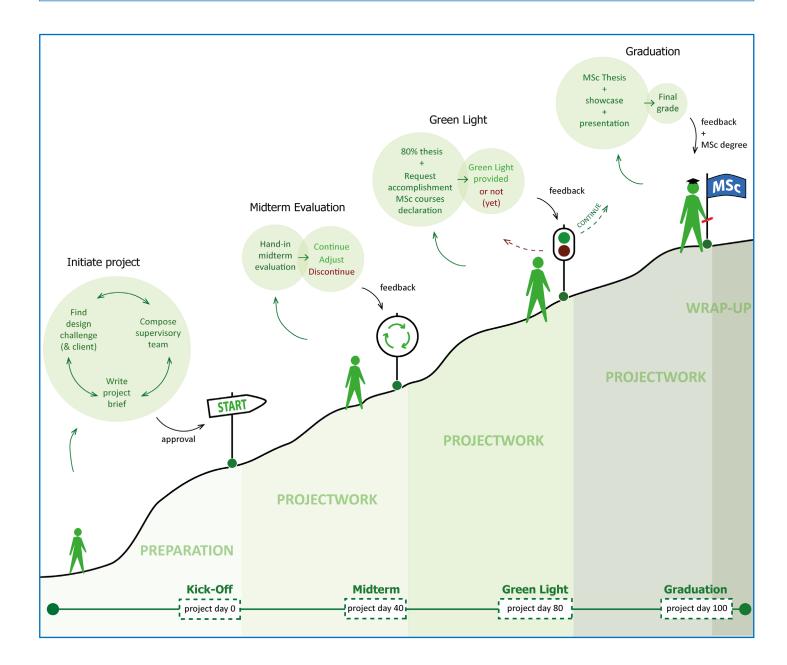
# **The IDE Master Graduation Project**

Edition August 2024

### Student manual to ID4190-16 / ID4290-16 / ID4390-16 IDEM1000 / IDEM2000 / IDEM3000



Delft University of Technology Faculty of Industrial Design Engineering Delft, **August 2024**  Changes compared to the graduation manual edition August 2023:

- New IDEM course codes are included;
- References to new MSc elective courses (IDEM308/IDEM403/IDEM404) have replaced references to ID4060 and ID5080;
- To start the graduation project, students will need to have participated in their third semester elective courses. This is set as additional starting requirement;
- After termination of enrolment (after graduation) any access to student facilities like student email and Osiris will terminate as well (no grace period);
- Updated names of programme directors of IDE MSc programmes (11.1);
- Added 11.2.4: Writing support, reference to services provided by Writing Centre TU Delft;
- In general, more direct links included to reference documents which are available on the graduation website;

This manual is written by the Faculty of Industrial Design Engineering of Delft University of Technology, to inform our IDE Master students and staff on procedures and requirements regarding the Master Graduation Project.

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Whenever you may miss specific content, or have suggestions for further improvements, you may share your ideas with <u>graduationsupport-io@tudelft.nl</u>

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Inti	ntroduction to IDE Graduation Project manual						
1	Cou	rse Overview	6				
	1.1	Quick info / course characteristics	6				
	1.2	Place in educational programme	7				
	1.3	People involved, roles and responsibilities	8				
2	Proj	ect requirements and learning objectives	12				
	2.1	Project and subject requirements	12				
	2.2	Learning objectives	12				
	2.3	Personal (learning) ambitions	13				
3	Final deliverables and assessment						
	3.1	Final deliverables of the Graduation Project	14				
	3.2	Handing in of deliverables	15				
	3.3	Assessment	16				
4	Step-by-Step course structure, procedures and paperwork; from idea to kick-off						
	mee	ting	18				
	4.1	Check: Requirements and conditions to start	18				
	4.2	Find a project and supervisory team	19				
	4.3	Define your graduation project	20				
	4.4	Prior to the kick-off meeting	22				
5	Step	Step-by-Step course structure, procedures and paperwork; from kick-off meeting					
	to m	idterm evaluation	23				
	5.1	The kick-off meeting (day 1)	23				
	5.2	Prior to the midterm evaluation	23				
6	Step	-by-Step course structure, procedures and paperwork; from midterm					
	eval	uation to green light	25				
6	6.1	The midterm evaluation (day 40)	25				
	6.2	Prior to the green light meeting	26				
	6.3	The green light meeting (day 80)	27				
7	Step-by-Step course structure, procedures and paperwork; from green light to						
	grad	uation day	29				
	7.1	After getting a green light	29				
	7.2	Prior to the graduation day	29				
8	Step	-by-Step course structure, procedures and paperwork; the graduation day	31				
	8.1	The graduation day procedure	31				
9	Step-by-Step course structure, procedures and paperwork; after the graduation day						
	9.1	Terminate your student enrolment	33				
	9.2	Publicity	33				
	9.3	Career & Counselling Services	34				

10	General Conditions			
	10.1	Student registration and tuition fee	35	
	10.2	Double Degree graduation project	35	
	10.3	Executing a graduation project abroad	36	
	10.4	Student rights and duties	37	
	10.5	Models and prototypes	38	
	10.6	Liability (client project)	38	
	10.7	Confidentiality (client project)	38	
	10.8	Rules and Regulations concerning admission	40	
11	Contact information		41	
	11.1	Course coordinator / course management	41	
	11.2	Graduation support	41	
	11.3	Other IDE staff members / chair and mentor	42	

11.3 Other IDE staff members / chair and mentor

APPENDIX A; Rubric and assessment form				
AP	PENDI	X B; Final attainment levels of IDE MSc programmes	45	
	١.	Attainment levels of the TU Delft master programmes	Error! Bookmark not defined.	
	П.	In addition, as an Integrated Product Design graduate	Error! Bookmark not defined.	
	III.	In addition, as a Design for Interaction graduate	Error! Bookmark not defined.	
	IV.	In addition, as a Strategic Product Design graduate	Error! Bookmark not defined.	
AP	PENDI	X C: The Midterm Evaluation Form	47	
AP	PENDI	X D: Instructions for uploading documents to Brightspa	ce organisation 49	
	D.1.	Manual for uploading Midterm form to Brightspace	49	
	D.2.	Manual for pre-checking your graduation report on plagiarism	า 49	
AP	PENDI	X E: The Dutch Patents Act	52	
AP	PENDI	X F: Embargo request	53	
AP	PENDI	X G: Requirements video and poster showcase	54	

### **Introduction to IDE Graduation Project manual**

This IDE Graduation Manual covers the procedures, organisation, and requirements for starting and completing the course *Master Graduation Project* within the Faculty of Industrial Design Engineering (IDE), of Delft University of Technology (TU Delft). We (obviously) encourage you to timely study this manual, to prevent any misconceptions about the course, the project and its required preparations.

In this manual it is often referred to <u>IDE's MSc graduation</u> website, where additional information is shared and all relevant documents are to be found.

Chapter 1 allows you to get a quick overview of the course, and will link you to various other chapters in this manual, and to other sources that apply. Chapter 2 will elaborate on the expected content and the course's learning objectives, where Chapter 3 addresses the deliverables and assessment. From Chapter 4 on, you will be guided through the project step-by-step, explaining possible approaches together with the procedures and paperwork from start to finish.

Next to this manual, another manual is available aimed at explaining the organisation and conditions regarding the project to potential clients: the Graduation manual for clients. When setting up a project with a client ensure to also read through this manual, as it contains valuable information for students as well.

If, after reading both manuals you still have questions, there are several ways to reach out for support. The different options are further defined in Chapter 11.

### **1** Course Overview

The MSc Graduation Project at IDE is the concluding part of your Master programme. In this project, you will demonstrate your capabilities as an Industrial Design Engineer to the faculty, the university, the outside world, and to yourself. The emphasis of this project is not only on testing your competences, but also on developing (new) knowledge, understanding, and skills. You are expected to apply what you have learned, learn new things, and to operate as an independent Industrial Design Engineer while executing the project. This course comes with great opportunity and responsibility.

### 1.1 Quick info / course characteristics

- To graduate, an IDE Master student must successfully complete the MSc Graduation Project.
- The MSc Graduation Project is a full-time course, and accounts for 30 EC. As 1 EC represents a study load of 28 hours, 30 EC represent a course's study load of 840 hours (= 20 weeks of full time work = 100 days)<sup>1</sup> in total. Any project you are preparing to start should be doable within this timeframe, something to keep in mind when drawing up the project's assignment and planning.
- The course allows you to set up your graduation project to your individual wish and ambitions, but should, at any time, match with its study load of 30 EC. This means, as individual wishes and needs differ from one another, projects will differ in scheduled activities, aimed for results and time plan. However, all projects will have to comply with a number of predefined procedures (Chapter 4), criteria and goals (Chapter 2).
- Your project's set up should be explicated in the <u>Graduation Project Brief</u> (download from graduation website), which will guide you in setting up your project, and facilitate discussion with your (potential) supervisors. After your chair has approved the project's content, some formal checks will follow (e.g. on study progress) after which you are officially started.
- You can start your project at an individual time and date <sup>2</sup>, once you have met the requirements to start with regard to study progress and the organisation of the project. For study progress this implies that you have passed at least all first year MSc courses, and that you have participated in the electives courses of the third semester of your programme. You also must be registered as a full time student at our faculty. See also paragraph 4.1.

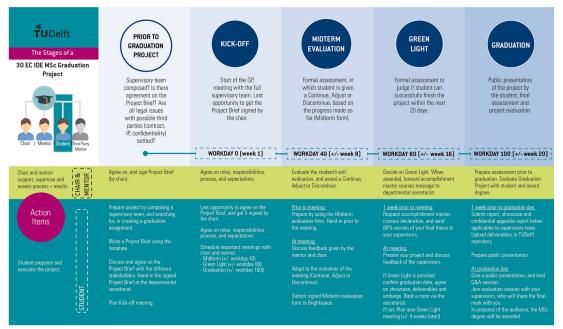
<sup>&</sup>lt;sup>1</sup> At the IDE Faculty, a regular, full time study week encompasses 42 hours.

<sup>&</sup>lt;sup>2</sup> This implies, the starting date can deviate from the start of a regular education period, and that you are allowed to work during holiday/no teaching periods (see also TU Delft Academic Calendar). However, no rights can be claimed with regard to availability of staff when planning activities outside of regular teaching periods.

• Take into account that initiation of some types of projects (see schedule in paragraph 4.2) require more lead time, and more lead activities, than others. Preparing your graduation project is **not** included in the run time of the course itself, and will require some small effort from time to time, given that you start preparing in time (in your third master semester at the latest!).

If you don't succeed in starting these preparations in time, project initiation could be perceived as a big effort at once! **Please note**, that it is your own responsibility to move into action on time. However, there are few courses that will offer some support to get things going (see 1.2).

You don't enroll in Osiris to take the course and officially start. Instead, after having composed your supervisory team, you register as graduating student with your chair's departmental secretary. Once your Project Brief is officially approved (after all checks) you will be formally registered as graduating student and get enrolled in the IDE MSc Graduation Project Brightspace community. See also Chapter 4 for the full procedure.



*Fig. 1.1.1* A handy flyer is available giving an overview of the whole process. You might use it as mnemonic to remind yourself of important actions to take. See <u>downloads</u> on the graduation website.

### 1.2 Place in the educational programme

The MSc Graduation Project is the concluding course for **all** IDE Master programmes. It is deliberately scheduled in the second semester of the second year of your Master, to assure that you will be well equipped. All (mandatory and elective) courses of the first three semesters of the programme contribute to this.

Some elective courses have a direct relation to the graduation project, and are aimed at supporting you in getting acquainted with IDE's research groups and topics, and the lead activities and organisation of your project.

The elective course <u>Graduation Launchpad</u> (IDEM308) prepares you for a graduation project that is related to specific <u>research of the IDE faculty</u>. The Graduation Launchpad acts as a platform where you can interact with researchers to identify topics for your graduation project and learn how to approach, plan and execute this project successfully. After a general introduction of how to conduct high-quality graduation work, you will join a topic-specific group of researchers, potential project supervisors and fellow students to conduct preliminary research, and to prepare your individual graduation project. At the end of the Graduation Launchpad, you will have gained a firm grounding in a research topic, have defined a feasible graduation project, identified a supervisory team and be ready to start the graduation project.

