staff may not have a guarantee at this moment that they can take their preferred elective elsewhere, but they still need to hand in this form to the Educational Affairs Office and study adviser in time, so their participation in the PSTS courses can be noted.

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 Faculty of Behavioural, Management and Social Sciences  
 Master of Science Programme Philosophy of Science, Technology and Society  
 Educational Service Centre/Educational Affairs Office PSTS (EAO)

## Appendix B: Graduation Study Plan (Milestone 2)

To be submitted at the Educational Affairs Office before the end of the second quartile in the context of MasterLab

Family name: \_\_\_\_\_

Given name(s): \_\_\_\_\_

Student number: \_\_\_\_\_

**Courses still to be completed:**

Course Code	Course name	ECTS credits	(planned) date of completion
<b>Total</b>			

<b>Number of attended colloquia</b>		(out of 8)
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**Title Final Project:**

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**Short description (“what, why, where”):**

  
  
  
  
  
  
  
  
  
  

**External assignment (if applicable):**  
 Name company/institution:

  

Address:

External supervisor (and phone number):		
<b>Graduation Committee:</b>		
Supervisor:		
2 <sup>nd</sup> reader:		
External supervisor (if applicable) (adviser):		
External subject expert (if applicable) (adviser):		
<b>Period:</b>		
Start:	(month - year)	
Expected duration :	(in months)	
If applicable, please mention the period when you will be abroad for Final Project work:		
Supervisor:	Signature:	Date:
2 <sup>nd</sup> reader:	Signature:	Date:
External supervisor (if applicable):	Signature:	Date:
External subject expert (if applicable):	Signature:	Date:
Student	Signature:	Date:

- At least 75 ECs** of coursework (incl. Skills Portfolio, TechnoLab and Research Methods) is successfully completed before the start of the Final Project.  
**If this is not the case, you have to contact the PSTS study adviser.**  
 Submit a Study Progress Review from Osiris that lists your academic achievement
- The Final Project research proposal and a transcript of records have been approved by the Final Project supervisor
- After signing this Milestone 2 form the student has to submit the **original copy** to the Educational Affairs Office PSTS and a copy to the MasterLab teachers and the PSTS study adviser.
- In case this Final Project involves human subject research, the student must submit the research proposal to the Faculty's Ethics Committee **before starting the part of the work involving humans**

**Note:** According to standard procedure you will upload your thesis for non-confidential publication after graduation. In case the thesis supervisor and/or the organisation where you conduct your Final Project insist on deviating from this public archiving of the thesis, you must submit a request for changing this public status into "confidential" to the Examination Board.

**Should the thesis be handled confidential?**

No       Yes, and I will submit a request to the Examination Board

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Faculty of Behavioural, Management and Social Science, Master of Science, Programme Philosophy of Science, Technology and Society, Educational Service Centre/Educational Affairs Office PSTS (EAO) Citadel.

## Appendix C: Graduation Request (Milestone 3 – ‘Green Light’)

To be submitted to the Educational Affairs Office at least 15 working days before the envisaged graduation date.

Family name: \_\_\_\_\_

Given name(s): \_\_\_\_\_

Student number: \_\_\_\_\_

Address after Graduation: \_\_\_\_\_ (street)

\_\_\_\_\_ (postal code/city)

\_\_\_\_\_ (country)

Phone number: \_\_\_\_\_

Title of the colloquium:

\_\_\_\_\_

\_\_\_\_\_

The Graduation Committee declares that the Final Project is ready to request for graduation.

Name and signature Supervisor:

Name and signature \*2nd reader:

Name and signature External member or \*\*3<sup>rd</sup> reader (if applicable):

The Supervisor declares that, in the framework of safeguarding scientific quality, the presented thesis has been checked (via plagiarism detection software) on fraud/plagiarism, and the Supervisor concludes that in this regard the thesis meets the academic standards.

The Supervisor declares that, if the Final Project involves human subject research, the request to the Faculty's Ethics Committee has been approved.

\* The 2<sup>nd</sup> reader does not attend the green light meeting in person, and submit their independent evaluation to the Supervisor at least one day before the green light date. If the Supervisor and the 2<sup>nd</sup> reader do not concur on whether to proceed to the graduation event, the case is referred to the PSTS programme director for appointing a 3<sup>rd</sup> reader, whose evaluation will determine a final green light decision.

