

# **Study guide Graduation project**

## **Master Artificial Intelligence and Engineering Systems (AI&ES)**

Course codes & credits: 5ARG45 - 45 credits  
Level: Master  
Program: Artificial Intelligence and Engineering Systems  
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This study guide applies to students starting the Graduation project of the master AI&ES in the academic year 2024-2025.

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## 1. Introduction

The graduation project is an individual research project on a topic related to Artificial Intelligence in the context of Engineering Systems. It must be supervised by a supervisor of one of the research groups participating in the AI&ES program of the following departments: Electrical Engineering (EE), Mechanical Engineering (ME), Biomedical Engineering (BME), Built Environment (BE), Mathematics and Computer Science (M&CS), Applied Physics and Science Education (APSE) and Industrial Engineering and Innovation Sciences (IE&IS). The thesis supervisor is an assistant-, associate-, or full professor and an expert about the project, or anyone explicitly appointed by the Examination Committee AI&ES (EC AI&ES).

The graduation project offers you the opportunity to apply your acquired knowledge, competences, and skills to a research project. The type and content of the graduation project depends on your background and ambitions. The graduation project can be carried out within all TU/e departments connected to the AI&ES master, within a company, at another university or research institute in the Netherlands or abroad. The condition is that it must be agreed by you and the thesis supervisor. A graduation project may be preceded by a lab training on equipment safety and emergency protocol.

The graduation project is structured in two phases. The first phase is the **preparation phase**, of a duration of maximum 6 weeks, during which you will write and submit a research plan. The research plan will contain the background and already obtained results on the topic, the project goal (based on literature and/or previous work), research method (means, steps, results), project planning and the end date, when the thesis (graduation report) has to be submitted to the thesis committee. The graduation project can either focus on experimental work, application-oriented work or fundamental research questions, or combinations of these. It can be carried out on campus, in collaboration with companies or research institutions outside TU/e, or abroad.

The preparation phase is followed by the **project phase**, of a duration of 26-28 weeks, during which the actual project is carried out. Your progress on the graduation project is primarily monitored by your thesis supervisor. The total duration of the graduation project is monitored by the EC AI&ES. The graduation project will result in a thesis, which together with your presentation and defense will be graded by the thesis committee.

**!** We advise you to read through this entire study guide before you start your graduation project. It will offer you clear guidelines on the process and your responsibilities.

## 2. Learning goals

After completing the graduation project, you are expected to have learned how to apply your knowledge and skills to a complex research problem in the domain of AI&ES.

After finalizing the graduation project, you are expected to be able to:

- Formulate and analyze a scientific problem at an abstract level. Analyze the required multi-disciplinary knowledge for tackling the research problem.
- Independently and iteratively set up, organize and perform a complex experimental and/or theoretical electrical engineering research project, while reflecting on it within the working environment.
- Gather, understand and judge scientific literature about the research topic and incorporate the current insights on the literature into the research project.
- Carefully handle data, systematically investigate, critically interpret, and formulate the results and conclusions.
- Clearly communicate about the research project both orally (presentation and discussion) and in written form (report) on a specialist and professional level.

- Contribute to and take the lead in scientific discussions related to the research project.
- Illustrate and identify the scientific and societal relevance, impact, and limitations of the results and outcomes of the project.
- Contribute creatively and with perseverance to the research project.
- Show that you have a constructive and cooperative attitude to operate in a professional environment.

### 3. Finding a graduation project

The initiative and responsibility for finding a graduation project and a thesis supervisor lies with you. Be proactive and start looking for both on time. There are several ways to find a graduation project.

#### 3.1. Finding a graduation project in one of the TU/e departments

You start your search for a graduation project by **first** browsing the [AI&ES Master Marketplace](#) (MMP), an online platform where you can search through all available graduation projects of the research groups that are part of the AI&ES master, including the complete list of the thesis supervisors.

An [overview](#) of the research groups that have specific Artificial Intelligence (AI) expertise in Engineering Systems (ES) is published on the online Education Guide AI&ES. Staff members (assistant-, associate- or full professors) of the research groups included in the overview can supervise graduation projects of any AI&ES student, regardless of the track the student follows. Example: a student who is enrolled in Track 2 Mobility, can be supervised by a thesis supervisor that belongs to 3D Concrete Printing research group of the Built Environment Department.