If you aim to participate in a faculty project otherwise, preparations can also start in your third master semester by taking the <u>Research elective</u> (IDEM403/IDEM404). In this elective you may set up your own research project, and facilitate yourself to get acquainted with IDE's research groups (e.g. the Delft Design Labs) and topics, and/or perform some background research on a topic of your interest before defining a graduation project.

### 1.3 People involved, roles and responsibilities

As each IDE master student must successfully complete the MSc Graduation Project, the course characteristics fit with each IDE master programme. Next to that, the course accommodates for individual exploration, expression and stimulation of talent and personal growth. The MSc Graduation Project distinguishes itself from regular IDE courses which are often predefined in detail, as within this project it is *your* responsibility to initiate, organise, plan and execute it: You will be the project leader of your project, and by that are expected to act like such.

With yourself in the project leading role, you will involve a supervisory couple from the faculty/university and, if applicable, a mentor who represents a client. Next to these, within TU Delft other people will be involved who facilitate all registration, or who can provide additional support on a specific topic. Not all roles will be elaborated on here as most will pass by in the different project steps described from Chapter 4 on.

### 1.3.1 Student responsibilities

### Regarding the project

As explained above, it is your responsibility to organise, plan and execute the project. Being responsible within this context means, for instance, that it is your job to initiate your assignment and the project as a whole. You are expected to be in charge of setting goals, scheduling meetings and activities, and of preparing these, and to manage your time. Equally, it is up to you to compose a supervisory team (a task that should not to be underestimated!), and to ensure all graduation conditions are clearly agreed on in case an external party is involved. Naturally, it is also up to you to initiate the development of content in the project and to keep your supervisors informed and involved. The latter implies that you best do not only present fixed outcomes and plans, but that you also share findings, doubts, struggles and ideas. To allow them to coach you, you should share information that enables them to do so.

In the search for a project and supervisors, it will not be uncommon you have several talks with different staff members. For the sake of clarity and civilization it is expected that once you have composed your supervisory team, you will notify all other staff members that were consulted during the search.

Within the given structure of the project you will need to play your role. For some this might be the first time individual responsibility is expected to be taken for such an extensive project. This all will contribute to the challenge the graduation project might be, but given that you have already come to this stage in your studies, you are (considered to be) well equipped. This project is a great opportunity to be set up in accordance with personal interests, motivation and ambition, and a chance to learn and to develop new knowledge and skills!

### Regarding conditions

To start your graduation project, and at the time of preparing for the green light, specific requirements regarding your study progress apply (see paragraph 10.7). It is your responsibility to timely check whether your courses are registered correctly, and whether all registered information is up-to-date <sup>3</sup>. Furthermore, it is your responsibility to monitor whether all administrative and procedural activities are being processed and followed up upon correctly.

#### 1.3.2 The Supervisory Team

The Supervisory Team is organised by the student, and consists of a TU Delft chair and mentor who both have about 30 hours to supervise you. The team's expertise should more or less cover a field(s) that the graduation subject applies to.

To learn about IDE staff eligible to act as a chair and/or mentor, you should consult the list of 'IDE chairs and mentors' which is a <u>download</u> from the graduation website. Your chair can only be selected from the chairs in this list, where a mentor can come from both groups; chairs and mentors. However, as a project cannot start without a chair and there are simply more mentors than chairs, it is advised to select a chair from the chairs and a mentor from the mentors.

In rare situations one might wish to involve a TU mentor who is not on the list of eligible supervisors, because this person has an expertise that is very relevant for the project but that is not available within IDE Faculty. In such situation, the chair has to submit a substantiated request for approval to IDE's Board of Examiners <sup>4</sup>. The proposed mentor will need to have experience in the academic field and education, and should bring in a for the project essential expertise that none of our faculty staff members has.

Both, chair and mentor must be present at all important meetings in the project. You will determine together to what degree, and in what way, you will stay in touch outside of these meetings.

<sup>&</sup>lt;sup>3</sup> In the situation exam programme information is not correct, you should get in contact with the Study Programme Administration: <u>spa-io@tudelft.nl</u>. In the situation you might miss a course grade, get in contact with the responsible course coordinator.

<sup>&</sup>lt;sup>4</sup> In case a mentor from outside IDE Faculty is proposed as member of the supervisory team, the chair should ask permission with IDE's Board of Examiners. The chair's request should include a short explanation of this person's relation to the subject, and their CV. The request should be sent to: <u>educationregulations-ide@tudelft.nl</u>.

The difference between a chair and a mentor is mainly that the chair has a formal role in the procedures and registration of your project. The registration runs via the departmental secretary of your chair. Depending on personal preference and task approach, you might perceive more differences between your supervisors during project execution. Don't forget that besides the supervision by your chair and mentor, you are off course allowed to consult other staff members to get advice on a specific topic within your graduation project.

When a chair and mentor have committed to take part in your team, they are expected to cover different field(s) of expertise that your graduation subject relates to, or to be

complementary otherwise. Industrial Design Engineering builds on the convergence of people, technology and organisation, which ideally is reflected in your project and the supervisory team involved. Next to that, there cannot be a potential conflict of interests between both supervisors, as they will need to operate as a team independent of potential relations they have outside of the project. In general this means you should select two supervisors who are not from the same departmental subsection <sup>5</sup>. In the situation you wish or need to have both supervisors from the same subsection anyhow, you must motivate the proposal in the Graduation Project Brief.

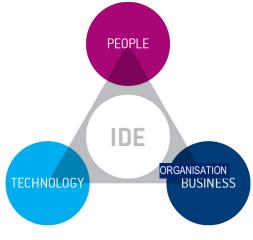


Fig. 1.3.1 The IDE domain

In line with this, when an external party is involved in your project and one of your supervisors has an interest in this party outside of the scope of your project, you should opt for another supervisor who can act (more) independently.

Information on staff members' expertise is available on the Faculty's Personal Profiles pages.

### 1.3.3 Third mentor from external party

Many projects involve a third, external party, such as an association or company; a client. If your project does, you will also need a third mentor who represents this client and who guides you in applying their viewpoint into your project. In the assessment of your work, the client mentor can function as an advisor to the supervisory team, but they cannot determine the grade, because they are not authorized to act as an examiner. As a student you are assessed by the university staff.

<sup>&</sup>lt;sup>5</sup> In the list of 'IDE chairs and mentors' an overview is given of staff members who are eligible to supervise the graduation project. The staff are organised in accordance with the organisational structure of our faculty, and therefore placed under IDE's departments and their subsections. In general, people who contribute to a similar field of research and knowledge are brought together in such subsection. The list of chairs and mentors is a <u>download from the graduation website</u>.

When involving a client and client mentor, you need to make sure it is understood that your graduation project is an academic proof in the first place and not a commercial project <sup>6</sup>. Your client mentor cannot have a primary interest in the project (meaning that their job might be at stake depending on the outcomes of the project), and your client cannot force you to deliver any tangible results within a fixed amount of time. Nevertheless, a client may expect you to try hard to come up with the best possible results for your project, and for you to put reasonable effort in pursuing to achieve these.

When contacting a client for setting up a project, you must ensure that your expectations and plans are well understood. It is not unlikely a client does not immediately have a clear picture of how the graduation project is organised within our faculty, and might expect it to be similar to an internship. Therefore you should inform yourself about the difference between both, in organisation as well as in learning objectives and deliverables, and be able to explain these to the potential client.

To support you in this process a 'Graduation manual for clients' is available, which you will find in the downloads section of the <u>graduation webpage</u>. You can provide it to the client when more detail and background information are wished for, after you have first explained the project to them in all aspects.

<sup>&</sup>lt;sup>6</sup> Besides the educational aspect, this also follows from the BNO Code of Conduct (Gedragscode Beroepsorganisatie Nederlandse Ontwerpers BNO) the IDE Faculty complies with. Unfair competition and corruption of the market should be prevented. Therefore, the student should not be regarded as a full-fledged employee. On the graduation website -> <u>downloads</u> you will find the this Code of Conduct.

### 2 Project requirements and learning objectives

As the graduation project is the concluding part of the Master's programme, the project should enable you to show your knowledge, understanding and skills at an academic level, and you should have the opportunity to independently plan and execute this 20 weeks project. You are expected to show you can adapt to new developments and results from analysis, and that you are capable of motivating and defending your choices. Moreover, your graduation project must have the potential to be a fitting culmination of your master's programme in terms of content and complexity. What 'fitting' entails in this is in a way summarised in the Final Attainment Levels of your programme. These levels reflect the content and competencies to develop within your specific Master, and the project at hand is expected to provide enough space to show that you indeed have done so. In appendix B, the Final Attainment Levels of the three IDE Master programmes are included as these were linked to the MSc courses up and until document date. (Updated FALs, as included in the TER 24-25, will apply to the graduation project from next year on.)

This chapter explains project and subject requirements, and the learning objectives of the course. Next to that, it explains the possibility to identify personal learning ambitions.

### 2.1 Project and subject requirements

When looking for a suitable subject, and while initiating your project, take the following requirements into account:

- The subject you will work on must fit within the domain of Industrial Design Engineering, which integrates the three pillars Business, Human and Technology in your project;
- The subject should be relevant to the mission of the IDE Faculty: Design for Our Future;
- The project enables you to show you have achieved (at least some of) the Final Attainment Levels of your specific master programme (appendix B);
- The project must be feasible to be executed, given the knowledge, competencies and skills you have acquired in your master programme, within the given runtime of 100 days in total.

### 2.2 Learning objectives

The learning objectives describe what abilities you should master, in, or at the end of, the graduation project. These are the objectives that the graduation project is being assessed on. On completion of the project you are expected to be able to:

- 1. Effectively collect, analyse, integrate and generate knowledge required for the project;
- Justify your choices with respect to used methods and/or approaches used in the project;

- 3. Deliver a relevant project result. For design output this might mean a persuasive argument for the desirability/feasibility and/or viability of the design. For research output this could be originality and/or generalizability;
- 4. Effectively and thoroughly communicate to, and discuss with, stakeholders involved in the project;
- 5. Manage a design/research project independently within the given time.

### 2.3 Personal (learning) ambitions

You are given the opportunity to point out specific elements that you wish to put emphasis on in the execution of your project, or that you wish to learn; your personal (learning) ambitions. You are challenged to make clear and explicit why and how this particular project resonates with you, and by doing so, enable all involved stakeholders to understand your project approach. You could e.g. indicate the ambition to learn a specific method or tool, to deepen knowledge or skills in a specific area (e.g. apply VIP, program a working prototype in Arduino) or other. Definition of personal (learning) ambitions is optional, not mandatory, and counts up to a maximum of five. Your ambitions can be defined on the project brief, where some space is reserved to write them down.

### 3 Final deliverables and assessment

### 3.1 Final deliverables of the Graduation Project

The following graduation project deliverables are defined, which are similar for all IDE graduation projects. All deliverables need to be prepared **in English**.

### i. A graduation report (thesis)

In your thesis you document the process followed and results achieved within your graduation project. It is an important deliverable for the assessment of the project, and it is expected to meet the accepted academic standards regarding content, structure, referencing, and language. It should provide a good insight into the project in terms of objective, used methods and results achieved, revealing core information in the report's body, supported by appendices. The thesis needs to be provided in .pdf format, and next to the above, it must include:

- A summary of 500 words max, supported by visuals, graphics and pictures, showing process and result(s).
- The original project brief, as it was approved at the start of the project, without any personal information (include as appendix).
   <u>Note</u>: the report will stored in the TU Delft repository, therefore you must **remove any private information** from the project brief before uploading! This comprises the information on the pages 1 and 2 of the brief.

