

IDE Master Graduation

Project team, Procedural checks and personal Project brief

This document contains the agreements made between student and supervisory team about the student's IDE Master Graduation Project. This document can also include the involvement of an external organisation, however, it does not cover any legal employment relationship that the student and the client (might) agree upon. Next to that, this document facilitates the required procedural checks. In this document:

- The student defines the team, what he/she is going to do/deliver and how that will come about.
- SSC E&SA (Shared Service Center, Education & Student Affairs) reports on the student's registration and study progress.
- IDE's Board of Examiners confirms if the student is allowed to start the Graduation Project.

! USE ADOBE ACROBAT READER TO OPEN, EDIT AND SAVE THIS DOCUMENT

Download again and reopen in case you tried other software, such as Preview (Mac) or a webbrowser.

STUDENT DATA & MASTER PROGRAMME

Save this form according the format "IDE Master Graduation Project Brief_familyname_firstname_studentnumber_dd-mm-yyyy". Complete all blue parts of the form and include the approved Project Brief in your Graduation Report as Appendix 1 !



family name
initials
student number
street & no.
zipcode & city
country
phone
email

Your master programme (only select the options that apply to you):

IDE master(s): ☐ IPD ☐ Dfl ☒ SPD

2nd non-IDE master: _____

individual programme: _____ (give date of approval)

honours programme: ☐ Honours Programme Master

specialisation / annotation: ☐ Medisign

☐ Tech. in Sustainable Design

☒ Entrepreneurship

SUPERVISORY TEAM **

Fill in the required data for the supervisory team members. Please check the instructions on the right !

** chair Dr. Ir. Jan Carel Diehl dept. / section: DE/DfS
** mentor Ir. Willemijn Brouwer dept. / section: PIM/SM&CB
2nd mentor Adinda Quiel Beekman
organisation: 4Building
city: Nieuw-Vennep country: The Netherlands

comments
(optional)

⋮

! Chair should request the IDE Board of Examiners for approval of a non-IDE mentor, including a motivation letter and c.v..

! Second mentor only applies in case the assignment is hosted by an external organisation.

! Ensure a heterogeneous team. In case you wish to include two team members from the same section, please explain why.

APPROVAL PROJECT BRIEF

To be filled in by the chair of the supervisory team.

chair Dr. Ir. Jan Carel Diehl date - - signature _____

CHECK STUDY PROGRESS

To be filled in by the SSC E&SA (Shared Service Center, Education & Student Affairs), after approval of the project brief by the Chair. The study progress will be checked for a 2nd time just before the green light meeting.

Master electives no. of EC accumulated in total: _____ EC

Of which, taking the conditional requirements into account, can be part of the exam programme _____ EC

List of electives obtained before the third semester without approval of the BoE

☒ YES all 1st year master courses passed

☐ NO missing 1st year master courses are:

name _____ date - - signature _____

FORMAL APPROVAL GRADUATION PROJECT

To be filled in by the Board of Examiners of IDE TU Delft. Please check the supervisory team and study the parts of the brief marked **. Next, please assess, (dis)approve and sign this Project Brief, by using the criteria below.

- Does the project fit within the (MSc)-programme of the student (taking into account, if described, the activities done next to the obligatory MSc specific courses)?
- Is the level of the project challenging enough for a MSc IDE graduating student?
- Is the project expected to be doable within 100 working days/20 weeks ?
- Does the composition of the supervisory team comply with the regulations and fit the assignment ?

Content: ☒ APPROVED ☐ NOT APPROVED

Procedure: ☐ APPROVED ☐ NOT APPROVED

comments

name _____ date - - signature _____

Designing a Corporate Training to Embed Design Thinking in Business project title

Please state the title of your graduation project (above) and the start date and end date (below). Keep the title compact and simple. Do not use abbreviations. The remainder of this document allows you to define and clarify your graduation project.

start date 25 - 09 - 2019 25 - 02 - 2020 end date

INTRODUCTION **

Please describe, the context of your project, and address the main stakeholders (interests) within this context in a concise yet complete manner. Who are involved, what do they value and how do they currently operate within the given context? What are the main opportunities and limitations you are currently aware of (cultural- and social norms, resources (time, money,...), technology, ...).