Date of examination: \_\_\_\_\_

Time oral examination: \_\_\_\_\_

Time colloquium:  9.00 /  11.00 /  13.00 /  14.00 /  16.00

Number of guests: \_\_\_\_\_

My Thesis is: to be published in the Library

Confidential   
 (approved by the Examination Board)

Date:

Signature student:

**Note: meet the following requirements:**

<input type="checkbox"/>	Attach a recent study progress review (transcript of records), thus demonstrating that all requirements but the thesis are met.
<input type="checkbox"/>	Submit a signed copy of this form to the EAO PSTS, at least 15 working days before graduation date.
<input type="checkbox"/>	The volume of the thesis spans either 16,000-24,000 words for a 30 ECs Final Project, or 12,000-20,000 words for a 20 ECs Final Project. <b>If a thesis exceeds this number of words, the graduation committee cannot approve the presented thesis.</b>
<input type="checkbox"/>	The final (approved) thesis must be submitted in <b>electronic</b> form (MS-Word and PDF versions) at least one week before the graduation date to all members of the Graduation Committee (and in CC to the profile coordinator and the Educational Affairs Office PSTS).

The PSTS Programme aims at fostering the relation with its graduates. Therefore you are invited to fill-in your private e-mail address:

.....

....

This will allow the programme management to contact you in case we would like to invite you contributing to the PSTS programme.

Disclaimer: the PSTS programme management will treat your e-mail address confidentially. Therefore, nobody except the programme management will have access to it.

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Faculty of Behavioural, Management and Social Sciences  
 Master of Science Programme Philosophy of Science, Technology and Society  
 Educational Service Centre/Educational Affairs Office PSTS (EAO)

## Appendix D: Final Project assessment form

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### Assessment form Final Project MSc Philosophy of Science, Technology and Society

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Please tick:  **Master's thesis (short)** **20 EC (201300089)**

**Master's thesis (regular)** **30 EC (201300088)**

**Name student:** .....

**Student number:** .....

**Title thesis:** .....

.....

.....

**Assessment aspects and calculation scheme**

**Calculation of overall grade**

• Content (category 1-5, average of supervisor and examiner's grade)	50%
• Report (category 6, average of supervisor and examiner's grade)	15%
• Process (category 7, graded by supervisor only)	15%
• Exam and colloquium (categories 8 and 9, jointly graded by supervisor and examiner)	20%

**NB:** Scores on categories 1-6 should range between 5,5 and 10. If one of these categories is scored lower than 5,5, the student should not receive green light for graduation.

	Final Project Supervisor	Examiner
<b>1-5 Assessment on content [(1+2+3+4+5)/5] (50%)</b>	Assessment (5,5-10):	Assessment (5,5-10):
→	0	0
<b>1. Subject matter and main research question (10%)</b>	Assessment (5,5-10):	Assessment (5,5-10):
→	0,0	0,0

- Consider whether:
- The subject matter fits the PSTS domain.
  - The subject matter is clearly introduced and described.
  - The main research question is clear and specific.
  - The main research question is based on relevant academic concepts and theories, argued for and/or legitimised by up-to-date academic insights and/or social developments.
  - The main question is researchable (providing direction to the research strategy).
  - The relations between sub-questions are clear and sub-questions can be reduced to the main research question.

*Justification and feedback (required)*

**2. Theoretical framework (10%)**

Assessment (5,5-10):

0,0

0,0

Consider whether:

- The research question is justified and embedded in a suitable theoretical framework.
- An extensive and in-depth literature review has been performed as a theoretical framework for the main research question.
- It is made clear how investigating or answering the research question fits in and could potentially contribute to theory development (the theoretical framework) and/or tackling societal challenges.

Justification and feedback (required):

**3. Research method(s)/approach(es) (10%)**

Assessment (5,5-10):

0,0

0,0

**Note: these criteria apply to literature research, conceptual analysis and empirical research, although their relative weight in these cases may differ.**

Consider whether:

- The research method or approach is clearly justified and described.
- The research method or approach fits with the main research question.
- The selection of literature and/or acquisition of empirical data has taken place in an adequate and transparent manner.
- The research method or approach and the relevant concepts are applied in a correct manner.

Comments:

**4. Analysis and argumentation (10%)**

Assessment (5,5-10):

0,0

0,0

Consider whether:

- The analysis and interpretation of the data/literature is accurate, reliable, comprehensive and verifiable.
- The argumentation is coherent, logical and convincing.
- The argument leads to theoretically embedded conclusions/partial conclusions that are relevant to the main research question.
- Insights from different theories/approaches and/or data sources are synthesised in a coherent and convincing way.

Justification and feedback (required):

**5. Conclusion, reflection, discussion (10%)**

Assessment (5.5-10):

0,0

0,0

Consider whether:

- The main question is answered adequately.
- The conclusions sufficiently take into account presuppositions, basic principles and the limitations/opportunities of the selected methodology/approach.
- The conclusions include plausible recommendations for how the results could be put to use, using creativity and with consideration of social and academic standards and values.