Although you have the option to choose a thesis supervisor from any research group from the overview, your graduation project has to relate to your track. The graduation projects published on the MMP indicate to which track(s) these are connected. Projects are continuously added throughout the year. Once you find a graduation project that presents interest to you, please contact the thesis supervisor responsible via email. We advise you to make a top 3 choice and reach out to the preferred thesis supervisor first.

You have the option to connect with your track mentor to explore the possibilities for a graduation project. Should you choose to make use of such an option, you must check the available graduation projects on the MMP **before** the meeting or draft some ideas/topics on the interested areas of study of your own. The instructions on how to create an account and search for graduation projects can be found on the online Education Guide AI&ES - Graduation project - [Guide AI&ES Master Marketplace for students](#).

#### 3.2. Finding a graduation project in a company or abroad (own project)

It is possible that you have a specific company in mind where you would like to do your graduation project. Start by reading the company's website for information about the current possibilities and about the company's contacts within TU/e departments. A graduation project at a company should always be supervised by a thesis supervisor, hence make sure to find one yourself that matches the company's field of research. **Reach out to the track mentor or thesis supervisor first for support, before contacting the company.**

A graduation project at a company should be of sufficient level for a master student, complex enough to comply with the minimal required duration and daily supervised by an external supervisor, in addition to the thesis supervisor. The external supervisor should hold at least a master's degree in technical science domains.

If you do your graduation project in a company, the company might want to impose an embargo period if the company believes that (commercial) interests may be harmed by publishing your thesis. This means that your thesis may not be published during the embargo period (including TU/e library) within that timeframe. Make

sure you check with the company before the start of the graduation project if there is such a need, so that you have enough time to go through the process of embargo approval applicable at the TU/e. The deadline for submitting a formal request to the Dean of the Electrical Engineering (EE) Department is **at least 10 working days before you share your thesis with the thesis committee**. You can read more about confidentiality in [section 10](#).

Maybe you are interested in going abroad for your graduation project. A graduation project abroad should be of a sufficient level for a master student, meet the minimal duration criteria and be supervised daily by an external supervisor, in addition to the thesis supervisor. A potential way to find a graduation project abroad at specific universities, research institutions or companies is the network of the AI&ES staff members and research groups. If you already know someone, you can contact him/her to discuss international options. The AI&ES [track mentors](#) are another good starting point to discuss international options.

Please make sure to carefully check the [International experience](#) page of the AI&ES master and [Exchange programs for studying abroad](#), for detailed information on the process. A very useful document for you to check out is the [Fact Sheet Graduation projects AI&ES abroad 2024-2025 \(outside the Netherlands\)](#) and experiences of other students who went abroad before you. It is very important to keep in mind that arranging a graduation project abroad takes time, thus make sure you start well in advance. The [International Office EE](#) can assist you with your registration and provide important information.

Similarly with finding a graduation project within one of the TU/e departments, you have the option to connect with your AI&ES track mentor to consult about your own interests for the graduation project.

### 3.3. Finding a thesis supervisor

It is your responsibility to find a thesis supervisor for your graduation project. A graduation project can be supervised by an assistant-, associate- or full professor, or anyone explicitly appointed by the EC AI&ES. If you do your graduation project within TU/e, the thesis supervisor can appoint another staff member, such as a PhD or postdoc, as your daily supervisor (coach). Once you have found a graduation project, connect with your thesis supervisor and discuss the details of your graduation project (e.g., content, scope, location and planning), in addition to any other questions you might have. Please remember that it is also your responsibility to find a graduation project supervisor at a company or university abroad, which is approved by your thesis supervisor, when you choose one of these options.

In both situations (project within TU/e or external), after contacting the thesis supervisor of your topic of interest, you will both meet to discuss the topic and how it matches your track, graduation plans or future career ambitions. Upon thesis supervisor's assessment, you will either continue with the preferred topic, or you will have to choose another one. Should you be allowed to continue with the graduation project that you have selected from the MMP, your thesis supervisor will indicate it as being "reserved", hence making it unavailable to other students. Should you be allowed to continue with your own project, the thesis supervisor will add it to the MMP and indicate its status to "reserved".

