FINAL PROJECT PROCEDURES for I-TECH and EIT-HCID

Updated 21 March 2023

How to use this manual?

This document provides information about the final project (master thesis project) and its preparation, the Research Topics. It is meant to complement the main information about Research Topics and Final Project that you can find on our website or in the Canvas environment for the courses 'Research Topics' and 'Final Project'. You can self-enrol for this Canvas environment through: https://canvas.utwente.nl/enroll/GT7HNE

Topics covered in this document include finding a final project and supervisors, different types of final project, confidentiality, the process of doing a final project (from Research Topics to green light and presentation), and registering for Research Topics and Final Project. In case of questions, do not hesitate to contact the I-Tech master coordinator.

Table of Contents

1. About the Final Project

The Final Project is the final study unit of the master. It has a study load of 30 EC. This means that, if you started in September and studied nominally, it will take up the entire second semester. You do not have to do your final project in the second semester, however. In fact, you can start it at any time you like, provided that you have finished all your courses except Research Topics, which is the preparatory study unit for the Final Project.

I-TECH students can do either an internal (at the UT) or an external (outside UT) final project. If you want to do an external final project at a company after also having done an internship (20 EC) as part of your master programme, then you need to have special permission from the Examination Board. This is because according to the EER (Education and Examination Regulations) of I-TECH, the total number of credits completed at the UT or at another university or research institute approved by the programme mentor, must be at least 90. It is no problem if you do an internship at a company followed by an external final project at a university or research institute (other than UT).

EIT-HCID students are required to do their final project at least partially at a company. According to EIT rules, as an EIT-student you need to spend at least 3 months at this company. In UT terms, this type of final project is called an *external* final project; see also Sections 2 and 3 below. In EIT terms (and usually also in company terms), the stay at the company is called an 'internship'. However, the 'internship' for the EIT final project is NOT about working at the company; it really needs to be about doing research for your Master thesis (but in an industrial rather than an academic context). In other words, it should not be confused with the kind of internship/traineeship that is just meant for gaining work experience and does not result in a Master thesis.

2. Finding a final project

The recommended way to find a final project (external or internal), is to look at the website of the HMI (Human Media Interaction) research group and contact the staff member associated with the topic of your interest: https://www.utwente.nl/en/eemcs/hmi/hmi-teaching-folder/hmi-student-assignment-overview/

In general, you can contact an I-Tech teaching staff member directly, if you think this specific person is involved in research that would be interesting for you to do a final project on, or if you have an idea for a final project that you think they would be happy to supervise. At least one staff member from the HMI group needs to be involved in your thesis committee, but this person doesn't need to be your main (daily) supervisor.

If you have found a final project opportunity in some other way, or if you want to work on a specific topic but you have no idea who could supervise you on it, you can contact Dennis Reidsma (d.reidsma@utwente.nl) to help you find a potential supervisor.

3. Doing an "external" final project

For I-TECH students it is optional to do a final project with a company, while for EIT-HCID students it is in principle mandatory as explained in Section 1. In case of external final projects (especially when they take place outside the Netherlands) you can ask the people from the EEMCS internship office for advice on practical matters such as contracts, subsidies, visa, travel insurance etc.: https://www.utwente.nl/en/eemcs/internship/

Important: always make sure you have a supervisor from the HMI teaching staff before making any final agreements with a company! Also, do not sign any contracts with a company until you have checked that the contract complies with the university's regulations, for example with respect to confidentiality; see Section 4. The internship coordinator has standard contracts available.

4. Confidentiality

In principle, the master thesis is public and is published on the UT website. However, it is possible to keep it confidential for a limited period (2 years by default, up to a maximum of 5 years). A request regarding confidentiality should be sent by your advisor to the Programme Board of I-TECH (Alma Schaafstal) *before* the start of the final project. Note that the university is obliged by law to store all final project reports (as well as internship reports) for a period of 7 years. Accreditation committees that assess the quality of the grading of the study programme must be able to read them. This also holds for confidential reports.

5. Research Topics: preparation for the final project

In preparation for the final project, students need to do Research Topics (10 EC). This needs to be finished before the start of the final project, so (in principle, if you want to start your final project in semester 2) by the end of the first semester. In that case, it will take up most of Block 1B. The first supervisor (from the university) of the final project is also the supervisor of the Research Topics.

For I-TECH students, **Research Topics (201900194)** typically involves doing an initial literature study or some other preparatory study (pilot experiments, initial context analysis, etc.) resulting in the statement of a clear research or design question and research plan for the final project. It results in a report that is graded separately from your master thesis, by your supervisor.