It is considered a bonus if:

- The thesis contributes to the development of new scientific knowledge and ideas or has enough potential to do it.
- The student critically assesses and discusses the research, recognising strong/weak points and their implications for the interpretation and potential use of the research results.
- The student has made a convincing proposal for follow-up research, based on theoretical and/or practical considerations.

Justification and feedback (required)

**6. Writing skills (15%)**

Assessment (5.5-10):

0,0

0,0

Consider whether:

- The language used is correct and clear.
- There is a logical and relevant structure, consisting of the following: title page, table of contents, summary (max. 1 page), main research question, results, discussion, conclusion and references.
- There is a consistent and clear chapter structure that is relevant to the main research question.
- The chapters and sections are provided with suitable titles.
- References are complete, consistent and correct, and comply with the applicable academic standards.

Justification and feedback (required)

**7. Process and functioning of the student (15%)**

0,0

n.a.

Consider whether:

- The student worked relatively independently, making effective use of supervision and feedback.
- The student complied with deadlines and agreements.
- The student completed the final project within the set timeframe.

**Note: The typical study load for a master's thesis is 30 EC's, which equals 840 hours.  
For a 20 EC's thesis this equals to 560 hours.**

Justification and feedback (required):

**8. Oral exam (10%)**

jointly assessed: 0,0

Consider whether:

- The student convincingly justifies the choices made in and conclusions drawn from the final project.
- The student demonstrates in-depth knowledge of the research subject.
- The student is able to reflect on and respond to critical questions.
- The student is able to reflect on the implications of potential weaknesses, and to suggest ways to address them.
- The student is able to put his or her work in a broader theoretical and or societal perspective.

Justification and feedback (required):

**9. Colloquium (10%)**

jointly assessed: 0,0

Consider whether:

- The student gives a clear oral explanation of the research for a non-expert audience.
- The student answers questions about the research in a clear and convincing manner.
- The student uses media resources in an adequate way.

Justification and feedback (required):

**Assessment overview:**

	SCORES		
	Final Project Supervisor	2nd Reader Examiner	Average or Joint
Content (cat. 1-5) (50%)	0,0	0,0	0,0
Writing skills (cat. 6) (15%)	0,0	0,0	0,0
Process (cat. 7) (15%)	0,0	n.a.	0,0
Exam/colloquium (cat. 8-9) (20%)	n.a	n.a	0,0
	Final Grade		0,00
	Final Grade ROUNDED		

**Remark for rounding the grade, based on EER:**  
 Final grades can be expressed in half grades, except for the grade 5.5; this must be rounded to 6.0, whereby grades must only be rounded in the last phase of the assessment of the study unit.  
 Example rounding scheme:

grade	final rounded grade
≥ 7.00 and < 7.25	7.0
≥ 7.25 and < 7.75	7.5
≥ 7.75 and < 8.00	8.0

General remarks:

**Names and signatures Graduation Committee:**

**Final Project supervisor:**

**Date:**

#N/A

#N/A

**Examiner**

**Date:**

#N/A

#N/A

Faculty of Behavioural, Management and Social Sciences,  
 Master of Science Programme Philosophy of Science, Technology and Society (PSTS)  
 Educational Service Centre/Educational Affairs Office PSTS (EAO) Citadel H-436

## Appendix E: Combined final thesis projects in PSTS Link trajectories

The requirements for final thesis projects in PSTS Link trajectories are based on two starting points.

1. Since the aim of the joint educational programmes (labelled PSTS-Link) is to create synergy between the MSc PSTS and another MSc programme, the final project for both programmes should be combined, resulting in one thesis. This means that the joint programme student chooses a thesis topic that fits with and can be investigated from both a PSTS- and the partner programme's (BA/PA/) perspective. Ideally, the research leads not only to overlapping, but also to integrated insights and results, showing the added value of a combined final thesis project, rather than two separate projects on the same topic.
2. To safeguard and check that students doing a combined final thesis project ultimately satisfy the final qualifications of the MSc PSTS, as well as the final qualifications of the partner programme, the combined project (or the relevant parts, see below) will be assessed using the assessment criteria and rubrics that are also used for 'regular' final projects in each of the two programmes. This implies the thesis (or the relevant parts) receives two grades and that these may differ.

At this moment, the study load of the combined final project and the exact requirements for preparative courses (research skills training) vary among the different joint educational programmes. Regardless of these differences, however, similar requirements and procedures apply to all PSTS-Link trajectories.