- ! The initiative and responsibility for finding a graduation project and a thesis supervisor lies with you.
- ! Check the projects on the Master Marketplace before you meeting your track mentor or approaching a thesis supervisor.
- ! Staff members (assistant-, associate- or full professors) of the research groups included in the overview can supervise graduation projects of any AI&ES student, regardless of the track the student follows.
- ! Although you can choose a thesis supervisor from any research group from the overview, your graduation project must relate to your track.
- ! Prepare thoroughly before the first meeting with the thesis supervisor for aligning on a topic for the graduation project.
- ! When looking for a company to conduct your project, reach out to the track mentor or thesis supervisor first for support, before contacting the company.
- ! If an embargo is imposed, the formal request to the Dean EE must be submitted as soon as possible but at least 10 working days before you share your thesis with the thesis committee.

## 4. Registration for the graduation project

### 4.1. Entry requirements

You are allowed to start your graduation project if:

1. You have passed at least 60 credits, including the Team internship course (5ARIP10).
2. Your program of examinations (study program) has been approved by the EC AI&ES.

In the event that you do not meet the above-mentioned entry requirements, you cannot start the graduation project and you must stop. Reach out to your academic advisor to consult on your options.

Should you be completing a **double diploma program**, the following entry requirements apply to you:

1. Core courses: your program needs to contain the full program of the six core courses.
2. Specialization study components: you need to choose one of the AI&ES tracks and to follow the four track-related courses.
3. Team internship course (5ARIP10): you need to do the AI&ES Team internship project of the chosen track. This project cannot be replaced by another team project.
4. Graduation project:
  - The graduation project consists of 60 credits.
  - The graduation project needs to be supervised by two departments to make sure the interdisciplinarity of the graduation project is guaranteed. Deviations in the supervision must be approved by the EC AI&ES.

### 4.2. Registration

You must register for your graduation project online via the Registration form Graduation project AI&ES and enroll for your Graduation project course in Osiris, **at least one month before the start of the graduation project**.

#### 4.2.1. Registration form Graduation project AI&ES

You must register for the graduation project through the online [Registration form Graduation project AI&ES](#). Make sure you discuss all the details of your graduation project with your thesis supervisor before filling in and submitting the webform. Additionally, it is important that all the fields are filled in completely and correctly, and that the start and end dates are correct.

The start date is the date you indicate on the registration form (online) and via Osiris (course code), which is also counted as the first day of your preparation phase/phase 1. The end date is the date when you submit your thesis to the thesis committee (the period of the graduation project cannot exceed 32/34 weeks). It is possible to request an extension due to a prolonged holiday, following other courses or personal reasons. Such an extension must be approved by the EC AI&ES **before** you submit the registration form online and register in Osiris. Please see [section 5.2](#) for detailed information of this process.

Your submitted graduation project registration webform will be sent to your thesis supervisor and the [CSA EE](#). The CSA EE will check whether your registration (entry requirements and graduation dates) is correct. You will receive confirmation that your registration is approved from the CSA EE, expected within 10 working days, after which you may continue with your graduation project

In case of issues with your form, you will receive a rejection email from the [EC AI&ES](#) as soon as possible, motivating the rejection and advising on the steps to follow next (e.g., contacting the thesis supervisor and/or academic advisor, correcting the dates of the graduation project). Once you have solved the issues, you will resubmit a corrected registration form, which will be received by the thesis supervisor and CSA EE. You will receive confirmation that the resubmitted registration is approved from the CSA EE, expected within 10 working days, after which you may continue with your graduation project.

#### 4.2.2. Osiris enrolment

You must enroll for the graduation project course in Osiris using the code 5ARG45. For students of an internal double diploma the graduation project registration code is 5AIESIDD30 (combined graduation project 60 credits, part AI&ES 30 credits).