For EIT-HCID students, **Research Topics for EIT (201800524)** is similar but smaller, only 4 EC.

The exact content of your Research Topics depends on what is the best preparation for your Final Project; you should discuss this with your supervisor. In general, it will be possible to reuse parts of your Research Topics report in your thesis. For example, it could form the basis for your introduction, background and related work chapters. But you should make clear in your thesis which parts were taken from your Research Topics report, for example by adding a reference to it.

6. Registering for Research Topics and the final project

You need to register for the graduation courses using different systems. Make sure you have made all registrations in time in order to avoid problems when determining the date of the colloquium. If you (expect to) receive green light soon, you should contact BOZ to start with arranging the colloquium by filling out a colloquium form. There should be 4 weeks between the date of your colloquium and the moment you hand in the colloquium form to BOZ! They can inform you in more detail about this process.

CANVAS

The Canvas page for both Research Topics and Final Project is accessible after self-enrolment: https://canvas.utwente.nl/enroll/GT7HNE. It is advised to enroll as soon as you start preparing for your graduation semester or any time sooner if you want to find out what is expected.

OSIRIS

For both graduation courses you can register in Osiris after you meet the criteria to start with these courses. To start with Research Topics (201900194) you need to have obtained 70 EC[1] or more of your I-Tech programme. The Final Project (201900195) requires that you have 10 EC or less left of your I-Tech programme. Be aware that your I-Tech exam programme will only be correctly shown in Osiris after approval of your courses[2] by the programme mentor Dirk Heylen. More information can be found here. BOZ will assist you with your registration in Osiris, since they have to check the entrance criteria and you may not be able to register yourself.

Mobility Online

Graduation Standard or Graduation Extended

For Mobility Online, it is necessary to make two separate registrations: one for Research Topics and one for the Final Project. For Research Topics 201900194 (EIT Research Topics = 201800524) you need to use the *Graduation **Standard*** pipeline. For the Final Project 201900195 you start with a new registration using the *Graduation **Extended*** pipeline in Mobility Online. A **pipeline** represents all steps that you need to go through in subsequent order, when filling out several fields related to your thesis topic, supervisor(s), starting date, etc. Go to this page for instructions about registering in Mobility Online.
Contact BOZ to let them know you started the graduation process and they can check whether your file is complete, they don't receive an automatic update.

Registration Form and Proposal Form

Mobility Online has different **sections**. In both pipelines you will start with a *registration form*, which is a short and general form. After BOZ has checked the entry requirements for the course 'Research Topics' or 'Final Project', they confirm your registration in that pipeline. You can then proceed with the *proposal form,* see Appendix 1. In this form you fill out more details such as a description of your graduation project. After you filled out the proposal form, you can download it for your supervisor (and yourself) to sign. Then you upload the signed form in the Mobility Online system and if applicable you are asked about travel insurance, visa or scholarship to complete the registration. The filled-in proposal form will also be checked by BOZ.

When you register for Research Topics, you don't need to fill in your entire thesis committee yet. You only need to fill in the name of your Research Topics supervisor (see Section 7) as Committee Chair. You can adapt and add most information along the way. For instance when it is more clear who will be your second supervisor, you can add this information in Mobility Online. You may not know all the details from the start, but they are important for BOZ, because they have to check if all information is completed and guard the entry requirements. Filling out all fields accurately in time, helps to get your proposal form approved. An overview of the entire registration process (for Research Topics and Final Project) is given in Appendix 2.

Note that BOZ does not get automatic notification of your Mobility Online registration! To avoid delays, *mail BOZ when you have registered Research Topics or Final Project in Mobility Online* so they can start some of the early administrative checks (for example whether your MSc programme has been registered properly or whether your committee satisfies requirements).

---

[1] See Osiris information of Research Topics in the Course Catalogue.
[2] After approval of your courses, the Bureau of Educational Affairs (BOZ) will be able to manually compose the exam programme in Osiris and assess your study progress properly.

Confidential thesis?

For making your thesis *confidential*, you need to make a separate request to the programme director (see Section 4). Just checking the box in Mobility Online is <u>not</u> sufficient!

