

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 

family name Bonnemayers
initials VMJJM given name Vitto
street & no. Wittevrouwelaan 100
zipcode & city 2628 XH Delft
country Netherlands
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Your master programme (only select the options that apply to you):

IDE master(s): IPD DfI SPD

2nd non-IDE master:

individual programme: - - (give date of approval)

Honours Programme Master

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 Jan Willem Hoftijzer, MSc dept. / section: HCD, HIJD
** mentor Wouter Kets, MSc dept. / section: HCD, DA
2nd mentor Guillermo Mignot, MA
organisation: Genesis Design, Hyundai Motor Europe Technical Center GmbH
city: Rüsselsheim am Main country: Germany

comments (optional)
The project will be carried out safely from home with the (foreign) company as remote client, with which all communication takes place digitally. This is has been approved by the Exam Committee of IDE in January.

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.

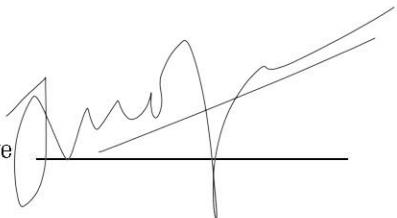
APPROVAL PROJECT BRIEF

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

 chair Jan Willem Hoftijzer, MSc

 date 16 - 03 - 2021

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

 YES all 1st year master courses passed

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

 NO missing 1st year master courses are:

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

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 _____

Sustainable luxury in automotive interior design

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 22 - 02 - 202130 - 09 - 2021

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,...).

GENESIS ADVANCED DESIGN STUDIO (MAIN STAKEHOLDER)

Genesis Motor is the luxury division of the Hyundai Motor Group (HMG). HMG is a Korean conglomerate which is among the largest vehicle manufacturers in the world (OICA, 2017). HMG's European R&D centre is located in Rüsselsheim am Main, Germany, and features the Genesis Advanced Design (GAD) studio, which is the main stakeholder behind this project.

As this thesis is labeled a 'visionary project' within the studio, their aim is to be inspired by refreshing ideas for styling and concept design. Their focus will be on the emotional impact of the visual results and vision behind these.

TU DELFT

For TU Delft, the process and methodology behind the design is just as important, with emphasis on critical thinking, argumentation and reflection. Blending a methodological approach with the more intuitive and pragmatic mindset of GAD, provides opportunities for design that is both aesthetically pleasing and meaningful.

MYSELF AS STAKEHOLDER

My personal aim is to create an eye-catching end result of artistic (aesthetic) as well as academic value. This is to increase my job opportunities after graduation in the car design field (also see p. 7).

LIMITATIONS

- Focus on styling & concept design (the expected outcome by GAD).
- Should be centred around the luxury car segment (main stakeholder need).
- COVID-19, which might create challenges for the working conditions (100% home office), communication and organising (physical) activities.
- Time and budget limitations (as well as COVID-19) rule out physical results (scale models/prototypes).

OPPORTUNITIES:

- Digital results (= skill improvement in 3D software, future-oriented, time-saving and matches with the digital workflow of GAD).
- The fact that the Genesis brand is still young, provides opportunities for impacting the future of the brand in a meaningful way (according to Filippo Perini, Chief Designer at GAD).

space available for images / figures on next page

introduction (continued): space for images



image / figure 1: [The top model in the Genesis range: the G90 limousine.](#)



image / figure 2: [The interior of the G90 showcases the targeted segment with an example of contemporary luxury.](#)

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.

PROBLEM DEFINITION:

"how could Genesis anticipate sustainable developments for the expression of luxury in a future car interior?

It is needless to say that sustainability has become a priority for the car industry (Capgemini, 2020). From a technical and business perspective, the automotive industry is partly responding to this by introducing i.a. electric drivetrains and new (shared) ownership models. But how could sustainability impact the design of future cars from an emotional perspective?

To be more specific: how could Genesis anticipate developments towards a sustainable society for the part we interact most with: the car interior? Especially since Genesis operates in the premium segment, where luxury and sustainability might seem contradictory? (Sattler, 2019). In addition, for Genesis it is important to explore the changing perception of luxury. For example, nowadays any electric car can be powerful (as shown by Tesla).

SCOPE: luxury car segment for the year 2030.

SOLUTION SPACE: automotive styling and concept design (similar to the ACD course and in line with the activities of the GAD studio). In addition, the project focuses on the aspect of 'desirability' (IDE TU Delft, 2017) due to the emphasis on emotional impact (see p. 3).

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.

The expression and meaning of luxury today, in the future and for the brand will be explored and challenged with regard to sustainability, by means of literature, interviews and a future context study (ViP-method). The ViP-process will lead to a design vision about luxury in a future world (2030) influenced by sustainable developments. This will be turned into a concrete design to propose how sustainable luxury could look like for a future Genesis car interior.

DELIVERABLES

Eye-catching concept design of a car interior in the form of a detailed (digital) 3D model with emphasis on aesthetics/styling.

The design should be presented in a visually compelling way, based on the final 3D model; and supported with expressive development sketches as well as user scenarios to show the envisioned interaction. This way of presenting is key for inspiring the designers at Genesis and triggering a dialogue of how the expression of luxury could (or should) change in the future.