#### 4.2.3. Company contract

If you do your graduation project at a company, the company might request you to sign a company contract. The company contract can include information such as payment/allowance, insurance, working hours, legal information, intellectual property, confidentiality, etc. It is advised that the students sign preferably the [UNL Internship Agreement](#) over the company contract, or in situations when the company does not have its own contract. Before you sign any contract, submit your contract online via the [Registration form Graduation project contract](#). The CSA EE will have it checked by the Legal Department for you.

The contract can be a tripartite contract (you, the company and TU/e) or a bipartite contract (you and the company). In the case of a tripartite contract, the contract may be signed on behalf of TU/e by the managing director of the EE department only. This will also be arranged for you by CSA EE, following the same procedure as described above via the online Registration form Graduation project contract. Your thesis supervisor should not sign the company contract.

#### 4.2.4. Non-disclosure agreement

Sometimes companies wish to impose a non-disclosure agreement (NDA), that will apply to you, your thesis supervisor and thesis committee. It is often that this is already included in the contract, but it might be a separate document. Please register your NDA via the online Registration form Graduation project contract (as attachment).

#### 4.2.5. For non-EU/EEA students

Non-EU/EEA-students who do a graduation project in a company in the Netherlands are requested to sign additional documents. TU/e advises to use the [UNL Internship Agreement](#). The UNL internship agreement meets all legal requirements for non-EEA students to do an internship in the Netherlands. The company may ask to sign an [NUFFIC agreement](#) as well; however this is not mandatory. In this situation, it can be used as an Annex to the UNL Internship Agreement. A copy of the agreement will be kept by both the graduation project provider (company) and the TU/e. All agreements should be signed by the managing director of the EE

Department. You will submit your training agreement(s) online via the Registration form Graduation project contract (as attachment) which will be received by the International Office EE, where it will be checked by the Legal Department. A signed version of the agreement will be returned to you as soon as possible.

When the graduation project is conducted at ASML, Vanderlande and Lely Holding, different agreements apply. You can find more information [here](#).

### 4.3. Internal double diploma

For students doing an internal double diploma, a combined graduation project is generally part of the internal double diploma program. The core aspects of both master programs must be clearly identifiable in the graduation project. This will be assessed by each of the examination committees for their own program.

A combined graduation project is usually 60 credits, depending on the regular sizes of the graduation projects of the programs involved, and the contribution of each program is 50%. The combined graduation project is graded within one thesis committee and is assessed with two grades, one for each program.

Another option for students doing an internal double diploma is to do two separate graduation projects. When two separate graduation projects are taken the graduation project of program B is part of 'courses 2<sup>nd</sup> program' in program A and vice versa. Please bear in mind to not cross the minimum of 165 credits and maximum of 195 credits for an internal double diploma program.

- ! When you do not meet the entry requirements, you cannot start the graduation project.
- ! You must register online via the webform and Osiris, at least one month before the start of the graduation project.
- ! The start date is the date you indicate on the registration form, which is also counted as the first day of your preparation phase/phase 1.
- ! The end date is the date when you submit your thesis to the thesis committee.
- ! CSA EE will reply to your form withing 10 working days from the date of submission.
- ! It is advised to use the UNL Internship Agreement as a company contract, both for EU/EEA and non-EU/EEA students.

## 5. Duration of the graduation project

### 5.1. Duration of the graduation project

The formal duration of the graduation project is 32 weeks. This corresponds to 45 credits. For students of an internal double diploma with a combined graduation project, the duration of the graduation project is 42 weeks. This corresponds to 60 credits.

On your graduation project online registration form you should clearly specify the start date and end date of your graduation project. Make sure to discuss these dates with your thesis supervisor first, and if applicable, also with your external supervisor, before submitting the form. You are allowed to add another 2 weeks (in addition to the 32 weeks) in case you would like to include a holiday break. When planning your graduation project, you and your supervisor(s) should take holidays into account. Considering 2 weeks of holidays, the actual duration of the graduation project sums up to 34 weeks.

The start date is the date you indicate on the registration form (online) and via Osiris (course code), which is also counted as the first day of your preparation phase/phase 1. The end date is the date when you submit your thesis to the thesis committee (not shorter than 32 weeks and not longer than 32/34 weeks). By the end date of your



graduation project, you must **have the presentation and defense date planned already**, even if this will take place after the end date that you have indicated in the registration form.