7. Thesis committee

For your *Research Topics* you only need one supervisor. This is typically an examiner (staff member)[3] from HMI: https://www.utwente.nl/en/eemcs/hmi/hmi-people-pages/

For your *thesis committee (Final Project)* you need additional people. According to the latest rules in the Teaching and Examination Regulations, your Graduation Committee should be composed according to the following guidelines:

- *The Graduation Committee has to be chaired by a senior examiner.* A senior examiner has a University Teaching Qualification (UTQ) and has supervised five or more final thesis projects as member of an I-Tech Graduation Committee. Check with your supervisor if they or someone else in your committee meets this requirement or consult the list of examiners as posted in the Canvas environment 'I-TECH Research Topics & Master thesis'.
- *One of the examiners has to be from the research group Human Media Interaction.* They are the responsible research group for I-Tech/HCID.
- *In addition, the Graduation Committee has to contain an examiner from another research group.* This can also be someone from another faculty.
- *The Graduation Committee may contain further examiners, who are experts in the topic of the Final Project.* This includes your daily supervisor. If you do a master thesis outside the University of Twente, your external supervisor is also part of the Graduation Committee.
- For a full description of the requirements you can check the relevant articles (A3.7; A3.8; B4.2) in the Teaching and Exam Regulations, which are also included on the Canvas page.

Your daily supervisor probably has some suggestions if you don't know, whom to ask as the other members of your Graduation Committee. It is however recommended to contact Dennis Reidsma for assistance in composing your Graduation Committee. In the Canvas environment of 'I-TECH Research Topics & Master thesis'[4], you can find more instructions and documents that will help you to compose your Graduation Committee correctly.

8. Writing the thesis
Guidelines for writing the thesis

About thesis length and format: there is no official minimum or maximum number of pages for the thesis, but typically it's at least 50 pages. The general style should be that of a scientific report; we do not accept theses that are just a conference paper.[5] Your supervisors will tell you if they think any information needs to be added, or if your thesis is getting too long. There is also not a required format or lay-out style. If you want, you can use the LateX UT thesis template, but feel free to use a nicer looking one.

---

[3] An examiner has to be a staff member, but not all staff members count officially as examiners. If you're not sure, just ask them.

[4] You can self-enrol for the Canvas environment of 'I-TECH Research Topics & Master thesis' through: https://canvas.utwente.nl/enroll/GT7HNE

[5] But we do encourage students who want to write a conference paper *based on* their thesis.

Thesis Examples

For writing your thesis, if you want inspiration from examples, you can find all previous I-Tech master theses here: http://essay.utwente.nl/view/programme/60030.html

Ethics Committee

After finishing your Research Topics, and registering for the Final Project, you can start carrying out your final project and writing your thesis. It is difficult to give general guidelines for this, because it will be different for every project. One thing to think of is that if you do any kind of research involving humans (even if it's just an interview or survey), you need to ask for approval from the Ethics Committee (EC) of the faculty EEMCS. The homepage of the EC explains all the steps, and has a form you need to fill in via a web application, plus background information and example consent forms: https://www.utwente.nl/en/eemcs/research/ethics/

Important: before submitting the form, and after asking your supervisor for feedback, first send your request to the pre-check team: ethics-create-itech@utwente.nl. They will check your request and give you advice on changes that need to be made before you submit it to the EC.

Student space and lab rooms

There is a space for students to work on their final projects in the Citadel building, tower room T200. Also, the Interaction Lab has lab rooms available for your experiments. Contact the lab administration team to check availability. For the procedure on how to get access to these spaces, consult the *Guide of how to get access via SESAM* on Canvas or Appendix 3 of this document.

9. Green light: getting permission to graduate

Around 4 weeks before your graduation date (when you present your thesis and get your diploma), your thesis committee must have given their approval for your final thesis. This is called "*groen licht verklaring*" = "green light declaration". This approval is not based on the truly final version of your thesis, but on a complete draft that the committee deems of sufficient quality to pass the exam. You can hand in this draft digitally to your thesis committee.

You cannot get green light if parts of the thesis are still missing. The green light is basically a statement that you will get a sufficient grade for your thesis even if no further improvements are made. This means that it should be in such a state that you do not need to make any essential changes to it anymore. Making improvements after the green light has been given is OK, but not the kind that will make a difference between an insufficient and a sufficient grade.

When you get the green light, your supervisor will inform BOZ of this. Then BOZ will contact you via e-mail to determine the date for your final presentation, ask you for any missing information and other administrative details.

Checking requirements by BOZ. The 4 weeks between green light and presentation are needed for BOZ to check whether you have fulfilled all master's programme requirements and to prepare your diploma, which in principle will be handed to you after your presentation. You only get your diploma if you meet all requirements of the programme, meaning that at the time of the green light you must have an approved course programme and you need to have all your credits except the ones for your final thesis project.

For <u>EIT students</u>: please send an official document with your grades from your first year to BOZ. They need this in order to prepare your I-TECH diploma. You need to have at least 120 EC (including the credits from your first year) to get the diploma.