### ii. An information presenter/showcase

You are required to prepare some form of deliverable that clearly demonstrates the result of your work in context, the core value achieved, and the critical (scientific) insights gained. You can think of preparing a video of e.g. a demonstration of a prototype, an animation or a recorded presentation, or a poster that clearly demonstrates the result in its context. Which shape will best fit with your project should be determined in consultation with your chair.

For the preparation of a certain type of showcase (video, poster or prototype/model) additional yet important guidelines and requirements are to be found in appendix G.

## iii. If applicable; a separate confidential appendix, containing confidential client information

Confidential information that was shared with you by the client, and that you used in the process e.g. by taking it into account when making certain decisions, can be included in this separate report. In that way, your supervisors have access to it while it remains confidential for the public.

### iv. A public presentation

In this presentation, you are required to explain the objective, methods used, concepts developed and result(s) achieved to a non-professional audience, within a maximum of 30 minutes. The presentation is open to the public, thus when applicable you should consider how to handle information that is confidential or under embargo on publication <sup>7</sup>. Location will be at IDE Faculty.

### 3.2 Handing in of deliverables

On the day of your graduation, you have your **public presentation (iv)**. All other deliverables: **The graduation report (including appendices) (i), the showcase (ii) and the confidential appendix (iii)** will need to be handed in **no later than 1 week prior to the graduation date.** The following handing in is required:

### 3.2.1 Hand in with supervisors

To enable the supervisory team to prepare for the graduation ceremony and to assess the project, you need to hand in **deliverables i + ii + iii** with each member of the supervisory team. The deliverables should be made available digitally. Discuss with your team whether you should also provide a hard copy version of the report and appendices.

### 3.2.2 Hand in with the faculty / upload to Education Repository

Next to handing in deliverables with your supervisors, you are required to upload graduation deliverables i + ii to the TU Delft Education Repository <sup>8</sup>.

When <u>uploading the deliverables</u> other data will be asked for to provide, such as general information on the project and a summary (which you already prepared and included in your thesis). You can upload a maximum of 10 files.

<u>Note</u>: Providing this information and uploading the files is **mandatory at all times**, even if there is an embargo request to keep your work confidential <sup>9</sup>.

A timely upload of the deliverables will be checked by IDE Faculty, and the Master's degree certificate will only be issued if you have met all the above mentioned conditions.

On the subject of copyright, submitting the thesis and appendices to the TU Delft Repository implies that:

<sup>&</sup>lt;sup>7</sup> In your public presentation, you cannot share, or make visible, any confidential background information. Please see paragraph 10.6 for additional information on confidential information.
<sup>8</sup> The Repositories of the TU Delft Central Library are an online database containing the academic output of TU Delft. The repositories are part of a nationwide network of scientific repositories, coordinated by the Royal Netherlands Academy of Arts and Sciences (KNAW).
<sup>9</sup> If an embargo is asked for, or already granted by IDE Faculty, the report will not be accessible for the duration of the embargo. Only meta-data (data that defines your project and by which it can be found by search engines, like the author's name, date, institute, and title) will be visible. If an embargo applies, you should send proof of this to <u>afstudeerrepository-io@tudelft.nl</u> before uploading the report. See Appendix F for more information on embargo request.

- The author (you) grants the TU Delft Library the licence to perpetually publish the full text of the thesis on the Delft Repository website;
- $\circ$   $\;$  The author (you) retains the copyright to the thesis;
- There are no obligations whatsoever which prevent the publication of the thesis on the Delft Repository website;
- $\circ$   $\;$  The author (you) is responsible for all statements in the thesis.

### 3.3 Assessment

### 3.3.1 Assessment Criteria

By completing the graduation project, you will finish the course and simultaneously complete your master programme and attain the degree Master of Science. Therefore, as explained in Chapter 2, it is in line with expectations that some of the programmes final attainment levels are addressed and/or demonstrated within the project. Nevertheless, the course's learning objectives are what the graduation project is being assessed on. An explanation on achievement of these is translated to assessment criteria for the course, and included in the assessment form. The assessment of each learning objective is based on predefined criteria and a scale, which together merge to the assessment rubric.

Both, the assessment form and rubric are included as appendix A and are also available on the graduation website.

### 3.3.2 Formative and summative assessment

In this project formative and summative assessment are applied. The project is always assessed as a whole, taking into account the final deliverables, your attitude in meetings, and other activities that can be observed by the supervisory team. During the project the following formal assessment moments apply, related to project's milestones:

- a. The midterm evaluation (day 40), see paragraphs 5.2 and 6.1
- b. Green light meeting (day 80), see paragraphs 6.2 and 6.3
- c. Graduation ceremony (day 100), see Chapters 7 and 8

In these assessments, feedback will be given on your work based on (part of) the rubric, indicating the actual level and quality of it. Assessments a. and b. are formative in the sense that these don't have a weight in the final assessment of the project, although they can imply a revision of the planning, the project's outcomes, goals and/or your attitude, when the quality of work or progression made is considered insufficient. Ultimately, when any prospects are lacking you might even be forced to stop the project.

The final, summative assessment is applied on the graduation day, as part of the graduation ceremony, and defines the final grade for the course which will be expressed in a whole mark or a half mark from 1.0 to 10.0. To get a 'pass' for the course, the minimum result required is 6.0.

### 3.3.3 Cum Laude

The distinction Cum Laude is an honour that *might* be rewarded if you have shown exceptional competence which at least is reflected by;

- A weighted average of the results of the courses in the master programme, not including the graduation project, is at least 8.00 (out of 10). (Passes (V) and exemptions (VR) will not be taken into consideration;
- The graduation project being rewarded with at least a 9.0 (out of 10);
- A total length of study which does not exceed 30 months (2,5 years);

More details on cum laude are to be found in the faculty's <u>Teaching and Examination</u> <u>Regulations (TER)</u> to which a link is included on the graduation website.

### 4 Step-by-Step course structure, procedures and paperwork; from idea to kick-off meeting

From time to time you are expected to meet with your supervisory team, so your chair and mentor can stay involved, and you can discuss findings, doubts, progress and proceeding steps and your supervisors can provide intermediate feedback. The meetings are scheduled according to the preferences of you and your supervisory team.

For the graduation project to function well in practical sense, quite a number of predefined agreements, deadlines and procedures also need to be followed. This includes completing formal paperwork. In this, and the following chapters, the different steps within the course will be elaborated on, and the formal paperwork that comes along with a certain step will be addressed in the separate textboxes.

### 4.1 Check: Requirements and conditions to start

Before you can start, be sure to meet up to the following starting conditions:

- You have finished at least the full first year of your master programme (60 EC); Because the graduation project is considered to be a full time course, and to ensure that you have the requisite level of ability at the beginning of the project, it is required all mandatory programme courses are finished before start of the project.

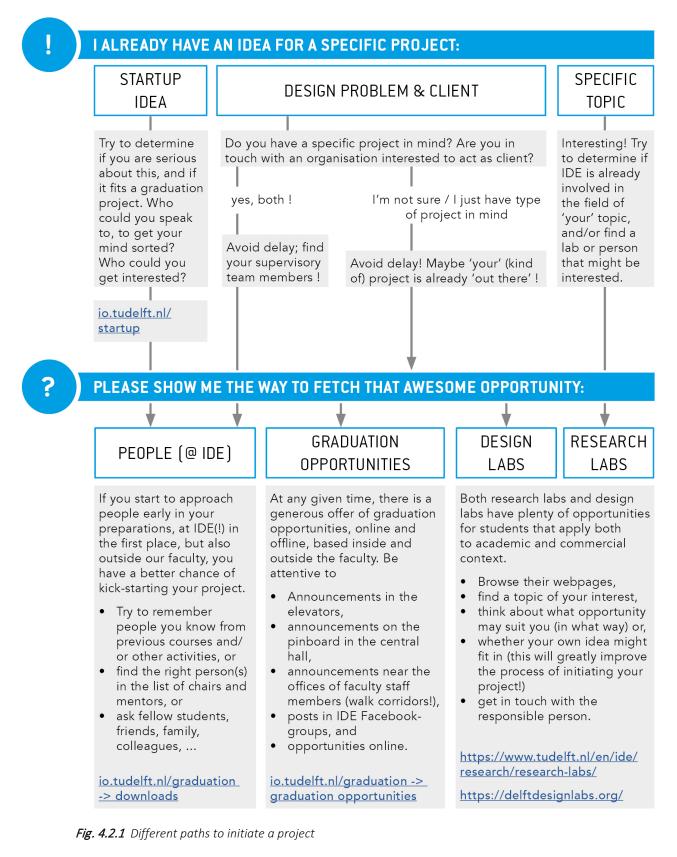
- You have participated in the elective courses of your third semester; In addition to the above, also the elective courses contribute to reaching the requisite level of ability for starting the project. Next to that they may help you in defining the project's direction.

- You are registered as a full time student of the IDE Faculty During the full course of your project you need to have a valid student registration, otherwise your diploma cannot be created.

As you may conclude from these requirements, you don't need to have finished all the elective courses before you can start your graduation project. In some situations only a small activity needs to be (re-)taken to complete the electives which might cause a disproportional delay in starting the project, while finishing the elective can be combined with the graduation work. However, keep in mind that for requesting the green light meeting (see Ch. 6.2, p24) **all** mandatory and elective courses of your programme need to be finished and registered as passed, otherwise no green light will be granted. It is not workable, and will not be approved, to start the graduation project while the majority of elective courses is still unfinished.

### 4.2 Find a project and supervisory team

Different kinds of projects can be considered, of which each has its own kind of character. Along with this character goes its origin, in other words: different paths are to be distinguished towards the (initial) project setup, as summarised below.



### 4.3 Define your graduation project

### 4.3.1 Set up your project by using the Graduation Project Brief template

When setting up your project, you should use the project brief template. Best, you start using it as soon as you have the chance to start thinking about graduation, as the questions in the form will conveniently guide you in the process. You should also try to involve your chair and mentor in the earliest stage possible, since they can provide you with information on how to set up a decent yet feasible graduation project and your chair has a key role in getting the project approved later on.



Form: Format for Graduation Project Brief (also see: Graduation website -> Downloads) When and where to hand in: Prior to your Kick-off meeting, share with involved stakeholders.

On the graduation project brief you explain what the project is about. You are asked to provide the following project information: Introduction, problem definition, the assignment, planning of key moments, and motivation and personal (learning) ambitions. The project brief is setup prior to the Kick-off meeting, and a document to help you in this is available on the graduation website ('Project brief guidelines')

**<u>Note</u>** that the format is a *form* that you can fill in. You cannot edit the document.

Agreements that are made between you and your supervisory team with regard to your graduation project are established in the brief. The document also facilitates the required procedural checks that have to take place within IDE Faculty/TU Delft and enables you with a correct formal start of the project.

**Note:** Because within the process of procedural checks some changes might need to be made in your project brief, you should **not** securely save the document as this will disrupt this process and might cause delay.

### 4.3.2 Get people involved

Once your project is drafted in the template, the project brief can also function as a tool when discussing the project with (potential) supervisors, or people within a company. It can help you in getting people interested and involved.

### 4.3.3 Get your supervisory team and project confirmed.

Details on the supervisory team are provided in paragraph 1.3.2.

- Assigned chairs and mentors are listed in "IDE chairs and mentors" which is available on the graduation website.
- When there is a client involved, a third, external mentor should be appointed, to represent the client.
- Already discuss and work on the content of your project brief with the people involved (chair, mentor, and if applicable client mentor). Use it as a tool to start a conversation.



Form: Workplace application (to collect at IDE's Service Desk) When and where to hand in: If applicable, as soon as your project is confirmed, with IDE's service desk.

When there is no external client involved in your project, or they don't provide a work place, you can apply for a desk space at IDE Faculty by means of this form. You can collect it at IDE's Service Desk where you can also hand it in. Desk spaces are limited and shared; you have a desk for 2,5 days a week and it might take some time to get one appointed.