Should you need to take a longer vacation than 2 weeks, you must submit a request for approval to the EC AI&ES via [Osiris Case](#) **first**. The same holds when you need extra time to complete courses. Please see [section 5.2.](#) for steps to follow.

## 5.2. Extra time for completing the graduation project

It might be the case that you would like to take one or more courses at the same time with the graduation project. Combining courses with the graduation project is challenging, therefore the advice is to first discuss your planning with the academic advisor. If combining is the best option, then keep in mind that the advice is to make sure you have sufficient time for both. You may request extra time from the EC AI&ES. The maximal allowed duration of such extension is calculated as such: 4 weeks per 5 credits, 7 weeks per 10 credits and 11 weeks per 15 credits.

It is your obligation to discuss your situation with your thesis supervisor and academic advisor. In agreement with them, the graduation project dates will be determined. You will proceed with submitting a request for approval of extra time to the EC AI&ES, via Osiris Case, **before registering online via the registration form and via Osiris**. It is mandatory to include in the request a confirmation (email, signed paper) from the thesis supervisor, hence make sure you ask for it before submitting the request. The academic advisor will confirm to the EC AI&ES discussing your situation, and the EC AI&ES will decide on your request.

Once your request is assessed, you will be notified by the EC AI&ES, and you will proceed with registering for the graduation project via the online registration form and Osiris, as described in [section 4.2.1](#) and [section 4.2.2](#).

## 5.3. Postponing the graduation project end-date

It might be the case that before or after starting your graduation project, you must postpone the end date, due to project-related or personal reasons/circumstances. It is your obligation to inform the thesis supervisor about the necessity to postpone the end date. When the reasons are project-related (e.g., too much workload, delay in starting it due to the company/research group, etc.), you will meet with the thesis supervisor to discuss the situation. Consequently, the thesis supervisor will recommend you consult with the AI&ES academic advisor as well. When the reasons are personal, you have the option to share them with your academic advisor only.

In both cases - meeting with the thesis supervisor or/and with the academic advisor - the next step for you will be to submit a request for approval to the EC AI&ES via Osiris Case. In the same request you must include the recommendation/confirmation from the thesis supervisor and/or academic advisor. You must submit your request **no later than one month before the end date of your graduation project**, or upfront of the start of the Graduation project in case the circumstances are already in place. The EC AI&ES can allow you to postpone the end date for a maximum of two months.

- ! The minimum duration of the graduation project is 32 weeks.
- ! The maximum duration of the graduation project (without an extension) is 34 weeks (when 2 weeks of holiday are accounted for).
- ! By the end date of your graduation project, you should have the presentation date planned already, even if this will take place after the end date you have indicated in the registration form.
- ! Any extension from the duration (min 32 - max 34 weeks) must be approved by the EC AI&ES (Osiris Case) before submitting the online registration form, or not later than one month prior to the end date.
- ! It is your obligation to discuss your situation with your thesis supervisor and academic advisor.

## 6. Phase 1: preparation phase

Once your registration is confirmed by the CSA EE, you will start the preparation phase of the graduation project, which is expected to last a **maximum of 6 weeks**. It is your responsibility to contact your thesis supervisor and schedule regular meetings. You will start working on the research plan, which you will have to submit to the thesis supervisor for review.

An approval (no formal assessment) is required so that you can move to Phase 2 of the graduation project. There is no midterm presentation of the graduation project or formal assessment of the research plan (grade) in the AI&ES master program. The research plan does not have to be formally submitted to the CSA EE, only to your supervisor for feedback and approval. The format of the research plan can be downloaded from the online Education Guide AI&ES - [Forms](#). Your thesis supervisor will have to fill in an [approval form](#) of your Research plan and submit it to the EC AI&ES.

- ! Approval of your research plan by your thesis supervisor will mark the completion of the preparation phase of your graduation project. You can continue to project phase.
- ! There is no midterm presentation of the graduation project or formal assessment of the research plan (grade) in the AI&ES master program.
- ! The thesis supervisor will have to fill in the [approval form](#) of your Research plan and submit it to the EC AI&ES.

