



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:

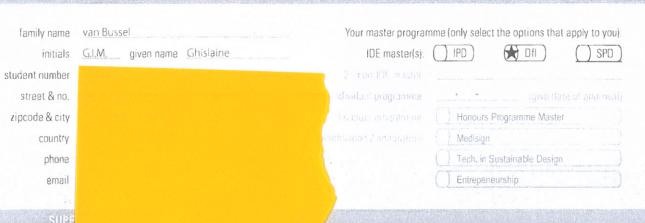
- The student defines the team, what he/she is going to do/deliver and how that will come about.
- SSC E&SA (Shared Service Center, Education & Student Affairs) reports on the student's registration and study progress.
- IDE's Board of Examiners confirms if the student is allowed to start the Graduation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

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

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STUDENT DATA & MASTER PROGRAMME

Save this form according the format. 'IDE Master Graduation Project biret_familyname_firstname_studentnumber_ud-mor-v,Av Complete all blue parts of the form and include the approved Project Briefin your Gradbatton Report as Appendix 1 L



** chair	Matthijs van Dijk	dept. / section: Design Aesthetics		Board or Exeminers for approval of a new light manual westerness.
** mentor	Mark Sypesteyn	dept. / section; HCD - HICD	0	
	Roeland Reitsema		0	
	organisatea NS			
	(1) Utrecht	The Netherlands		

APPROVAL PROJECT BRIEF
To be filled in by the chair of the supervisory team.

chair <u>Matthijs van Dijk</u> date	2-3-23 signature
CHECK STUDY PROGRESS To be filled in by the SSC E&SA (Shared Service Center, Education The study progress will be checked for a 2nd time just before the	on & Student Affairs), after approval of the project brief by the Chair. e green light meeting.
Master electives no. of EC accumulated in total: Of which, taking the conditional requirements into account, can be part of the exam programme List of electives obtained before the third semester without approval of the BoE	
Robin den Braber date 28	- 03 - 2023 signature <i>RdB</i>
FORMAL APPROVAL GRADUATION PROJECT To be filled in by the Board of Examiners of IDE TU Delft, Please Next, please assess, (dis)approve and sign this Project Brief, by	check the supervisory team and study the parts of the brief marked **. using the criteria below.
the student (taking into account, if described, the	Procedure: APPROVED NOT APPROVED - the missing course ID4070 should be finished before the green light meeting
name Monique von Morgen date 4/4	4/2023 signature MvM
IDE TU Celit - E&SA Department //7 Graduation project brief & Iortials & Name G.I.M. van Bussel Title of Project A future vision of the NS railway stations	Study overview /// 2018-01 v30 Page 2 of 7 Student number 5433215

A future vision of the NS railway stations

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

03 - 04 - 2023

08 - 09 - 2023

end date

This graduation project will take place in the context of NS railway stations. There is not one standard for the NS railway stations, as they are all customized to their external environment and demand: there are big railway stations that serve as hubs, but also smaller stations in small cities. However, what the railway stations do have in common, is a shared vision on the provision of information, facilities and accesibility. This shared vision will give train travellers a feeling of recognition on the different railway stations and therefore they will feel save and in control while travelling.

In this project, the main stakeholder will be NS and their Functional Cluster Operations team, which is part of the ComIT-organisation (commerce & IT).

NS

As a basic principle, NS wants to make the Netherlands accessible for all. NS wants to offer their users a seamless door-to-door journey, in which they feel in control and have the freedom to travel as they seem fit. They also want to offer a safe and pleasant journey, that will still be affordable. This all to, in the end, increase demand and offer even more people a sustainable way of traveling. NS wants to keep moving forward, by constantly improving and innovation to serve the changing needs and wishes of their users.

The aim to offer their train travellers a seamless door-to-door journey means that collaboration with partners is essential. They collaborate with a variety of fellow transport companies: operators of buses, trams, taxis and trains, Furthermore, NS collaborates closely with ProRail, the company responsible for existing and new infrastructure. They work in partnership on the day-to-day operation and development of stations. Additionally there is Bureau Spoorbouwmeester, an independent advisory body for design assignments within the railway sector, established on innitiative of NS and ProRail.

Train travelers

Additionally, the passengers are of important interest in this project. Hundred thousands of people use NS' services everyday. I strive to create a meaningfull vision that will change their future experiences for the better. In this project I aim to find out how the passengers relate to the train journey and station of the future. How do they see this in the future and what position do'l take around this prospect.

In this project, opportunities will lie in improving the trainstations in terms of accessibility (e.g. costs, straightforward wayfinding (language), reachability) and user interactions (ie.g. signs, furniture, devices). Already existing manuals of NS and Bureau Spoorbouwmeester can be used to get familiar with the current situation.

Limitations within the project will lie in designing for public space, where the design should be accessible to all, in terms of physical and societal limitations. Additionally when designing for public space, physical products should be designed so that they cannot be easily damaged.