#### 4.3.4 External party involved, prepare graduation contract

When an external party is involved in the project, it is strongly advised you operate on the basis of a graduation contract. A model contract (IDE Graduation Contract) is available to support you in coming to agreements with the client (see <u>Graduation website -> Downloads</u>). As you will see, **neither TU Delft nor IDE Faculty are party in this agreement**, as it is between you and the client. The model contract is set up to protect your rights as student and those of the client. As student you should be able to hand in the graduation project deliverables in the end, to have your work assessed and to enable graduation, where the client should be allowed to continue with your results.

Form: IDE Graduation Contract (also see: Graduation website -> Downloads) When and where to hand in: The model contract is provided to support you in negotiations with an external party. It comprises an agreement between you and the client, and does not involve the faculty nor TU Delft. Therefore, it does not need to be handed in.

When there is an external party (client) involved, in general a graduation contract is used to record agreements between you and the client. In some situations, the client might offer you an 'internship contract', or refers to you as an 'independent contractor'. Because of the objectives of the graduation project these contracts should be carefully reviewed by comparing them with the IDE Graduation Contract. If you, after comparing, still have doubts on what is stated in an offered contract, or the client has made adjustments to the model contract in a way you are not sure about, you can consult Graduation Support or <u>IDE's</u> <u>Valoriation office</u>. See also Chapter 11 for contact information.

Regardless of any provision made between you and the client, TU Delft will, in accordance with its tasks and objectives as laid down by law, execute its rights regarding use and publication of the results of the graduation project (i.e. for educational and research activities, or publicity purposes) taking into account the interests of all parties involved.

It is important all parties involved are aware of the special situation of a student as a graduate with a client. The primary objective is the learning situation, and the benefit of this working situation for the client is derived from that. With the focus on graduation, there is the obligation to achieve results that meet academic standards as well as the requirements for obtaining the Master's degree.

### 4.4 Prior to the kick-off meeting

Schedule a meeting with all people involved together, and prepare by making sure each of them is sufficiently informed on the project you are about to start. Complete your personal project brief (see 4.3.1.), and share it with the people invited, prior to the meeting.

### 5 Step-by-Step course structure, procedures and paperwork; from kick-off meeting to midterm evaluation

### 5.1 The kick-off meeting (day 1)

The formal start of your graduation project, and the last opportunity to adjust the project brief and get it signed by your chair.

At the kick-off meeting, you, your supervisors, and possibly client mentor, together go over the proposal for the project, to make sure it is clear to everyone involved what you plan to do, and which outcomes are aimed for. Any proposed adjustments can be discussed and processed during the meeting. When you all agree on the proposal, your chair signs the brief so it can be handed in with the departmental secretary of your chair to get the formal checks to start (see graduation project brief). After these checks are processed you are officially registered as graduating student for the faculty, and you will be enrolled in IDE's MSc Graduation Brightspace organisation. This process might take a few weeks, but should not keep you from starting to work as planned.

At the kick-off all stakeholders are present and it is strongly advised to grasp the moment to fix all formal meeting dates as proposed in your planning. Already schedule the project's milestone meetings; the midterm evaluation, the green light and the graduation date! After the kick-off meeting, you hand in the signed project brief with the departmental secretary, who will bring it further to have it checked and approved. You should **not** submit it yourself to any other department than your chair's!



### **SUBMIT:** Personal Project Brief, signed by chair

When and where to hand in: After kick-off meeting, hand in with departmental secretary of your chair.

The departmental secretary will ensure your proposal to be checked by E&SA-ESC on study progress, and by the Board of Examiners on proposed supervisors, to formally start.

**Note**: Because within this process of checks and approval, some signatures are collected in your project brief. You therefore should **not** securely save the document (e.g. with password protection) as this will disrupt this process and might cause delay.

### 5.2 Prior to the midterm evaluation

Work on the project as planned, with regular coach meetings and by keeping your supervisors involved. After (around) 40 working days, a midterm evaluation meeting has to be scheduled.

Aim of this meeting is to have a formal evaluation moment with your supervisors (chair and mentor). Prepare for the meeting by evaluating for yourself where you are in the project, and

whether you are on track or that it might be wise or necessary to propose some changes to enable graduation on the scheduled day. These changes might relate to e.g. scheduled planning, aimed for outcomes, client relation or other.



Form: Format Midterm Evaluation (also see: Graduation website -> Downloads) When and where to hand in: At least 3 days before the midterm evaluation meeting, send it to your supervisors so they can prepare for the meeting.

On the midterm evaluation form you are asked to provide information on how it goes, progress and in-between results. You are asked to reflect on topics like quality, planning, personal ambitions and supervision.

### 6 Step-by-Step course structure, procedures and paperwork; from midterm evaluation to green light

### 6.1 The midterm evaluation (day 40)

The second formal moment in your project, and the first assessment is the midterm evaluation. You have been working on the project for several weeks now, and most probably have a better understanding of the subject and your project. This review moment is scheduled with your TU Delft supervisors (chair and mentor) who will assess you on aspects as can be found in the rubric.

The midterm evaluation form you provided your supervisors with a few days before this meeting (see paragraph 5.2), will be leading.

There are different outcomes of this meeting which may affect the way you proceed:

- **Continue**; you're on track, and it is realistic to expect you will be able to finish the project with good result within the available amount of time. You can continue as planned.
  - → Plan green light meeting for day 80, maintain provisional graduation date (as defined on project brief) around day 100. Between green light and graduation there should be *minimally* four weeks of time.
- Adjust; some adjustments should be made. You are more or less on track, but due to various reasons (e.g. the project as proposed appears to become too comprehensive or complex) you should adapt the assignment, aimed for outcomes, and/or planning, in such a way it will be realistic for you to finish the project with good result within the available amount of time.
  - → Revise activities but keep 100 days runtime. Adjusting activities is considered good project management, unless it is caused by lack of intellectual capacity or lack of time spend on the project.
- **Discontinue**; you're behind schedule without any clear reasons, or the level of your work is far from satisfying. It is highly unlikely you will be able to meet the course's learning objectives within the 60 days that are left, thus to finish the project with good result within the available amount of time.
  - → Your supervisors will decide to stop the project there and then, and you will need to start over with a new project. You are going to be referred to the Graduation Progress Team <sup>10</sup> which may advise you in study progress, planning or how to proceed.

<sup>&</sup>lt;sup>10</sup> The Graduation Progress Team can be contacted via Graduation Support (see paragraph 11.2).



# <u>SUBMIT</u>: Completed midterm evaluation document, signed by you, chair and mentor

When and where to hand in: After the midterm evaluation, upload the form to the IDE MSc Graduation Project organisation in Brightspace. You will be enrolled in this organisation after formal approval of your project brief, including the mandatory checks .

After your graduation project brief is approved and all signatures are collected, you will be enrolled in the IDE Graduation organisation in Brightspace. It is your responsibility to upload the signed Midterm evaluation form to this organisation. Upload of the form will be checked by IDE Faculty. Instructions for uploading to Brightspace are to be found in Appendix D.

### 6.2 Prior to the green light meeting

### 6.2.1 Check on study progress

A green light can only be provided if you have finished *all* courses of the first three semesters (60 EC in the mandatory programme + a minimum of 30 EC of elective courses), and have them registered as such, prior to the meeting. The only unfinished course in your exam programme at that time can be the graduation project. A last check on study progress will be performed just before the green light, and any courses finished after that check cannot be part of your courses list.



### Form: I - IDE request declaration accomplishment Master courses

(also see: Graduation website -> Downloads)

When and where to hand in: One week prior to your green light meeting, send the request to E&SA.

The form should be submitted to E&SA: <u>spa-io@tudelft.nl</u> one week prior to your green light meeting. From E&SA, your chair (you in CC) will receive a formal declaration in which is stated whether or not you have passed all compulsory, and sufficient elective courses, to finish your studies.

After the meeting, and if you are given the green light, your chair will personally need to show or forward this message to the departmental secretary.

### 6.2.2 Thesis preparation

The green light meeting is scheduled at least 4 weeks prior to your graduation date. This implies that if you get a green light, there will be minimally 20 days left to finish all project deliverables and prepare for the graduation ceremony. To support you in getting this done it is required to have finished at least 80% of your thesis in final state for the green light meeting. Share the green light report with your supervisors some days before the meeting (arrange with your supervisors how many days) to allow them to decently prepare for the meeting.

When preparing your final thesis, be aware that the document will be placed in the TU Delft Repository, and by that will be accessible to a large audience. Information that is considered private (e.g. your home or family address) you therefore should exclude from the documents.

Because your final thesis will be checked on plagiarism, a tool to pre-check it yourself is provided by the faculty. You can upload your (80%) thesis to the IDE MSc Graduation Project Brightspace organisation, and use the available scan software to perform the check on plagiarism. See appendix D for instructions on how to upload and check.

### 6.3 The green light meeting (day 80)

The third formal moment in your project, and the second assessment. Your supervisors will give you a green light when they do expect, with reasonable certainty, that you are able to complete you graduation project within the next 20 days/4 weeks.

At the meeting, expectations with regard to the completion of the graduation project and preparation for the degree audit are discussed and recorded by the chair. Getting a green light is not a guarantee that you will pass the degree audit, although a student who has obtained a green light seldom fails.

Aspects that will be assessed on are derived from the learning objectives (see paragraph 2.2), and specified in the rubric. There are different outcomes of this meeting, which will affect the way you can proceed:

 Green light / All is well: You are on track and if you continue working like you did till here, you will be able to finish the project with sufficient result within the time that is left.

Next:

- Confirm the graduation date (that was already defined on the project brief around day 100);
- Agree on the shape of the showcase, which is a mandatory deliverable;
- Agree on the shape of deliverables that you are required to hand in with supervisors (digital and/or physical). (See also Chapter 3 on deliverables)
- Not a green light / No go: If the progress or standard of the project is deemed to be unsatisfactory, you will not get a green light, and another green light meeting will be scheduled at which a new or improved draft of the final thesis must be presented.

#### Next:

- Cancel the provisional graduation date;
- Allow an extra 4 weeks of work, and schedule a new (provisional) graduation date around day 120;
- Plan a new green light meeting for day 100;
- Since managing time of project execution is embedded in the learning objectives, extra time taken might affect the grade (see rubric).

### 6.3.1 (If applicable) The next/second green light meeting (day 100)

Being allowed an extra 4 weeks of time, it is expected this shows off with an improved draft of your final thesis and/or improved project quality. Expectations with regard to the completion of the graduation project are discussed as explained above.

There are different outcomes of this meeting which will affect the way you can proceed:

- All is well now: You are back on track, and you are expected to be able to finish the project with sufficient result within the time that is left.
   Next:
  - Confirm the rescheduled graduation date (around day 120);
  - Agree on the shape of the showcase and deliverables to hand in with your supervisors.
- Again not a green light: If you fail to get a green light another time, a new green light meeting must be scheduled.

Next:

- Cancel the second provisional graduation date;
- Schedule a new green light meeting for day 120, and a new provisional graduation day around day 140;
- Consider a meeting with one of the academic counsellors to discuss your situation (see paragraph 11.2.3).
- Since managing time of project execution is embedded in the learning objectives, the extra time taken will affect the grade (see rubric).

### 6.3.2 (If applicable) another green light meeting (day 120) and beyond

See the description in paragraph 6.3.1, which applies until a green light is granted. The extra time taken for project execution will affect the grade, as is explained in the rubric.

After repetitive unsuccessful green light meetings, eventually supervisors might conclude the project time lost for achieving this milestone affects the project in such way achievement of a sufficient project result is getting out of reach. In such rare situation supervisors might decide to stop the project after all, and refer you to the Graduation Progress Team (see also Chapter 6.1) who can provide support in starting a new project.

### 7 Step-by-Step course structure, procedures and paperwork; from green light to graduation day

### 7.1 After getting a green light (post-green light document pack)

After the green light meeting, your chair needs to *personally* inform the departmental secretary on your green light, and show, or forward, the 'Declaration of accomplishment' as received from E&SA (spa-io) on your request. The secretary will, in consultation with you, book a suitable graduation location on the proposed graduation date. For graduation ceremonies there are 4 fixed time slots a day, as presented in the table below. In Chapter 8, you will find more information on the different steps of the ceremony.