## 7. Phase 2: project phase

You are working consistently on your graduation project and thesis. Make sure to maintain regular contact with your thesis supervisor or daily contact person and, if applicable, your external supervisor about your progress and questions that you might have. At the start of the graduation project, you should discuss how you will keep in contact (e.g., face-to-face meetings, online Teams meeting, or via email) and with which frequency. During your graduation project, adapt the communication, when necessary, e.g., if you encounter a problem. Keep in mind that your thesis supervisor is there to help you, so do not hesitate to reach out should you be concerned about your graduation project. In case you do not feel comfortable discussing certain project-related issues with your thesis supervisor, you can contact the academic advisor. In case you face personal circumstances that hinder your progress and completion of your graduation project on time, always contact the academic advisor.

## 8. Thesis committee

The thesis committee will assess and grade your graduation project. Your thesis supervisor must submit a proposal for the composition of your thesis committee to the EC AI&ES **no later than 2 months before the end date of your graduation project**. Your thesis supervisor will use the [Composition form Thesis Committee AI&ES](#). The EC AI&ES needs to approve the proposal and inform your thesis supervisor on the validity of the composition of your thesis committee. The EC AI&ES will also send the [Assessment form Graduation Project](#) to the chair of the thesis committee.

A thesis committee consists of at least three voting members and one or two non-voting (advisory) members. At least one voting member comes from a different research group than the group of your thesis supervisor. The [Regulations of the EC AI&ES](#) stipulate strict rules regarding the setup of a thesis committee. The secretary of the EC AI&ES will check and validate the composition of your thesis committee to your thesis supervisor. It is the responsibility of your thesis supervisor to know the rules and find members for your thesis committee.

## 9. Thesis

The graduation project is concluded by writing the thesis, presentation and defense of your graduation project.

### 9.1. Requirements for the thesis

Your thesis should follow the guidelines of a typical length conference/journal submission in the field of the graduation project, which describes the project and its results, and is ready to be submitted as a regular contribution to a periodical and complies to the quality standards of scientific journals or peer-reviewed conference papers. Appendixes can be added but will not be assessed. You must use the [Title page Graduation thesis AI&ES](#) for your thesis as it is published on the online Education Guide AI&ES.

### 9.2. Handing in the thesis

You must send your thesis to your thesis supervisor **at least 15 working days before your graduation project end date**. If applicable, you should also include a public summary of your thesis or a public version of thesis if your company imposed an embargo, see [section 10](#). Once you have handed in your thesis to your thesis supervisor, you may not amend your thesis. This includes not amending your thesis after your final presentation and defense.

Your thesis supervisor will test your thesis for fraud and plagiarism using the designated software Ouriginal (Urkund). In cases where such a test is impossible for technical or confidentiality reasons, your thesis supervisor must check the authenticity of your thesis. Once tested, you will receive the confirmation from your thesis supervisor and you can share your thesis with the thesis committee, **no later than the end date as indicated in the registration form**. In case fraud or plagiarism is suspected, a fraud case will be started by your thesis supervisor at the EC AI&ES. Your thesis committee will be informed by your thesis supervisor and your final presentation and defense will be cancelled.

At least 10 working days before the next EC AI&ES meeting, you must submit the following documents to the CSA EE:

1. Thesis, including the mandatory title page Graduation thesis AI&ES)
  - \* *If the confidentiality applies, you must submit, in addition to the thesis, a public summary or a public version of the thesis.*
2. The signed TU/e code of scientific conduct for the Master's thesis.

The chair of your thesis committee will submit the Assessment form Graduation project AI&ES after your final presentation and defense. Should you have passed all your courses and all credits within your **approved program**

of examinations are registered in Osiris, the graduation process will start for you.

! Your thesis supervisor must submit a proposal for the composition of your thesis committee to the EC AI&ES no later than 2 months before the end date of your graduation project.