The world is rapidly changing around us. This forces businesses to change the way they work by reinventing business models and by looking for new methods to design and create solutions.

World Economic Forum has confirmed these changes in the business environment and has also predicted that complex problem solving would be the number one skill to possess for businesses in 2020.

Luckily Design Thinking is a well-proven method for businesses to solve complex problems.

Design Thinking is a human-centred way of doing and thinking, used by organisations to solve ill-defined and wicked problems with innovative products and services that people love, by integrating the needs of people, technological possibilities and the requirements for business success.

Like Herbert Simon, the father of Design Thinking, stated in 1969: "Design Thinking is too important to be just for designers", I completely agree with this statement. Therefore during this graduation project, I would like to contribute to the acceleration of successful implementation of Design Thinking in organisations.

space available for images / figures on next page

introduction (continued): space for images



image / figure 1: UBR Employees creatively reframing a problem during V-Lab's Design Thinking Training



image / figure 2: A Nepalese teacher, making a tangible representation of his solution during a Design Thinking training

PROBLEM DEFINITION **

Limit and define the scope and solution space of your project to one that is manageable within one Master Graduation Project of 30 EC (= 20 full time weeks or 100 working days) and clearly indicate what issue(s) should be addressed in this project.

Sadly, Design Thinking taught in business is often dumbed-down to a simplified step by step process, excluding the necessary Design Thinking mindsets, resulting in an unsuccessful implementation. The trainers focus on the Design Thinking methodology, rather than seeing it as a way of doing and thinking.

While a firm can adopt the Design Thinking process and learn new tricks, it is the mindset (the way of thinking) that will ultimately help the organisation to achieve innovation objectives at a deeper and more sustained level.

A Design Thinking mindset is often viewed as a condition for sustainable cultural change. Implementing Design Thinking without the necessary mindset and culture will turn it into a rigid plan and will be doomed to fail.

Therefore a solution would be to teach businesses not only the Design Thinking process, but also the necessary mindsets, required for a succesful implementation.

ASSIGNMENT **

State in 2 or 3 sentences what you are going to research, design, create and / or generate, that will solve (part of) the issue(s) pointed out in "problem definition". Then illustrate this assignment by indicating what kind of solution you expect and / or aim to deliver, for instance: a product, a product-service combination, a strategy illustrated through product or product-service combination ideas, In case of a Specialisation and/or Annotation, make sure the assignment reflects this/these.

As a solution, I will design a training for organisations, that will not only include the necessary process and tools, but also the necessary mindsets. This Design Thinking training will allow employees to obtain a certain amount of knowledge of the process and the mindset, required for a beginning Design Thinker in the business environment.

In order to sucessfully design this training, research has to be done regarding (1) a Design Thinking mindset, (2) Design Thinking in business and (3) the development of a (Design Thinking) training in general.

Also, in order to enhance and iterate on the training, an organisation (4Building B.V., a consultancy for building and housing projects.) will be used to test the training and to provide feedback.

More organisations will be incorporated up to a certain extent in this project as well, which will allow the training to be projectable on a large variety of businesses. This will also allow me to exploit the training after my graduation with my own company, Mindsweepers, hence the Annotation in Entrepreneurship.

Personal Project Brief - IDE Master Graduation

PLANNING AND APPROACH **

Include a Gantt Chart (replace the example below - more examples can be found in Manual 2) that shows the different phases of your project, deliverables you have in mind, meetings, and how you plan to spend your time. Please note that all activities should fit within the given net time of 30 EC = 20 full time weeks or 100 working days, and your planning should include a kick-off meeting, mid-term meeting, green light meeting and graduation ceremony. Illustrate your Gantt Chart by, for instance, explaining your approach, and please indicate periods of part-time activities and/or periods of not spending time on your graduation project, if any, for instance because of holidays or parallel activities.