The final presentation format is to be defined, but can be:

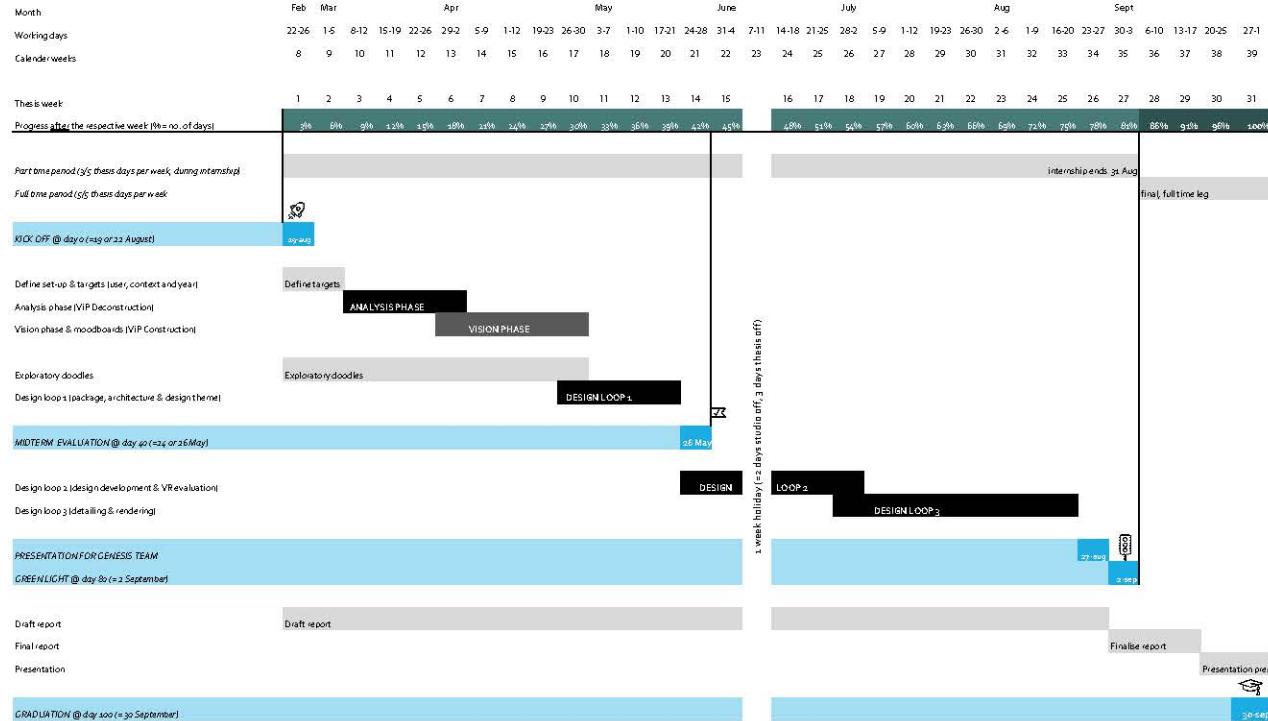
- animation video and/or poster
- VR model and/or poster

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 22 - 2 - 2021
30 - 9 - 2021

end date


ACTIVITIES

The planning is mainly based on 3 phases: an analysis, vision and design phase. The analysis and vision phases are structured according to the 'Vision in Design' (ViP) method, which is a suitable design method to combine automotive design with an academic approach (Hekkert & Van Dijk, 2017). The design phase is based on the common design process in the car design field (Hull, 2018).

PART-TIME APPROACH

It is important for GAD and myself that I also contribute part time to the 'real', ongoing projects of the studio (see 'Motivation', p. 7). Hence, during the 6 months (remote) thesis internship, I will work part time (3/5 days per week) on the thesis, so at 60% normal speed. This means the total duration will be 20 weeks * 1.6 = ca. 32 thesis weeks. To easily keep track of the progress, please see the green bar on top, which shows how much percent (= number of days) of the thesis is completed after each respective week. After the internship period ends at 31 August, there are still 19 days (19%) to be completed, which I can then fulfill full time (5/5 days per week).

MILESTONES: Kick-off (19 February); Midterm evaluation (24 or 26 May); Final presentation for GAD team (27 August); Green Light (2 September); Graduation day (30 September).

HOLIDAY: In order to take a healthy summer break, I would like to take calendar week 23 off (7-11 June), after the midterm review. Since I work part time on the thesis in that period, this means that the graduation date moves (only) 3 extra days forward.

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.

MOTIVATION

The reason for me to study design and come to Delft was actually to pursue my dream of working in the car design field, by graduating at an established brand like Genesis. Since the path towards this field can be long and challenging, reaching this moment is special to me.

My ambition is to become a car interior designer, which explains topic. My aim is to use my holistic mindset developed at TU Delft and combine it with my 'artistic' skill-set trained at Umeå Institute of Design (3rd semester exchange) to give shape to future car interiors on both a highly aesthetic and highly meaningful level; and inspire my fellow (usually artistic) colleagues to do so too! Likewise, to be (digitally) surrounded by the talented artists which happen to become my colleagues, feels like a privilege.

Moreover, the part-time graduation format which allows for getting a taste of 'real' projects, is a rare opportunity for improving my professional design skills.

COMPETENCES TO PROVE AND LEARN

- Sticking to a clear scope and planning. This is usually an area of improvement for me and is extra important due to the part-time nature of the project.
- Concise writing (another area of improvement).
- Efficient use of materials developed throughout the process, to prevent double work and content overload.
- Learning the requirements and 'visual language' for car design in the premium segment (to increase my chances in the industry across different segments).

PERSONAL AMBITIONS

- Strong visual execution of the final design, to end my studies on a high note and have an eye-catching project in my portfolio for increasing my chances for a car design job.
- Showcase artistic competences (towards GAD) besides the required academic competences.

- Cum Laude, if possible (the weighted average of my mandatory MSc courses is a 8.4/10 and I can attribute my 6 months study delay due to the global pandemic).

See: <https://www.tudelft.nl/studenten/vo/onderwijs/afstuderen-master/graduation-during-covid-19/#c613157>

FINAL COMMENTS

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

Please see Appendix A for the planning in full-size; Appendix B for an infographic that explains the methodology and steps; and Appendix C for the references used throughout this document.