## 10. Confidentiality

In principle, a thesis is public and Open Access, meaning that it is published in the TU/e library. Your company and/or research group may, however, choose to impose an embargo. This means your thesis may not be published in the TU/e library during the embargo period. This also means that all other publications derived from your thesis (e.g., scientific journals and conferences) are not allowed during the embargo period. You are advised to discuss confidentiality at the very beginning of your graduation project with the company and thesis supervisor. In this way you are all informed about the TU/e process applicable for confidential projects.

### 10.1. Embargo for maximum of two years

Should the company involved in your graduation project decide that (commercial) interests may be harmed by publication of your thesis, the company may impose a temporary up to two-year embargo. The imposition of an embargo must be announced by the company in good time and **no later than 10 working days before you share your thesis with the thesis committee**. Make sure to check this in time and always include your thesis supervisor in the communication.

In the event of a two-year embargo, you must write a **public summary** of your thesis in addition to your original thesis. You may choose to write a **public version** of your thesis instead of a public summary. The next steps are similar to [section 9.2](#).

The public summary of your thesis will be published during the two-year embargo in the TU/e library. After the two-year embargo, your thesis will be published in the TU/e library. The embargo might also influence the content of your final presentation. Make sure to check this in time and always include your thesis supervisor in the communication.

### 10.2. Embargo for two-to-five years

If the company deems it necessary to impose an embargo for two-to-five years, your company must submit a substantiated request to the [Dean of the EE Department](#) for approval. The company must submit the request in good time; **at the latest 10 working days before you share your thesis with the thesis committee**. Make sure to check this in time and always include your thesis supervisor in the communication. An embargo of two-to-five years needs to be communicated and decided upon carefully by the Dean, the company, the thesis supervisor and you.

Your thesis may not be published for a period of two-to-five (including TU/e library) within that timeframe. Any other publications of your thesis are not allowed either. You must write a public version of your thesis in addition to your original thesis. The public version should resemble the original thesis as closely as possible. This means, as a general rule, that the public version is written by making minimally invasive changes to your original thesis. Only the non-public aspects of your original thesis should be adapted to create the public version. Make sure to discuss this thoroughly with your thesis supervisor and your external supervisor. The next steps are similar [section 9.2](#).

The public version of your thesis will be published during the embargo period in the TU/e library. The public version of your thesis will be replaced in the TU/e library by your original thesis after the embargo period has expired. The embargo might also influence the content of your final presentation. Make sure to check this in time and always include your thesis supervisor in the communication.

- ! Always include the title page in the thesis when submitting it to the thesis supervisor, thesis committee and CSA EE.
- ! You must send your thesis to your thesis supervisor at least 15 working days before the end date of the project.
- ! You must submit your thesis to the thesis committee only after it was confirmed by the thesis supervisor and no later than the end date as indicated in the Registration form.
- ! You must submit your thesis, and all documents (see Graduation project page) to the CSA EE at least 10 working days before the next EC AI&ES.

## 11. Finalizing the graduation project

### 11.1. Graduation presentation and defense

You conclude your graduation project in an event in which you present your graduation project in a public presentation at least to your thesis committee, thesis supervisor and, if applicable, your external supervisor. You also defend your work against questions from your thesis committee.

Your thesis supervisor will organize your final presentation and defense, and invite the members of your thesis committee and, if applicable, your external supervisor as well. The secretary of the research group of your thesis supervisor arranges the public announcement of your final presentation. The final presentation is held on campus, but in consultation with your thesis supervisor and thesis committee the final presentation can also be organized hybrid or online. Your final presentation is a public event, therefore, should you wish, you can invite your family, friends and fellow students.

Your final presentation takes half an hour, which includes the opportunity to ask questions. You present your graduation project in such a way that your own contribution can be clearly distinguished. After your final presentation the defense takes place. During the defense, the thesis committee will ask questions about your graduation project and thesis, for a duration no longer than one hour (60 minutes). After the oral defense 30 minutes are typically reserved for deliberations and grading, without the student being present.

### 11.2. Final assessment

Your thesis committee assesses and grades your graduation project right after your final presentation and defense take place, during the final assessment. For this, your thesis committee uses the [Assessment form Graduation project AI&ES](#). In this assessment form you can find information about the assessment criteria that apply to graduation projects of the AI&ES program. You are not present during the final assessment, but you will be informed about your (sub)grade(s) right after the final assessment by your thesis supervisor and the thesis committee. See the assessment form for categories on which you will be assessed.