start date - -
end date - -

	SEP	OCT	NOV	DEC	JAN	FEB														
Project Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1. Inspiration																				
Build theoretical framework (Design Thinking, Design Thinking in business, Design Thinking mindset, (un)succesful implementation of Design Thinking, Trainings)																				
Expert Interviews (IDE teachers / Design Thinking experts, Design Thinking trainers)																				
Study existing Design Thinking trainings																				
Study existing or similar cases																				
Company analysis 4Building (what do they do, who are their employees, why do they need Design Thinking, what determines their success, etc.)																				
2. Ideation																				
Identify the necessary (Design Thinking) skills that employees should aquire (e.g. expert interviews, interview with managers, interviews with the employees themselves, etc.)																				
Employee interview at t=0 (e.g. what do employees currently know about Design Thinking, how do they apply Design Thinking, etc.)																				
Interviews with ex-Design Thinking trainees (pros & cons, up till what extent are they able to apply what they have learned in the training in their actual business environment, limitations, etc.)																				
Brainstorm ideas for interventions																				
Create a concept for a training																				
Run low-fidelity tests with students																				
Expert check																				
3. Prototyping and testing																				
Prototype the interventions (workshops, trigger events, materials, etc.)																				
Intervention 1 4Building																				
Employee interview 1 at 4Building (Identify what the participants have learned and how they have applied the learnings in their business environment.)																				
Intervention 2 4Building																				
Employee interview 2 at 4Building (Identify what the participants have learned and how they have applied the learnings in their business environment.)																				
Intervention 3 4Building																				
Employee interview 3 at 4Building (Identify what the participants have learned and how they have applied the learnings in their business environment.)																				
Iterate on the training / interventions																				
Test iterations with other organisations																				
4. Final Concept																				
Review results and make adjustments accordingly																				
Design a final concept that is projectable on different organisations																				
Recommendations (shortcomings, etc.)																				
Write final report																				

MOTIVATION AND PERSONAL AMBITIONS

Explain why you set up this project, what competences you want to prove and learn. For example: acquired competences from your MSc programme, the elective semester, extra-curricular activities (etc.) and point out the competences you have yet developed. Optionally, describe which personal learning ambitions you explicitly want to address in this project, on top of the learning objectives of the Graduation Project, such as: in depth knowledge a on specific subject, broadening your competences or experimenting with a specific tool and/or methodology, Stick to no more than five ambitions.

I have initiated this project because of the following motivations:

Motivation 1 - Experience

I have cofounded the creative consultancy Mindsweepers, where I facilitate design workshops for leading organisations, governmental institutions and startups. I also have international experience in developing and giving creative workshops (e.g. (1) I have spent several months in Tanzania, where I facilitated several creative workshops for 78 night fishermen in order to design a new solar powered fishing lamp for the night fishing industry & (2) I have given a Design Thinking crash course for approximately 70 participants at Indian Institutes of Technology (IIT) in order to find new ways to design affordable housing for people living in the slums of India).

Motivation 2 - Appreciation by others

At IIT, I was also able to teach my team (consisting of teachers and students from Nepal, Buthan and India) about Design Thinking. They showed honest appreciation about the Design Thinking methodology and expressed that they believe that more people should be taught about it.

Motivation 3 - Drive

I feel incredibly fortunate that I had the opportunity to go to the TU Delft, apply to Industrial Design Engineering and learn about Design Thinking. It helps me to solve all kind of different complex problems that I face. However, just like Herbert Simon, I believe that Design Thinking is way to precious to be just for the designers and that it should be spread around the world. That is my drive.

Motivation 4 - Frustration

At Mindsweepers, we give a Design Thinking crash course called 'Think Like a Designer'. I have given the workshop countless times and I really love doing it. However, while a crash course will allow people to gain interest for Design Thinking, it will not allow them to actually aquire the methodology and succesfully implement it in their business environment. Instead, ex-participants of the workshop will go back to their work not being able to perform Design Thinking at all. I would love to enable Design Thinking to be implemented in organisations successfully.

Motivation 5 - Challenge

I have often experienced that professors and teachers at Industrial Design Engineering expressed to be sceptical and denigrating about Design Thinking trainings. I woud like to challenge myself to design something that they will actually agree with.

FINAL COMMENTS

In case your project brief needs final comments, please add any information you think is relevant.