	Public presentation	Q&A session	Degree audit	Evaluation	Awarding the degree	End of ceremony
With whom	student, supervisors & audience	student & audience	supervisors only	supervisors & student	supervisors, student & audience	
Slot 1	08:45	09:15	09:15	09:45	10:15	10:30
Slot 2	10:45	11:15	11:15	11:45	12:15	12:30
Slot 3	13:45	14:15	14:15	14:45	15:15	15:30
Slot 4	15:45	16:15	16:15	16:45	17:15	17:30

### Graduation timetable (estimated)

The secretary will send the IDE Chair Examination Application Form to SPA-IO, who, on their turn, will send a letter to you, with a request to complete and return some appendices as soon as possible.

### 7.2 Prior to the graduation day

### 7.2.1 Deliverables

At least one week prior to the graduation day, the following graduation project deliverables need to be submitted to your supervisors, **and** to the TU Delft Repository;

- i. The thesis
- ii. The showcase
- iii. The confidential appendix report <sup>11</sup>

See Chapter 3 for a full overview of all deliverables, and the way they should be submitted.

<sup>&</sup>lt;sup>11</sup> The confidential appendix report, with confidential background information, does not need to be uploaded to the Repository.

To enable the supervisory team to assess the project, and to not obstruct any final checks performed by the faculty, your graduation deliverables need to be finished, complete, and submitted at the time indicated being; **at least one week** prior to your graduation day.

After having submitted your final deliverables, you are still required to prepare the last deliverable; your public presentation.

# 8 Step-by-Step course structure, procedures and paperwork; the graduation day

### 8.1 The graduation day procedure

The faculty will check whether all deliverables are handed in in time. If these are, the steps in the last week, and on the last day are as follows (see also the estimated timetable, Ch. 7.1);

- 1. **Thesis, and other materials**: prior to the graduation day your supervisors will independently assess your thesis and other deliverables. They will meet before the day to mutually decide on a preliminary mark supported by the assessment form and rubric;
- 2. **Public presentation**: on the graduation day, you give a public presentation, based on the thesis (30 minutes);
- 3. **Q&A session**: after presenting, your supervisors will leave the room while you lead the Q&A session with the audience (15-20 minutes);
- 4. **Degree audit**: a session in which your supervisors mutually determine the final mark based on their preliminary mark and your presentation, and fill out the assessment form (15-20 minutes);
- 5. **Evaluation**: after finishing the Q&A session with the audience, you join your supervisors who will inform you on the final grade, after which you evaluate the graduation project together (30 minutes);
- 6. Awarding the diploma; together with your supervisors you will return to the audience where will be declared whether you passed the course and succeeded in reaching the Master's degree.

### 8.1.1 Public presentation

Prior to the public presentation, your supervisors independently establish a preliminary indication of the grade, based on the thesis, showcase and process, according to the assessment criteria of the course. They meet before the graduation to discuss their individual findings, and to prepare for the final assessment. The client mentor has no formal say in the preliminary mark, but may share experiences and findings on your performance with your supervisors.

You are required to present your project to everyone involved, and you can also invite family, friends and other interested persons to join the presentation. Within a maximum of 30 minutes you can explain what you have done and which the outcomes are. The presentation should be given in English, be organised at the IDE Faculty and open to the public <sup>12</sup>. Communication of the project is a topic in the rubric.

<sup>&</sup>lt;sup>12</sup> If an embargo on your project is requested and granted, the audience present at the public presentation can be asked to sign a Non-Disclosure Agreement (NDA) which will be provided by TU Delft. A request can be made at <u>IDE's Valorisation desk</u> (see also Chapter 11).

### 8.1.2 Q&A session

After you have finished your presentation, your supervisors most probably will have some questions for you. After answering these, they will leave the room for the degree audit. You will be left with your audience, and are expected to continue the Q&A session, so the audience too can ask their questions about the work performed and the results achieved.

### 8.1.3 Degree audit

Your supervisors retreat from the public Q&A session to start a 15-minute session in which they finally assess your project using the course's rubric and assessment form, which will be filled out. If the graduation project was executed to the satisfaction of your supervisors, all requirements of the master examination are met, and they will decide on the final grade.

### 8.1.4 Evaluation

After determining the final grade, the supervisors will ask you to join their session for an evaluation of max. 30 minutes. The strengths and weaknesses of the work performed will be discussed by means of the assessment form and rubric. Your supervisors will share the final grade with you. Together you will return to the audience.

### 8.1.5 Awarding the degree Master of Science

Provided that your supervisors have reached a positive assessment, in presence of the audience the degree certificate will be awarded immediately <sup>13</sup>. Your supervisors will declare you passed the course, and with that, the Master programme, and by passing the Master programme, you are eligible to the title MSc. No grade will be announced in the public ceremony and your chair might take the opportunity to address a few personal words to you, the newly pronounced Master of Science. To make its status legal, you have to sign the degree certificate.

After approximately two weeks of the examination, the mark for the graduation project will be added to the official list of marks on the diploma supplement by E&SA. It will be signed by the Board of Examiners and sent to you as a supplement to your degree certificate.

<sup>&</sup>lt;sup>13</sup> Your TU Delft supervisors (chair and mentor) are mandated by the Board of Examiners to serve as examiners, not only of the graduation project, but also of the Master programme as a whole.

### 9 Step-by-Step course structure, procedures and paperwork; after the graduation day

### 9.1 Terminate your student enrolment

After successfully having concluded your graduation project, and after all festivities of the graduation day, it is important you terminate your enrolment as a student. This will not be done automatically but requires your active handling and can already be done before your grade is visible in the official list of marks.

Termination of enrolment can be done via the StudieLink website www.studielink.nl.

When you have paid a full year's tuition fee in advance and you terminate your enrolment before May 31<sup>st</sup> of the Academic year, you are entitled for a refund. See for more information on termination of enrolment and refunds:

https://www.tudelft.nl/en/student/administration/termination-of-enrolment You can also apply for this directly at the Contact Centre / Student Administration TU Delft, Jaffalaan 9, 2628 BX, Delft.

Please note, that after having terminated your enrolment, *any access to student facilities like TU Delft student email and Osiris will be terminated as well.* Ensure to have checked whether your address in Osiris is the address you wish to receive the diploma supplement on before you terminate your enrollment. See also 'Letter after obtaining Green Light' a download from the website.

### 9.2 Publicity

### 9.2.1 Nice publicity

It is not unlikely your graduation result will get some attention. Industrial Design Engineering is a creative field that often brings forward interesting everyday life solutions and designs. It therefore is an attractive field also for journalists to focus on.

In the situation your public presentation appeared to not be the only spotlights for you, and you are e.g. invited for an interview or will get attention otherwise, you should not forget to also bring to the attention the context in which the project was executed, as it was an educational project within a master's programme of IDE Faculty, TU Delft. You were supervised by two TU Delft supervisors, who might have justified expectations you will mention their names.

### 9.2.2 'Beware of' publicity

Unfortunately, not all attention is nice and harmless. After uploading your thesis to the repository, chances are you will be contacted by an office that claims to publish your thesis for free.

Offices that act like such aim for collecting copyrights of academic work, without paying you any compensation. On the internet, e.g. by using a search engine, you can find lots of information on how these offices act. When you are approached by an obscure agency

claiming to publish your fantastic work for free, be careful! Look up their name on the internet to find out whether something doubtful comes forward before going into business with them. Whenever you have questions or just want more information on publication with (trusted) parties, you can consult TU Delft Library <a href="https://www.tudelft.nl/en/library/">https://www.tudelft.nl/en/library/</a>.

### 9.3 Career & Counselling Services



TU Delft Career & Counselling Services provide a range of career workshops and programmes to support you in building your employability and career management skills. Next to that,

several resources are offered to support you in starting your alumni life. Learn more on what they offer by taking a look at their website: <u>https://www.tudelft.nl/en/student/counselling</u>

### **10** General Conditions

The Graduation Project spans all three IDE master programmes, which makes that numerous people and departments are involved in procedures, rules and regulations of the course. Continuing on those that are already explained in this manual, some additions and summaries are recorded in this chapter.

### 10.1 Student registration and tuition fee

When executing your graduation project, you are still a regular student and you need to have a valid student registration. The type of project you work on makes no difference. When you start your project in a certain Academic year and execution continues to a next Academic year, you therefore need to re-enroll for the new year, otherwise you cannot graduate. Even when your graduation date is set on e.g. the 1<sup>st</sup> of September you will need to re-enroll for this new Academic year!

For the new Academic year you will only have to pay tuition fee for the months the project continues in, and you might have the option to pay it monthly <sup>14</sup>. If not, any tuition you paid in advance will be refunded from the month after you terminate your enrolment as a student (after graduation!), and before May 31<sup>st</sup>. For more information on this topic and your particular situation see: <u>https://www.tudelft.nl/en/student/administration/termination-of-enrolment</u>

### **10.2** Double Degree graduation project

If you are doing a double degree, you don't need to execute two different projects to graduate on each master separately. You can setup one diversified project, in which both of your master studies have a part.

### 10.2.1 Combined IDE masters' Double Degree

In total, the project you initiate must comprise 45 EC, which equals 30 weeks/150 project days. Other project requirements to start are quite similar to those for single master graduation projects, meaning:

- You will need to have one faculty chair, and one TU Delft mentor who supervise you in the project. Depending on whether a client is involved, you will also need a client mentor. (See also paragraphs 1.3.2. and 1.3.3)
- You will need to explain the project in the Graduation Project Brief. Because your project's setup might be wider, your planning will be more extended compared to regular projects, something you should address in your brief. Also indicate the masters that are involved.

<sup>&</sup>lt;sup>14</sup> This is an option offered when the TU Delft is authorized to automatically cash in, from a European (SEPA) bank account.

- At the kick-off and in your planning, formal assessment (milestone) moments are expected to be scheduled as follows: midterm evaluation (40 days after the kick-off), the green light meeting (day 130) and the graduation day (day 150).
- You will need to hand in one single pack of deliverables (like described in Chapter 3) and schedule a public presentation at IDE Faculty at the graduation day.
- The graduation day procedure applies as described in Chapter 8.

### **10.2.2** One IDE master, and one other faculty's master Double Degree

When combining one of IDE's masters with a master from another faculty, the organisation, execution and finishing of the project might be different from what is described above. This will depend on requirements for execution of a graduation project that are set by the other faculty. For the IDE master to graduate on, regular requirements apply as these are described in this manual for finishing a single master's programme:

- You will need to have a faculty chair, and one TU Delft mentor who supervise you in the project. Depending on requirements for graduation set by the other faculty, this might imply that you will need to work with multiple chairs and/or mentors.
- You will need to explain the project in the Graduation Project Brief. Because your project's setup might be wider, your planning will be more extended compared to regular projects, something you should address in your brief. Also indicate the masters that are involved.
- At the kick-off meeting, together with your (IDE) team, you schedule the formal assessment moments: the midterm evaluation (40 days after the kick-off), the green light meeting (at least 4 weeks before graduation), and the graduation day.
- You will need to hand in the deliverables as described in Chapter 3, and schedule a public presentation at IDE Faculty, to finish the IDE master.
- The graduation day procedure applies as described in Chapter 8. Depending on the other faculty's regulations, you might need to organise multiple presentations, and receive two final marks; one for each master programme.

### 10.3 Executing a graduation project abroad

If you choose to execute your graduation project with an external party abroad, you are subject to the general procedures and rules in relation to graduation, as described in this manual.

In addition to these, general rules for studying abroad are applicable. Preparations include attending to practical matters relating to foreign language and culture, accommodation, funding, insurance, vaccinations, visa and work permits, and scholarships (if applicable). For information on these matters, see the relevant web pages on TU Delft's and IDE's Student Portal: <u>Study Abroad (tudelft.nl)</u>

#### **Register stay abroad in OSIRIS**

When going abroad you have to register your stay abroad in OSIRIS. By this, TU Delft can keep track on where her students are, which is relevant in situations of emergency. When you register you will also be covered by TU Delft's travel insurance.