Final version of thesis. In the time between green light and final presentation, you can still make improvements to your thesis. The final version of your thesis should be sent to the committee about a week before your final presentation. It can be either digital or printed, depending on the preferences of your committee members; the university has no rule about this. The university will expect a digital copy for your file and for the library; this needs to be uploaded before your final presentation. You will get information about this from BOZ.

10. Final presentation

To finish your studies within the academic year, you need to give your final presentation (and get your diploma) before 1 September. It is OK to schedule your final presentation during the summer holidays in July or August, but you need to make sure that your thesis committee members can attend (and are not away on holiday).

You agree on the date of your presentation with your committee members. At least the two UT members of staff should be there. In case of a presentation on campus, possibly the advisor from the company could attend via a video call, if it is impossible for them to attend in person. In case of a presentation on campus, BOZ will reserve a room for you when you let them know about the date and how many people you expect. In case of an online presentation, BOZ will reserve a virtual meeting room for you.

The presentation is public. This means that you may have to remove any confidential information. Besides your thesis committee you can also invite fellow students, family and friends.

First, you will present the main results of your research (30 minutes). Then there is time for questions from the thesis committee, but also from the rest of the audience. After the questions (which usually last 10-15 minutes) the thesis committee withdraws to discuss your work and determine your grade and fill in the assessment form (see Appendix 4). You join them after their deliberation so they can tell you the grade in private first and explain its motivation. When they come back to the public room, if you agree with it they will announce the grade in public, or else just that you have successfully graduated. In case of an on-campus presentation, the I-TECH-diploma then gets signed and handed over to you. In case of an online presentation, you have to pick up the diploma later at BOZ.

11. After getting the diploma

After your presentation, the UT advisors will send the filled assessment form to BOZ, who will register your thesis grade. BOZ will contact you via e-mail when your grade list (= diploma supplement) is complete; you can choose whether to pick it up in person or if you want them to send it to you. You will also get a copy of the assessment form.

If you did NOT get your I-TECH diploma at the time of your final presentation (for example, because your presentation was online) then you will have to pick it up in person at the university when it is ready, or authorize someone else to do this for you. You will get an e-mail from BOZ about this.

For <u>EIT students</u>: When you have the Master diploma from each of the two universities you attended, you can also get the EIT certificate based on those.

APPENDIX 1 – Example Mobility Online form

This is the proposal form for **FINAL PROJECT** in Mobility Online.

PROPOSAL FORM - GRADUATION

STUDENT

Student number	s
Last name(s)	
First name(s)	
Study field	Business Information Technology
Study Level	MSc
Faculty	EEMCS
Research chair	
Confidential	
Start date assignment	15/10/2018
Expected end date assignment	15/04/2019

GRADUATION COMMITTEE

1. Committee chair
2. Committee member (UT)
3. External member
4. Additional member(s)

ASSIGNMENT DESCRIPTION

Title of the assignment

Assignment description

Additional Remarks

COURSE CODE(S)

Course code 1	192399979
Course code 2 (if appl.)	
Course code 3 (if appl.)	
Course code 4 (if appl.)	

RECEIVING ORGANISATION (if applicable)

Name	
Country	
Address	
Name Supervisor	
Email	

CONFIDENTIALITY

Proposal form confidential	☑
If yes: confidential until	

SIGNATURES

UNIVERSITY OF TWENTE.

PROPOSAL FORM - GRADUATION

Student: Name	Chairman: Name
(date (dd-mm-yyyy)) (Signature)	(date (dd-mm-yyyy)) (Signature)

APPENDIX 2 – Registration procedure

Research Topics – STANDARD registration in MO

Preparatory phase

1. **Student** registers in Mobility Online *Standard registration*
   Use the [Standard Registration](#) form
2. **Student** prints form, has it signed and checked by their supervisor (mandatory fields) and uploads the signed form. Complete the procedure by logging back in and upload a signed form
3. **Student** mails BOZ about having uploaded the form
4. **BOZ** checks whether the student has enough EC and if the mandatory fields (start/end date, title or topic, short description, signature supervisor) are filled and the supervisor signed
   a) If yes: approves application in MO
   b) If no: decline application, and fill out reason in feedback field. This can be:
      - The supervisor is not an examiner for RT, and someone else needs to sign of
      - The signature of the supervisor is missing
5. **Student** completes the assignment and marks the registration completed in MO
6. **BOZ** marks the assignment as complete, when the grade is in