The final grade of your graduation project is rounded to the nearest half grade on a scale of 0 to 10. Your graduation project is considered successfully completed if it is assessed with a final grade of 6.0 or more. The final grade is only calculated if each category is completed with a minimum of 5.0 otherwise it is marked as NMR 'not met requirements' (NVD, 'niet voldaan'). A NVD always requires further investigation by the EC AI&ES before further actions are taken.

### 11.3. After the final assessment

After the final assessment, the chair of your thesis committee emails your graduation project assessment form to CSA EE. Your grade will be processed in Osiris. After the EC AI&Es meeting, your thesis will be published in the TU/e library, if there are no embargo restrictions for your thesis.

You can find everything you need to know about actions to take further (graduation procedure and deadlines, EC AI&ES meetings, documents to send to CSA EE, [terminating your TU/e enrolment](#) and graduation ceremony) for the master program AI&ES on online Education Guide AI&ES – [Graduation](#).

## 12. To-do list and timeline

Below you can find an overview of the timeline, actions and people responsible for each one of them, during the graduation project process.

| When   | Who   | What   |
|--|---|--|
| A few months before the start of the graduation project (Sem. 2, year 1)                               | Student   | <a href="#">Finds a graduation project</a>   |
|  | Student & thesis supervisor (& external supervisor) | <a href="#">Meet with the thesis supervisor</a>  |
| Start of the graduation project  | Student   | Meets with the thesis supervisor<br><a href="#">Registers via online form</a><br><a href="#">Enrols via Osiris</a> |
|  | Non-EU/EEA-students                                 | <a href="#">Registers the UNL Internship Agreement</a>   |
| <b>Phase 1: preparation phase</b><br>(4-6weeks after the start of the graduation project)              | Student   | <a href="#">Writes and submits research plan to the thesis supervisor</a>  |
| <b>Phase 1: preparation phase</b><br>(4-6weeks after the start of the graduation project)              | Thesis supervisor                                   | Signs Approval Research plan form and emails to EC AI&ES   |
| <b>Phase 2: project phase</b><br>(26-28weeks after completing phase 1)                                 | Student   | <a href="#">Works on the graduation project and thesis</a>   |
| Min. 2 months before the end date of the graduation project  | Thesis supervisor                                   | <a href="#">Submits composition thesis committee to the EC AI&amp;ES</a>   |
| Min. 1 month the EC AI&ES meeting when you plan to graduate  | Thesis supervisor                                   | Organizes final presentation   |
|  | Student   | Confidentially applies - writes a public summary or public version<br>Prepares the final presentation              |
| Min. 10 working days before sharing the thesis with the thesis committee (end date graduation project) | Student & thesis supervisor (& external supervisor) | <a href="#">Follow procedure Confidentiality</a>   |
| Min. 15 working days before sharing the thesis with the thesis committee (end date graduation project) | Student   | <a href="#">Sends the final thesis to the thesis supervisor</a>  |
|  | Thesis supervisor                                   | <a href="#">Tests the thesis for fraud and plagiarism</a>  |
| Max. on the end date of the graduation project as indicated in the form                                | Student   | <a href="#">Shares the thesis with thesis committee</a>  |
| Min. 10 working days before the EC AI&ES meeting when you plan to graduate                             | Student   | <a href="#">Sends required documents to CSA EE</a>   |
| Before the final presentation  | Thesis committee                                    | Reads the thesis   |
| Last day – the final presentation  | Student & thesis committee                          | <a href="#">Gives the final presentation</a>   |
|  |   | Defends the graduation project   |
| Last day – the final assessment  | Thesis committee                                    | <a href="#">Assess and grade the graduation project</a>  |
| Last day – after the final assessment  | Chair thesis committee                              | <a href="#">Emails the final assessment form to the CSA EE</a>   |

On the online [Education Guide AI&ES](#) you can find a visual graphic of the timeline and a separate To-do list Graduation project AI&ES.