Because of the possible absence of peers, and the geographical distance to supervisors and faculty, excellent planning skills, discipline and autarchy are some of the qualifications that you should recognise in yourself, to successfully execute a graduation project abroad.

# 10.4 Student rights and duties

#### 10.4.1 Payment

When doing a project with an external, commercial client, you might receive an allowance per month for execution of the project. If the client has no fixed regulations, together you can discuss a reasonable fee. The IDE Faculty will *not* intervene in this discussion, however discourages graduating students from executing a project while being offered a full salary. This might give the impression the company is entitle to demand tangible results within the given time, while your only commitment is to put reasonable effort into the project. If, for any reason, payment by the client is not possible, other agreements can be looked for, e.g. you might keep (part of) the IP-rights on the work (see paragraph 10.4.2.).

During the project, costs for models or prototypes, the thesis, the presentation, travelling expenses, and even housing expenses may occur as a direct result of a client's involvement. It is the responsibility of the client to reimburse these costs to the graduating student. Unwillingness to do so on the part of the client could jeopardise the progress or results of the project.

In any other situation, e.g. when executing a project within the faculty or for yourself, in principle allowances will not be paid, so make sure to address the topic and come to agreements on it before starting the project.

### 10.4.2 Intellectual Property (IP) and IP rights on the result

In principle, IP rights belong to the true creator of the work, where the crucial argument is whether the work is original and new. When no commissioning party is involved, you, as the true creator of your original and new work, are the owner of it. Therefore, you are strongly advised to refer to yourself in your thesis as the author.

However, when executing a project with an external client, or when working on a project that was offered via TU Delft, the IP on your work most likely is transferred to the commissioning party. The commissioning party then will become owner of the work, and has the exclusive right to use and/or to further develop your work.

What should be *excluded* from this IP transfer are:

- The copyright on your thesis;
  - As the University has the legal obligation to publish all its academic output from which also your thesis is part, you, as author of the work, need to give the University

permission to do such. To be able to give this permission, you need to keep the copyright on the work.

 As your graduation work is part of your study at TU Delft, and under supervision of TU Delft supervisors, the University has the right to use your work for its own education and research and publication and PR activities independent of which party is owner of the work.

Apart from the copyright on the thesis, and the rights of TU Delft as referred to above, it is possible to make alternative arrangements on the basis of a written agreement between you and the commissioning party.

# 10.5 Models and prototypes

Depending on (the goals of) your project and assignment, you may wish or need to build a prototype or model. Whether this is required should be discussed with your supervisors. Take into account that prototypes or models are the property of the party that bears the costs. Thus, prototypes or models which are paid for by the client are the property of the client, where prototypes or models built at the faculty's expense are the property of the faculty (and can be sold to the company at the production costs). If there is no commissioning party involved, you are to bear the costs yourself.

# 10.6 Liability (client project)

When you are doing a project with a client, IDE Faculty and TU Delft cannot be held liable for any damage caused by you. It will be your responsibility to ascertain how liability between you and the client is regulated, which includes legal liability and health insurance. In some cases, you can be insured through the client.

Next to that, you, IDE Faculty nor TU Delft can be held liable for any damage or injury that comes forward from the use of the results of your graduation project.

# **10.7 Confidentiality (client project)**

A commissioning party (the client) may ask you to not disclose specific information. This might involve both, confidential client information that you have access to (background information), and confidential graduation project results; the results of your work.

### 10.7.1 Confidentiality regarding background information

Background information is information the client provides you with for the purpose of working on your project and assignment. Background information already exists independent of your graduation project. Most background information cannot be found in the public domain, and you can only use it for the purpose of the graduation project.

The client can ask you to keep part of the background information confidential (= to not publish, or otherwise share with parties that are not involved in your project). The client has to

be very clear on this, and has to explicitly inform you on what information should be kept confidential.

TU Delft supervisors involved in your project are obliged to treat all confidential information they become acquainted with, with utmost confidentiality. In the situation a client asks you to sign a statement of confidentiality (Non-Disclosure Agreement - NDA), it should be clear that this statement does not affect your supervisors' rights to have access to all background information required to monitor project progress, and to assess your work, even if this is designated as confidential.

### 10.7.2 Confidential background information and your thesis

Confidential background information of the commissioning party can be added to the thesis in a separate Confidential Appendix (not to be confused with the regular appendices of your report!) which you make available only to your supervisors (see Chapter 3, deliverable iii). In your thesis you refer to the confidential information in said appendix, while making sure the content of your thesis is still sufficient as an academic proof and readable. For obvious reasons the confidential background information should not be shared in your public presentation (deliverable iv).

You are strongly advised to work with a confidential appendix from scratch, and to have the commissioning party check interim reports on confidential information. It will save you and the commissioning party time not having to check and adjust the full thesis at the end of the project.

Adding a separate confidential appendix to your thesis is free of charge, and is only applicable when confidential *background information* is involved.

If the commissioning party is of opinion using a confidential appendix is not feasible because the issue of confidentiality affects the entire project, then the project should be considered not-suitable for an IDE graduation project. The commissioning party should reformulate the project in such way, the resulting thesis can be uploaded to the TU Delft Repository for publication.

# 10.7.3 Confidentiality of project results (embargo)

In principle, your thesis, including your research and project results, should be accessible by the public shortly after uploading it to the TU Delft Repository. TU Delft has a statutory duty to provide public access to results of research and teaching, for students and teaching staff in particular, and society in general.

When, while determining the scope of the project, the client is of opinion an embargo on publication of the thesis will be necessary, the project must be considered not-suitable for an IDE graduation project. The project should be reformulated in such way it can result in a thesis that can be made public shortly after uploading it to the TU Delft Repository.

At the time of green light, the results of your project have taken shape, and if the client at that point considers the results of your research or project to be extremely valuable to them, the

client can ask for a delay of the publication via the TU Delft repository, of *the results of your research* or on *the results of your work* (= embargo).

By a granted embargo request, public access to the thesis is prevented for a fixed period of time, with a maximum of two years. Because an embargo in fact obstructs TU Delft in executing its statutory duty, it is a situation that is not desired by the faculty. Next to that, it is a legitimate assumption additional benefits are involved for a client when delay of publication is wished for. Therefore, IDE Faculty discourages an embargo request by setting an embargo fee of 3.000 Euros for a one year, and 5.000 Euros for a two year embargo, both excluding VAT.

Exceptions concerning the embargo fee can be made only by a motivated request. See Appendix F for more details on how to apply for an embargo.

# 10.8 Rules and Regulations concerning admission

Admission requirement (with regard to study progress) for starting the Graduation Project It is essential that the student meets the admission requirements before actually start working on a Graduation Project. This is to ensure that the student has the requisite level of ability at the beginning of the project. Students may start the graduation project on the condition that they have finished at least all mandatory first year courses of the MSc programme.

## Requirement (with regard to study progress) before granting Green Light

The student can only receive a green light for graduation on condition that **all** mandatory and elective courses of the Master's programme (except the Graduation Project itself) have been completed and are registered as such.

# **11** Contact information

# 11.1 Course coordinator / course management

Because of its double objective, being a course **and** an educational programme's concluding project at the same time, course coordination of the graduation project lies with the master programme's director. As a result, there are three people responsible for the project <sup>15</sup>;

- The programme director of IPD; <u>Dr. rer. nat. T.D. (Tilman) Dingler</u>
- The programme director of DfI; Dr. R. (Roy) Bendor
- The programme director of SPD; Dr. R.A. (Rebecca) Price

Each programme director is graduation project coordinator for the students of their particular master programme.

# **11.2 Graduation support**

<u>Graduation Support</u> (GS) provides advice and expertise to students who are in the process of orientation on, making arrangements for, or execution of a graduation project. GS can also be consulted by staff members who have questions about the execution of a project by (one of) their students.

GS comprehends a network of experts within the faculty. Although the office normally is staffed by one person, the full network covers different disciplines. Topics to consult GS for are e.g. orientation on a graduation subject, questions concerning procedures, contracts or intellectual property, (Erasmus+) scholarship or planning, or when you just don't know how to start. Students and staff who during the graduation project run into problems that cannot be solved within the team, are also urged to consult Graduation Support. Graduation Support can be contacted by sending an email to: graduationsupport-io@tudelft.nl.

### 11.2.1 Contract support / IDE Valorisation

Within the network of Graduation Support, IDE's Valorisation team has an important role om covering the topic of graduation contracts and other legal issues. If you have any questions with regard to e.g. a graduation contract, NDA or embargo, you can contact Michelle Nahumury: <u>M.Nahumury@tudelft.nl</u>

### 11.2.2 Sparring partners

For each master programme, sparring partners are available to discuss your ideas with or to ask your questions concerning project content and/or topic, how to set-up your assignment and who might be a suitable supervisor in such project. At the time of writing, the following sparring partners are appointed, who can be contacted directly, on their personal email addresses. For a faster reply, make sure to put 'graduation support needed' in the subject line.

<sup>&</sup>lt;sup>15</sup> Names are known programme directors at the time of writing. Appointed programme directors might change over time. For actual information on who is coordinator of your master programme you should consult IDE's webpages.

Appointed sparring partners are <sup>16</sup>:

IPD – <u>Gerd Kortuem</u> and <u>Arjen Jansen</u> (G.W.Kortuem@tudelft.nl / A.J.Jansen@tudelft.nl)
 DfI – <u>Stella Boess</u> and <u>Gert Pasman</u> (S.U.Boess@tudelft.nl / G.J.Pasman@tudelft.nl)
 SPD – <u>Sylvia Mooij</u> and <u>Erik-Jan Hultink</u> (S.C.Mooij@tudelft.nl / H.J.Hultink@tudelft.nl )

### **11.2.3** Academic counsellors

The IDE academic counsellors can provide you with general information about your study programme and progress, and with personal guidance and advice regarding the specific situation you are in. You can contact them with all sorts of questions by sending an email to: <u>Academiccounsellors-ide@tudelft.nl</u>

You can also schedule an appointment yourself via their online agenda tool. See <u>Academic Counsellors IDE</u> for more information on getting in contact, and the agenda tool.

### 11.2.4 Writing support

<u>TU Delft Writing Centre</u> provides support to students who struggle with the writing of their thesis/graduation report. You can book a 45-minute writing coaching session for free. When you would like to e.g. discuss drafted text in detail, or wish to discover how to improve structure, paragraphs, references, style or perhaps efficiency of the writing process you can make use of the services they offer.

# **11.3 Other IDE staff members / chair and mentor**

### 11.3.1 IDE staff

When you wish to initiate a graduation project, or when you are looking for a subject, IDE staff might be the first group of people to consult. Our staff members can play an important role in initiation, also for projects that include an external client. Faculty staff members do have wide networks which include people from in- and outside the academic world. You can contact staff members:

- For orientation and acquaintance;
- When you have found a subject or project, and are looking for guidance or advice to shape it into a graduation project;
- When you are looking for a subject or project, and have a preference for a project within the area of expertise of a specific IDE staff member;
- When looking for contacts abroad.

You can learn about expertise, research topics, course involvement, or other interests of staff members by consulting their personal profiles pages on the IDE webpage: <a href="https://www.tudelft.nl/en/ide/organisation/personal-profiles/">https://www.tudelft.nl/en/ide/organisation/personal-profiles/</a>

<sup>&</sup>lt;sup>16</sup> The sparring partners listed here, are the appointed sparring partners at the time of writing this manual. Sparring partners may change over time. For actual information on who to consult as sparring partner for your master programme you can check the <u>IDE graduation support</u> webpage..