Final project – EXTENDED registration in MO

1. **Student** registers in Mobility Online *Extended registration*
   Use the [Extended Registration](#) form
2. **BOZ** checks if the student has enough EC to start the Final project
   a) If no: decline application, reason insufficient EC to start Final project
      If the student responds with e.g. they have been doing an internship and the grade is in process. The student can be approved during this step, but include a note why student is initially approved. Student can now move on filling out remaining part of the application
   b) If yes: approve
3. **Student** by logs back in, **indicates internal/external, and fills out** the remaining part of the form**.** Prints the form, has it signed and checked by their supervisor (mandatory fields) and uploads the form. During registration choose **internal** if you carry out your research within a research group at the UT, or **external**[6] if you carry out your research outside the UT
4. **Student** mails BOZ about having uploaded the form
5. **BOZ** checks the form. If the mandatory fields are filled in correctly and the supervisor signed off, approve the form. If not, decline the form with reason
6. **If a scholarship applies, student** is forwarded to the scholarship pipeline
7. **Student** marks the process as complete[7]
8. **BOZ** marks the process as complete after receiving the grade. Actual end date and title can be adjusted

---

[6] New organizations/contacts are registered by the master coordinator (if necessary, in consultation with the internship office). This is a separate process and does not cause delay for the student, who is always automatically transferred to the next step in the pipeline.

[7] In between these steps the normal procedure concerning 'green light', application final examination etc. take place.

APPENDIX 3 – Step by step how to get access to Lab rooms

- Go to the SESAM application (only available on VPN or internal UT network): https://www.utwente.nl/en/service-portal/campus/campus-security-service/building-access-authorisation-during-and-outside-office-hours
    - Click the blue button "Request new access"

Access to buildings marked with * are expired.

REQUEST NEW ACCESS	REQUEST BARRIER PASS	REQUEST UNIVERSITY TERRAIN KEY

- Select building "Citadel" and Organisation "EEMCS-HMI"

BUILDING

Building	Citadel
Organisation	EEMCS-HMI

- Find the key profile that you need access to (all room numbers in that group are listed in the entrances column).
- You should also request access to the Citadel building: "CI - (students) Main entrance during the day"
- If you want a specific lab room (e.g. H104, H106), you should first check with the Lab administration team or Daniel Davison if it is available.
    - CI - "Room Number"

EEMCS-HMI	CI - T200	Citadel	CI - T200

- **Note**: There is also a combination request if you need to be in the Tower room (T200) and the Main lab (H107 & H109): "CI - HMI - IA - Lab"

EEMCS-HMI	CI - HMI - IA - Lab	Citadel	CI - H107, CI - H109, CI T200

- For the chosen row, click the "EEMCS-HMI" in the first column, which opens a popup
- Set the start and end date for when you want to have access to the room.
- Briefly describe the reason for the access request and if applicable mention your supervisor.
- You can only make one request each time. Click "Save" or "Save and request another" to send the request

REQUEST ACCESS

Building	**Citadel**
Organisation	**EEMCS-HMI**
Profile	**CI - HMI - IA - Lab**
Entrance(s)	**CI - H107, CI - H109, CI T200**
Date From	14-03-2023
Date Until	13-03-2024
Reason For Access *	Working on project "X" Supervisor: "X"

CANCEL SAVE SAVE AND REQUEST ANOTHER

- o   Repeat the process for additional access to key profile groups.
- The request has to approved by Daniel Davison
  - o   As soon as he has done this, you will be notified by email that from that moment on you have access
- When you are in Citadel and want to access your room with your student card, make sure to activate it at the main entrance
  - o   There is a scanner with the label "Daily card activator" in front of which you need to hold your card to be able to use it to access the rooms

- o

UNIVERSITY OF TWENTE.

MSc in Interaction Technology Thesis Assessment

Student Name: Student number:

Thesis Title:

Assessment criteria (+aspects suggested to take into account)	Assessment*	Remark (optional)
Content of thesis • Problem statement • Context and existing work • Discussion and argumentation • Results and conclusions • Recommendations		
Structure of thesis • Organization and structure • Clarity • References • Language		
Quality of work • Relevance • Originality • Complexity/volume of work • Contribution • Validation of design/product		
Process • Independence • Creativity • Problem solving • Planning • Interaction		
Scientific quality • Research question • Critical attitude • Scientific methods		
Oral presentation and defense • Clarity • Focus • Use of media • Answering questions		

* Describe your assessment of the criterion in short or use the following short forms: **n/a**: not applicable; **i**: insufficient; **--**: much below expectation; **-**: below expectation; **0**: meets expectation; +: above expectation; ++: much above expectation

Motivation for final mark (obligatory and related to above assessment):

Name of Examiner 1:   Name of Examiner 2:

Signature: Signature:

Date: FINAL MARK