Project requirements:

- The student formulates one research proposal with an overarching question for the project as a whole, and different sub questions for the different parts of the project. These sub questions can be clearly related to one of the two programmes, or may integrate the different approaches, as student and supervisors see fit.
- The student produces one thesis. This thesis should (at minimum) contain a joint introduction and an overall conclusion, answering the overarching question and reflecting on the added value of the combined perspectives and methods.
- In the research proposal, the student specifies the planned thesis outline and, with the help of the supervisors, indicates which parts of the thesis are relevant to which programme. This subsequently determines which parts will be assessed by which criteria. NB: this implies that it is possible, but not necessary, that all chapters are relevant for both programmes.
- The length of the thesis can (but need not) be increased to 1,5 x the length of a single master thesis (16.000-24.000 words in the case of a 30 EC PSTS thesis, implying a combined thesis would be 24.000-36.000 words).

Supervision:

- The combined final project is supervised by two staff members from PSTS (one being the supervisor, and in the role of second reader) and (at least) one from the partner programme.. The supervisors from both programmes are involved in developing, and have to approve the thesis proposal before the student can start working on the project. This implies that the Examination Board of each programme needs to approve the supervisor(s) of the partner programme as examiner in their own programme. If one or both of the Exam Board(s) does/do not allow this, an additional examiner from one or both programmes

- is involved. (Please note that an additional examiner from each programme will always be involved in a quality check of the draft thesis, see under 'Assessment' below)
- If parts of the final project and the resulting thesis have been assigned to one of the two master programmes only, the supervisor(s) from that programme handle supervision for that part in the same way as supervision of single degree final thesis projects.
- To safeguard sufficient alignment of expectations and a clear direction for the final thesis project, the supervisors have regular joint meetings with the student. Preferably they are all present during the supervision meetings, but if this is not feasible the supervisors jointly meet with the student *at least* at the following moments:
  - Before starting to develop the final thesis proposal, to discuss the feasibility and direction of the combined thesis project;
  - Before the thesis proposal is approved, also arranging who will be responsible for which thesis part(s);
  - Halfway the thesis writing (or more frequently as they see fit) to monitor progress and align and where possible integrate intermediary results;
  - Near the end, to discuss possibilities for integration of the different parts and to indicate what should be done before a green light can be given.

#### Assessment:

- The standard PSTS assessment criteria (and form), as well as the assessment criteria and form of the partner programme will be applied to those parts of the thesis that were indicated as relevant for PSTS and/or the partner programme in the research proposal. This implies that the standard rubrics of both programmes will be used in parallel. The level of integration of the two programme perspectives will be assessed as part of the content-oriented criteria of the rubrics of each programme; if the integration is quite successful this is a plus when assessing these criteria.
- Before the green light meeting, the supervisors informally (and separately) grade the *draft* thesis, using the format of their own programme. If the two informal grades differ 2 points or more, additional examiners (see bullet point below) are asked to assess not only the draft, but to also grade the *final* thesis.
- A second examiner from PSTS and possibly from the partner programme will be involved in marginally assessing the *draft* thesis, to safeguard the quality of the work from each programme's perspective. This examiner does not grade, but checks whether the draft thesis satisfies the minimum standards for a sufficient thesis; this approval is a requirement to receive green light for graduation. Only in case of a substantial divergence in grades of the two supervisors, these additional examiners will be involved in the grading of the final thesis. *Note that, from 2024-2025 onward and in adherence to the recommendations of the 2023 PSTS accreditation, the second examiner from PSTS does not attend the green light meeting in person but submit their independent report to the PSTS supervisor at least one day before the green light meeting.*
- The final assessment of the thesis project will thus be done by the two supervisors, unless (1) one or both of them is/are not approved as an examiner for the other programme, or (2) the informal grade assigned for the draft thesis diverges 2 points or more.

#### Graduation:

- For the graduation, joint education students have to do both an oral exam, and a colloquium (as any other PSTS student). If the other master programme has similar procedures, these can be combined. The time available for the exam can, if necessary, be extended to 90 instead of 60 minutes, to make sure all parts can be sufficiently examined.
- The combined final project is assessed with two grades, one for each programme. This implies that a student can receive different final project grades for the two programmes. The assessment form of each programme is used to determine the grade for that programme.

- Cum laude: the requirements of each programme apply to determine whether a student receives the label 'cum laude' for that programme. In the calculation, the grade of the thesis will have the same weight it has for single degree students. This implies that a student can receive a cum laude for one, or for both diplomas.

Requests for exemption, programme adjustments etc.:

If a PSTS Link student wants to submit a request for exemption, this has to be discussed with the study adviser of the programme that provides the course, and the request should be submitted to the Examination Board of that MSc programme. If the student wants to submit a request for a curriculum change that could affect realization of the final requirements of both programmes, the request needs to be approved by both Exam Boards.