# **APPENDIX A; Rubric and assessment form**

No rights can be taken from this document - final grade is not necessarily the mean of the parts – v04.7 July 2018

				RUBRIC IDE MASTE	R GRADUATION PROJECT (ID4x9	5)
		4	5	6	7 8	9 10
Knowledge	The student is able Collect and analyse	e to effectively collect, anal does not identify relevant questions / relevant/state of the art knowledge	lyse, generate and evaluate identifies relevant questions or relevant/state of the art knowledge	knowledge required for the and effectively collects and analyses knowledge required for the project	project. and uses academic rigor to verify the quality knowledge and its relevancy for the project	of the and collects and analyses additional knowledg beyond the domain of the graduation and/or the fie of industrial design engineering
	Generate and evaluate	does not identify / acknowledge the added value of generating knowledge	identifies or acknowledges the added value for generating knowledge	and effectively generates and evaluates knowledge required for the project	and develops this into design parameters evaluation criteria to increase relevancy for the p	beyond the domain of the graduation project and/or
T	The student is able			ods and/or approaches used i	in the project.	
Methods	Use of methods and tools	is unaware of / does not apply methods and/or tools relevant to the project	applies methods and tools that don't fit (or are not relevant) to the project or doesn't justify them	applies appropriate and meaningful methods and tools while justifying choices	and continuously adapts methods or re-aligns to cater to the changing context of the project w justifying choices	, , , , , , , , , , , , , , , , , , , ,
	Dealing with project complexity	is unaware of / unable to identify or address complexity issues	identifies and addresses a limited number (or too many elements) of the project without justifying this choice	identifies and addresses the projects' complexity and justifies choices	and shifts between various levels of comple throughout the project while justifying choice	the project domain or in the field of industrial design
. Т	'he student can d	eliver a relevant project res	sult.			
	Feasibility (can it be done?)	is unaware of / does not identify issues that determine feasibility	identifies the conditions for the project result to be feasible	and demonstrates that the project result is feasible	and develops a new way for this type of pro results to become feasible	ject and develops a new way for realising project results that could disrupt the field
Project result	Desirability (does it address the users' values and needs?)	is unaware of / does not identify the conditions for the project result to be desirable	identifies the conditions for the project result to be desirable	and demonstrates that the project result is desirable for stakeholders involved	and creates new value / meaning for stakehol	and creates new value / meaning for the doma ders of the project as a whole and / or and for society i general
	Viability (will it survive on a longer term?)	is unaware of / does not identify the conditions for the project result to become viable	identifies the conditions or the project result to become viable	and satisfies the conditions for the project result to become viable	and develops a new way for this type of pro results to become viable	ject and (re-)develops new ethical, social and / o environmental standards that allows meaningful change in (or outside) the domain
. т	he student is abl	e to effectively and thorous	, ghly communicate to- and o	liscuss with stakeholders inv	olved in the project.	
Communication	Academic level	conveys content that is irrelevant or incomplete	conveys relevant content that lacks structure and/or references and uses poor language	conveys relevant and structured content with appropriate references and use of language	and in a rich and personal way, also provid insights for those not (directly) involved in the pr	
	Connecting to stake- holders	provides minimal communication with the supervisory team	communicates to the supervisory team in a way that doesn't allow for connection	effectively communicates to the supervisory team allowing them to connect	and (continuously) communicates to othe stakeholders allowing them to connect	r and creates a buzz beyond the scope of the project, in the domain of the project and / or in th field of industrial design in general
	he student is abl	e to manage a design/resea	arch project independently	within the given time.		
Project Management and planning	Planning	does not oversee the project and executes it in an arbitrary manner	plans activities but executes them in an incomplete, inefficient and/or ineffective manner	plans and structures activities and executes them accordingly	and reviews priorities while executing activiti order to create room for iterations	es in and deals with and solves uncertainties and unforeseen circumstances effectively and efficient
	Autonomy & initiative	fully depends on guidance and does not initiate activities nor maintain the project	shows little initiative or needs significant guidance in maintaining the project	shows sufficient initiative and executes the project autonomously	and is pro-active in managing the project a stakeholders involved	nd and takes unexpected and creative initiatives th have a positive effect beyond the scope of the proj
	Response to feedback	displays no or defensive response to feedback	displays insufficient response to feedback or takes no visible action	displays sufficient responds to feedback and takes adequate actions	and argues (not) to respond to feedback of supervisory team, while retaining the intrinsic qua the project	and / or creates and uses room for failure and
Pro	Time spent	Green Light not granted Meeting"/Graduation took graduation grade ca		Green Light granted at Second "Green Light Meeting" (= around day 100)	Green Light granted at <b>First</b> "Green Light Meeti (= around day 80)	ng" N.A.

(An A3 version is available on the graduation website or ctrl-click on the picture above)

DATE:			
Student name;		Name Chair:	Name Mentor;
Student number;		Signature:	Signature:
1. Knowledge	Grade	Specific comments	I
Collect and analyse			
Generate and evaluate			
2. Methods	Grade	Specific comments	
Use of methods and tools			
Dealing with project complexity			
3. Project result	Grade	Specific comments	
Feasibility (can it be done?)			
<b>Desirability</b> (does it address the users' values and needs?)			
<b>Viability</b> (will it survive on a longer term?)			
4. Communication	Grade	Specific comments	
Academic level			
Connecting to stakeholders			
5. Project management and planning	Grade	Specific comments	
Planning			
Autonomy & initiative			
Response to feedback			
Time spent			
FINAL GRADE			

no rights can be taken from this document – final grade is not necessarily the mean of the parts This form is also available on the <u>graduation website</u>, or **ctrl-click** on the picture above.

# **APPENDIX B; Final attainment levels of IDE MSc programmes**

A programme's final attainment levels describe what you are able to when finishing an educational programme. The levels are defined for all students that graduate on one of the TU Delft master programmes (I), furthermore, there are some specified for your particular master programme, II (IPD), III (DfI) and IV (SPD).

# I. Attainment levels of the TU Delft master programmes

- 1. You will be capable of being analytical in your work on the basis of a broad and deep scientific knowledge;
- 2. You are able to synthesise knowledge and solve problems in a creative way dealing with complex issues;
- 3. You have the qualities needed for employment in circumstances requiring sound judgement, personal responsibility and initiative in complex and unpredictable professional environments;
- 4. You are able to assume leading roles, including management roles, in companies and research organisations, and to contribute to innovation;
- 5. You are able to work in an international environment, helped by your social and cultural sensitivity and language and communication abilities, partly acquired through experience of team work and any study periods abroad;
- 6. You are aware of possible ethical, social, environmental, aesthetic and economic implications of your work and know how to act accordingly;
- 7. You are aware of your need to update your knowledge and skills.

# II. In addition, as an Integrated Product Design graduate

- 1. You are capable of developing innovative products and product-service combinations to satisfy the needs of the stakeholders, based on balancing the interests of users, business and societal challenges and with due regard to international ethical issues;
- 2. You will have a thorough knowledge and understanding of, and are proficient in, the execution of the total product design process with a focus on conceptualization and embodiment design;
- 3. You are able to perform and manage the design process independently or as a member or the leader of a team, often in an international setting;
- 4. You have a thorough knowledge of the aesthetical, ergonomic, technical and environmental issues involved and are acquainted with the organisational and economic aspects of products;
- 5. You have the skills to use integrative approaches to these (aesthetical, ergonomic, engineering-related and environmental) issues into the product development;
- 6. You are capable of generating new knowledge, based on research performed with scientific rigor.

# III. In addition, as a Design for Interaction graduate

- 1. You are capable of gathering and communicating specialist knowledge from the humanities and behavioural sciences, and translating this knowledge into design parameters;
- 2. You can analyse product use and its various contexts and communicate the findings effectively to other people involved in the design process;
- 3. You are able to conceptualise the above into new products or services;
- 4. You are able to gather and integrate knowledge on new technologies (e.g. materials, sensors, ...) into design opportunities;
- 5. You can develop prototypes of experiential quality and test these with users;
- 6. You can independently set up and conduct research projects;
- 7. You can present and report design concepts and research findings in a professional manner;
- 8. You can answer research questions by designing products/prototypes;
- 9. You can contribute effectively to design teams.

### IV. In addition, as a Strategic Product Design graduate

- 1. You can apply tools and techniques to collect information on customer behaviour, competitive behaviour, market trends and technological developments;
- 2. You can translate firm innovation strategies into conceptualized and visualized product/service (line) directions;
- 3. You can synthesize data on the firm and its external international environment, including the firm-related strategic value of design, into realistic product/service concepts and their business cases;
- 4. You can translate product/service line strategies, mission statements, brand identities and information on the firm and its external network of strategic partners into design and engineering guidelines;
- 5. You are capable of independently setting up and conducting a complex multidisciplinary strategic product design, design consulting or research project;
- 6. You can present and report design concepts and (strategic and/or scientific) research findings in a professional manner;
- 7. You can lead an innovation team and deliver strategic input to the team.

# **APPENDIX C: The Midterm Evaluation Form**

>> Complete the form to prepare for the midterm evaluation, and send it to your supervisors, at least 3 days prior to your midterm evaluation session. <<

Name student			
Student number			
Name chair			
Name mentor			
	Interim/In-between results		
Short description of realised interim results: <to be="" by="" filled="" in="" student="" the=""></to>			
Reaction on description interim results: <to be="" by="" filled="" in="" supervisory="" team=""></to>			
	Reflection <sup>17</sup>		
	g objectives as starting point when refle		
Reflection on quality	<to be="" by="" filled="" in="" student="" the=""></to>	<to be="" by="" filled="" in="" supervisory="" team=""></to>	
Reflection on planning	<to be="" by="" filled="" in="" student="" the=""></to>	<to be="" by="" filled="" in="" supervisory="" team=""></to>	
Reflection on personal ambitions (if formulated in project brief)	<to be="" by="" filled="" in="" student="" the=""></to>	<to be="" by="" filled="" in="" supervisory="" team=""></to>	
Reflection on supervision and/or project context	<to be="" by="" filled="" in="" student="" the=""></to>	<to be="" by="" filled="" in="" supervisory="" team=""></to>	
Decision supervisory t	eam concerning progress graduatio	n project at this moment	
Continue	Adjust	Discontinue	
Substantiate the decision: <to be="" by="" filled="" in="" supervisory="" team=""></to>			
Adjust	ment of Project Brief: new arrar	ngements	
Proposal new arrangements based on this midterm evaluation: <to above="" add="" appendices="" applicable:="" based="" be="" by="" filled="" if="" in="" on="" reflection.="" student,="" the=""></to>			
Final arrangements <describe after="" agreed="" arrangements,="" be="" during="" filled="" here="" in="" meeting="" new="" on="" the="" to=""> Signatures (name, date and signature of student, chair and mentor)</describe>			
Signatures (name	, aute and signature of stadent		

 $<sup>^{\</sup>rm 17}$  A short indication of your thoughts and considerations with regard to the graduation project up till now.

<sup>&</sup>lt;sup>18</sup> Learning objectives are to be found in the Course Manual, and in the IDE Study guide.

Name student:	Name chair:	Name mentor:
Date:	Date:	Date:

At the end of the Midterm Evaluation meeting: Please hand-in the filled-in form via Brightspace, upload to the **'IDE Master Graduation Project'** organisation.

This form is also available on the graduation website.

# APPENDIX D: Instructions for uploading documents to Brightspace organisation

# D.1. Manual for uploading Midterm form to Brightspace

Once your project brief has been approved, passed al checks and you are formally registered as graduating student, you will automatically be enrolled in the IDE Master Graduation Project organisation in Brightspace.

At the end of the midterm meeting, the midterm evaluation form has to be signed by you and your supervisory team. After signing, the form must be uploaded to this Brightspace organisation. This is expected to be done straight after the meeting, but must be done within one week after the midterm meeting the latest.

When entering the Brightspace page, under 'content' you can find the assignment 'Midterm form' where you can upload the Midterm form.

The Assignment Submission area will open. Drag-and-drop your assignment, or click on 'upload' to select the assignment from your computer. The comments text box will expand and any comments related to the assignment can be added there, if needed. Please upload the form as a PDF with the following name: 'Midterm form – name student – student number'.

# D.2. Manual for pre-checking your graduation report on plagiarism

Your final thesis will be checked on plagiarism by the faculty. If you would like to pre-check your report (80%) on plagiarism, this is facilitated by the "IDE Master Graduation Project' organisation in Brightspace.

**NOTE:** these instructions are written with a focus on the use the Turnitin tool. Software might change over time, although it is expected this won't affect these general instructions too much.