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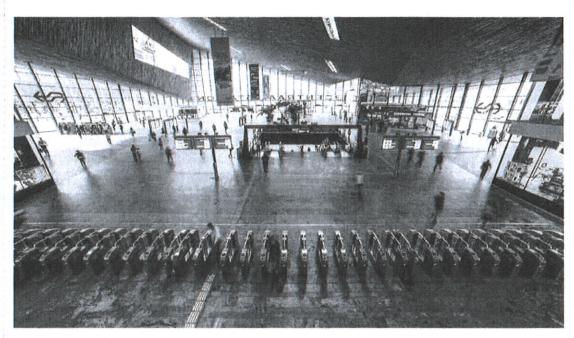


image / figure 1: Rotterdam Central Station



image / figure 2: Krabbendijke Station

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Personal Project Brief - IDE Master Graduation

NS wants to remain relevant in the society of the future. This means they do not want to be left behind in old values & technologies, when society is moving forward. In certain areas NS is already focusing on how to approach the future. For example, their future vision on the interiors of trains and the introduction of OVPay. However, when it comes to their trainstations, this is something yet to be explored. They want to gain an increase in demand, returning their passenger level to the level reached in 2019 (before the pandemic). Passengers and their needs and wishes change, so to keep moving forward NS needs to change with them.

This project will have a wide scope, in which different societal issues, such as economic recession, rich and poor, cultural differences, will be adressed and explored within the context of the train journey and station. It will look into how NS can position themselves around these themes, to ultimately fit a future reality.

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.

In this graduation project, research will be done around different societal themes in the context of NS' train journey and stations. With the use of the ViP method, a framework will be created, from which a future interaction and 'product' vision will emerge. Ultimately, a concept will be created that fits this interaction and 'product' vision.

Lexpect to create a vision for 5-10 years in the future. By doing research around different societal themes, Laim to find out how the passengers relate to the train journey and station of the future. Next, I will see if this attitude is desirable or if a change in attitude is necessary to move to a desired future.

The future vision will comprise an interaction vision of the passengers (and other visitors) with NS' railway stations and a consecutive 'product' vision. This will manifest in qualitative characteristics the 'product' should embodie to end up with a concept that fits the future vision, and that will actuate the desired change in attitude.

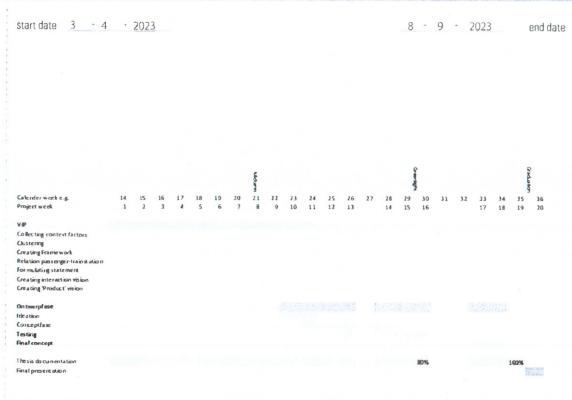
Based on (a part of) this complete future vision, a concept will be created and tested with traintravelers. This concept can be a product, a service or even a policy, which is expected to become clear during the vision creation process.

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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 caremony. Illustrate your Canth 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.



Approach

To form a future vision of the NS railway stations, I am going to use the ViP method. This method will help me find out how the passengers relate to the future train journey and station, and question and critizise this if necessary (without directly asking the passengers what would be best for them and what their needs would be for the future, since they probably don't have know this themselves). This will lead to an interaction vision and product* vision, which I will use to form a concept in the later stage of the project.

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^{*}The end result is not necessarily going to be a product, but it can also be a service, product-service or even a policy



Personal Project Brief - IDE Master Graduation

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 letc.) 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 ambittons.

My interests lie within sustainability and social design and therefore these themes have often been of significance in the projects throughout my student career. I think as a designer, it is of real importance to think about the impact of our design choices on the environment. Additionally, as a designer you have the opportunity to increase environmental awareness and facilitate sustainable behaviour through the design. As sustainability is an important value for me, personally and professionally, I am immediately enthusiastic about doing a graduation project at NS. I would really like to contribute to the creation of a positive user experience that fits the future vision of NS. In this way, hopefully even more people can be convinced to travel by train, heading towards a more sustainable future. Furthermore, in the field of social design making a societal impact is of great importance and in design projects this is always something I strive for. Within social design, often we design for public spaces and human interactions, which are also big topics within this assignment. Therefore, I think I will be able to use the experience I gained during projects in my bachelor's and master's well within this project.

The third theme that gives me a lot of energy is human-centered design. I find it fun and interesting to design for people and to ensure an optimal experience between the users and the design. But not only designing for people: also with people. I will gladly start the conversation to find out how stakeholders are experiencing a situation and how it can be improved. In this project, the best solution can be shaped by including the stakeholders to fit their needs and wishes best.

Additionally, with all projects of my bachelor and master together, I did not yet make use of the method ViP. This method has already been introduced to me during a course in my master, but I have not had the change to bring into practice yet. Now, I think it would be a very well fitted project and therefore a good opportunity to familiarize myself with this method and learn and perceive how and why it is usefull.

My ambition is to work at a social design agency after I graduate. I have done projects throughout my bachelor and master that focused on this subject of design. However, I have never experienced a social design project in practice, from within a company. I think this graduation internship and project will let me experience, to a certain extent, how it will be like to work on such projects in the work field, also to see if this would indeed be a path I want to continue on in the future.

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