### Turnitin

Turnitin will compare the document with sources published on the Internet and highlight any similarities. Based on this similarity report, you can improve your academic writing and referencing techniques.

Note: Checking your report on plagiarism can only be done once.

### Instructions

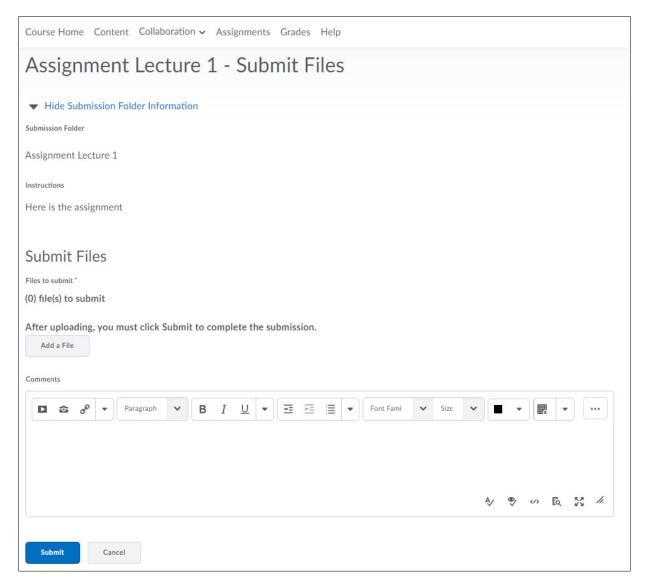
Go to the same organisation on Brightspace where you've uploaded your Midterm form before.

There's another assignment available under 'content' where you can submit your report. 'Graduation report'.

The Assignment Submission area will open. Drag-and-drop your report, or click on 'upload' to

select the report from your computer. The comments text box will expand, and any comments related to the report can be added there, if needed.

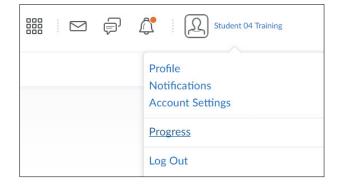
Please upload the report as a PDF with the following name: '*Graduation report – name student – student number*'.



To complete your submission, make sure to click 'Submit'. Then you will receive a confirmation email saying that the submission was successful. Please keep this receipt as proof of your assignment submission.

# <u>Viewing your similarity report, grade and</u> <u>feedback</u>

To view your similarity report in Turnitin, you have to first log into Brightspace, enter the organisation, and under your profile click on 'Progress'.



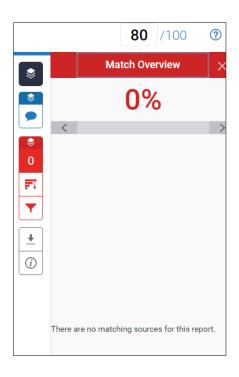
Within the progress area, you then select the report.

Note, that if it's the first time you are logging into Turnitin, you first have to click to 'agree' to the Turnitin User Agreement.

Turnitin similarity is shown in a percentage – the percentage of similarities matching your assignment.

Course Home Content Collaboration	<ul> <li>Assignments</li> </ul>	Grades Help		
Submission Folder List $\rightarrow$ View History				
Submission History				
Submission Folder				
Assignment Lecture 1	Apply			
Folder Type				
Individual submission folder				
Submitted Files		Turnitin® Similarity	Date Submitted 🗸	
For the website.docx (111,49 KB)		15 %	09 October, 2017 15:24	

If you click on the '**percentage'**, you enter Turnitin Feedback Studio, where you can see the similarity report (with the matching sources).



# **APPENDIX E: The Dutch Patents Act**

## The Dutch Patents Act

In general, the right to use the results of the Graduation Project will, by means of a graduation contract, be transferred to the commissioning party (Client or TU Delft). It is possible to make alternative arrangements on the basis of a written agreement between involved parties. If no commissioning party is involved, you will be the owner of the result.

A result can be eligible to Intellectual Property (IP) protection by IP rights, such as drawing/model rights (by registering) or a patent (invention).

When the work, as executed in a graduation project, results in an invention, the owner of the IP can decide to start a patent application on it. The Dutch Patents Act (*Rijksoctrooiwet 1995*) stipulates that the inventors' name should be mentioned in the application, and that the inventor is entitled to a financial compensation for the loss of the right to patent the invention, unless otherwise agreed on.

This implies that if a patent is applied for on the basis of the work done by a graduating student during execution of a graduation project, the application should always include the name of the graduating student. When employees of TU Delft, like the chair and/or mentor, claim to have had a significant part in the invention, the owner of the result shall enter into an agreement with TU Delft.

The requirements to protect IP are diverse, but in the first place require the work to be new. In other words, it cannot have been made public or be published before applying for protection. Since part of the graduation ceremony is open to the public, any registration must be done before the public presentation. An IP registration is simple, and not very expensive, so registration can and must be done before the public presentation.

A patent application on the other hand, is very expensive, and needs a lot of preparation. As part of the graduation ceremony is open to the public, and when a patent application cannot be filed prior to the graduation date, an embargo can be requested for. If an embargo applies, the audience present at the public presentation can be asked to sign a Non-Disclosure Agreement (NDA) which will be provided by TU Delft.

You can get in contact with <u>IDE's Valorisation team</u> to get more information on the TU Delft NDA. See Chapter 11.

# **APPENDIX F: Embargo request**

Your thesis will be published shortly after uploading it to the TU Delft repository. When there are grounded reasons for the client to wish to delay this publication, an embargo can be requested. Such grounded reason might e.g. be because your work leads to a patent application, and the patent cannot be submitted before you are required to upload your thesis.

At the green light meeting, when the results of the project have shape, the decision on whether or not to request an embargo has to be made. In most cases, the commissioning party requests an embargo. In the situation TU Delft commissioned the project, or when you work on a self-initiated project without external client involved, the chair has to make the motivated embargo request.

The IDE Faculty asks clients a fee for an embargo on the publication of a thesis, as is explained in Chapter 10. The fee for a one-year embargo is 3.000 Euros, and for a two-year embargo 5.000 Euros, both exclusive of VAT. A fee will not be asked for when TU Delft is the commissioning party, or when you work on a self-initiated project without any external party involved.

In the situation the client is not willing to pay the fee this should be motivated in the embargo request. TU Delft decides whether or not the fee will be charged.

In order to arrange the embargo, the requesting party has to write, and send, a motivated embargo request, signed by the client, by an authorised person, to the IDE Director of Education: <u>opleidingsdirectie-io@tudelft.nl</u> attn. Mrs. M.M. Borgstijn.

The request should include the following information:

- The reason for requesting an embargo
- The requested embargo period
- The billing address

Before uploading your thesis, you have to check with the commissioning party whether or not the embargo is granted, and when it is, for what period. With uploading your thesis, you can indicate an embargo applies, and you have to submit the end-date of this embargo. In the situation a patent is requested for, you should make sure the client confirms that the project's summary (included in your thesis, and also asked for to provide when uploading your thesis) does not include any information that can endanger the patent, before uploading the deliverables.

# **APPENDIX G: Requirements video and poster showcase**

### i. Requirements for <u>video</u> showcase

If you choose to prepare a **video**, take into account the following conditions:

- The video should be maximally 3 minutes long;
- Resolution to use: **1080p** (1920 x 1080);
- Make sure to save it as an **.mp4** file, using **H.264** as the **compression** format.

In general, uploads to the Repository have a maximum file size of 400 MB, but try to make it as small as possible.

### ii. Requirements for <u>poster</u> showcase

If you choose to prepare a **poster**, the following, general information on making poster presentations is available:

In this left column you can find the implication of this general info for the ide-graduation poster	Of all presentation forms, a poster is one of the hardest to make, because you are forced to make drastic decisions hence the limitations. Actually, the name 'poster' is somewhat misleading. A real poster usually consist of limited information: 'Buy this product', 'Vote for me!' or 'This interesting performance will take place there, at that time'. A large, catchy image is often used to attract attention from a distance. However, a poster presentation should consist of much more (complex) information. Usually, you would prefer to convey this information by means of a paper, report or lecture, but for any reason, that is not a possibility. Therefore, your 'message' has to be summarised to fit just one page. This is not all bad, because,
	when it's right, the viewer can grasp the idea at a glance.
	AIDA Is a formula developed for the marketing industry but is also applicable to poster presentations. AIDA stands for Attention, Interest, Desire and Action. To be effective, the first thing a poster has to achieve is to stand out, be noticed = Attention. Once that is accomplished, the poster must be so attractive that the viewer becomes curious about it = Interest. As a result, the viewer is drawn closer and wants to know more about what is presented = Desire. Now the observer can access the (more detailed) information and hopefully wants to engage into contact with the author, designer of it = Action. How to go about this? Here are some practical guidelines that can help you.
TU Delft corporate design applies. For more information on this design, see: <u>https://www.tudelft.nl/en/tu- delft-corporate-design/</u>	<b>Content</b> Because of the limitation in space, it is most important to decide what really has to be part of the poster. Which text and images represent the essence of the project you are presenting. Be conscious about your choices, and be aware that a poster cluttered with facts is inaccessible and definitively not attractive at all. Be aware that blank spaces are an integral part of the content and are equally important as the other elements in a successful poster presentation, because they provide tranquillity.
TU Delft corporate design applies; The typography is based on Arial (Regular, Italic, Bold, Bold Italic).	<b>Text</b> Legibility is a key factor to a successful poster presentation. Therefore, choose a 'common' font for the running text. There has to be a reason to go for an extravagant or special font. From a

Georgia is used for quotes and columns. Body text is always rendered in black or white, while a colour from the colour system or palette may be used for headings and subheadings. These guidelines are only meant for offline use.	distance of about 2 meters the running text should be readable, which has implication for the font size to be use. Font size is not the only factor that influences legibility, leading and line length are also important. Fact is, when lines become too long, legibility becomes difficult. Rule of thumb is that 60 - 70 characters per line (including spaces) is ideal. Leading can partly compensate for longer lines; the longer the
When using the InDesign template, text over 2 columns is preferred to 3 columns	lines, the larger the leading should be. Hierarchy improves 'access' to your content. This can be accomplished by using headers/sub-headers that are distinctive by using different font sizes and/or bold/italic.
Aim for approximately 1/3 text, 1/3 illustrations and 1/3 blank space	Colour is not a good means to achieve hierarchy, but can - considerately - be put to use in distinguishing parts of text. Avoid the use of frames and/or coloured block around/behind text unless to a specific purpose. Using to many visual elements can result in an inconsistent/ cluttered, and therefore unattractive poster. The goal is a clear, serene look. Leaving enough space between the elements leads up to a clear lay-out and makes the
	'need' for visible items like frames superfluous. Gettingpeopleinterestedinyourprojectshouldbebecauseoftheclearway of presenting, and its content, rather than embellishing your presentation with irrelevant (visual) items.
The project title is not automatically the poster titel!	<b>Title</b> Each poster should have a title, preferably a strong, catching one. An explanatory sub-title is often added to put the title into perspective to the project. The title must be readable from a distance to fulfil the role of drawing attention (A in AIDA).
	<b>Structure</b> The use of a (lay-out) grid is very helpful when placing elements on the poster plane. Starting point for determining such a grid is the (paper) size of the poster. Divide the plane into columns (preferably an uneven number), gutters and margins. The column width also determines the size of all other elements on the poster; text over 2 columns or a one column picture. The same way, you can make a horizontal division to support alignment. Text leading should be adapted to this measurement (base line grid). When all elements are aligned using the grid, the result will be a balanced, eye pleasing design.
	<b>Illustrations</b> When selecting illustrations derived from your project for use on the poster, be aware that it must be inviting and 'accessible' material. One large picture is preferred over several small ones, or, with AIDA in mind, a large one, and some smaller ones in addition to it. Once you have the viewers' attention, the smaller ones will also be noticed. In some cases, it is better to limit yourself to just text, especially when the image material at hand is poor. Hierarchy may also apply to illustrations. Size and position on the plane attain that.