IDE Graduation Assignment (version 2017.09.21) incl. the student's study progress (Appendix 3) TUDelft University of Technology



To be completed by the student Please save your assignment as (format): IDE Graduation Assignment_family name, name_student number_dd-mm-yyyy Place the proper document name on each page of your assignment in the headline, number the pages						
	Name student	Lukas Lambrichts				
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	Start at IDE: 2012	2 (year)	Start at T	U Delft: 2012 (year)		
Bachelor ■ TUD Bachelor IO □ TU/e or UT Bachelor IO □ TU Delft non-IO BSc □ Other Dutch University Bachelor □ HBO Bachelor □ Foreign Bachelor	☐ Individual pro approval	non-IDE master gramme, date of irs Programme	Specialisation ¹ ☐ Medisign Annotation ¹ ☐ Techn. in Sustainable Design ☐ Entrepreneurship			
Name Chair	Hoftijzer J.W.					
1. Check study progress To be completed by the Shared Service Centre O&S after approval of the assignment by the chair. The study progress will be checked for a 2 nd time just before the green light meeting.						
Bachelor degree:	□ Yes	□ No		□ N.A.		
Missing 1st year Master courses	1		4			
Master electives, no. of EC credits accumulated:						
Name	Deter	/ / 20	Cinnet			
Name:	Date:	. / / 20	Signature:			
	1					

2. Formal approval Graduation Assignment by the Board of Examiners			To be completed by the Board of Examiners			
Approval of the content of the Grad. Assignment:		□ Approved			Not Approved	
Procedural approval:		□ Approved			Not Approved	
			•		'	
Comments:						
Name:		Date: /	/ 20	Signature:		

IDE Graduation Assignment

GENERAL INFORMATION

Title Graduation Project	Interior design of a future passenger car for Škoda.			
Chair of Supervisory Team	Hoftijzer J.W.			
Department / Section	Industrial Design / Human Information Communication Design			
Mentor of Supervisory Team ⁴	Brand D.			
Department / Section	Industrial Design / Design Aesthetics			
Project commissioned by	☐ Faculty ☐ Company ☐ Other, e.g. entrepreneurial			
Project type 5	■ Design □ Research □ Other, e.g. entrepreneurial			
Company name, if applicable	Škoda Auto			
City & Country	Mlada Boleslav, Czech Republic			
Company Mentor	Peter Olah			
Start date	7-01-2019			
End date	7-06-2019			

CONTENT

Ascertain that the text of your Graduation Assignment clearly meets and reflects the general and specific requirements for your specific IDE master. ¹

Write your assignment in a neutral form.

When inserting images or schedules in colour, make sure a print in black and white is still readable.

Introduction

Give a sketch of the context of your assignment. Historical developments, if applicable relevant published scientific research results, new trends, status quo; materials, technologies, usage, etc.

- In case of a faculty project: describe how your assignment reflects the research portfolio of the IDE Faculty 6.
- In case of a company project: provide company information.
- If other, e.g. entrepreneurial: describe the future enterprise and how your assignment will be of value to the enterprise. Include an illustration or visual which depicts the context of your assignment.

In case one or more extra parties are involved in your project, indicate which role they play.

Škoda is a car company with a rich history, located in Czech Republic and part of the Volkswagen Group. The company currently produces seven models, from a small city vehicle to a large 7-seater SUV. Škoda is known for their 'Simply clever' solutions making the life of the user easier. The design department is growing significantly and is paying more and more attention to future development using concept cars. With the context and various developments in mind, this project will address the development process (analysis and exploration) and the design of a future Škoda car interior.

¹ For general master specific requirements, consult article 4 of the Master Teaching and Examination Regulations, and the IDE Graduation Manual, especially paragraph 2.4 and 3.1.4.

Problem definition

Indicate clearly, what should/could be improved compared to the present situation. When executing a research project: indicate the knowledge gap. What opportunities exist, what contradicting demands should be addressed, etc.

The automotive industry is changing due to new and more advanced technologies (such as autonomous driving and electric driving). The applications of the technologies in a vehicle interior are diverse, they are context and brand dependent. The exploration of future scenarios and context is important for a car company to provide direction for the upcoming generation vehicles and to stay relevant in the future.

Assignment

Briefly and to the point, describe what you are going to design, create or generate to solve (part of) the problem. In case of a Specialisation and/or Annotation, address specifically how this is/these are included in the assignment.

The analysis and exploration of future scenarios and context for Škoda, and the development of an integrated interior car design.

Approach

What will be the approach to deal with the complexity of the assignment? What has to be done to meet the challenges? Indicate the main <u>methodologies</u> to be used. Indicate the same <u>project phases</u> as you distinguish in your planning. If one or more extra parties are involved in your project, indicate which role they play.

In case of a Specialisation and/or Annotation, address specifically how this is/these are dealt with.

The project will mainly be executed at the Design centre of Škoda in Mlada Boleslav. My company mentor and other designers are present for assistance and feedback.

This project will consist of different phases. Starting with the analysis phase where a part of the VIP method will be used as a guideline. First I will get a better understanding of the current situation and context of the development of car interiors and the brand. After that, I will look into the future context. The VIP method will help me to get a clear focus on a certain context in the future and make sure that eventually the proposal will match. It is important to focus on the 'why' of the project, the method will make sure the project has a 'reason of being' which is crucial when designing for users in the future. The method also makes sure that during the whole proces, the user is central. Other methods will be used additional to the VIP method whenever necessary for example during ideation and decision making phases. The brand Škoda will be analysed using the brand identity prism of J N Kapferer. After the analysis phase, the ideation phase will consist of finding inspiration and generating new ideas for the vision created in the previous phase. Defining the ideas more and developing them into concepts is part of the conceptualisation phase. By the end of this phase there will be one chosen concept which will be further developed regarding aesthetics, materialisation and feasibility of the proposal. The final concept will be prototyped with the goal of checking the design with the initial vision setup in the first phase.

Škoda will have the role of the client, having a critical view on the different steps in the process but especially regarding the brand identity. To make sure the project is useful for Škoda it is beneficial if the final result also fits the vision of Škoda. They will also assist in the prototyping phase by making their facilities available for me.

Graduation Project results

- 1. Describe the expected results or outcome of your Graduation Project. For instance, a product, a product-service combination, a strategy illustrated through product or product-service combination ideas.
- 2. Indicate the expected scientific and/or societal and/or commercial significance of the outcome of your project.
- 3. In case of a Specialisation and/or Annotation, address specifically the relevant results to be expected.

The expected result of this graduation project will be a product in the form of a passenger car interior design which shows the direction for future interiors of Škoda.

The project will be relevant for Škoda on multiple levels. First of all a future context will be set with Škoda in mind. This will provide the company with an idea of where, what and who they can focus on in the future. The overal goal of the project is to show Škoda future possibilities.

Deliverables

List the extra graduation deliverables, if any (apart from the mandatory deliverables being the thesis report, annexes if any, the poster and the representative pictures). For instance, a working prototype or a paper.

A physical visual scale prototype of the final design will be made with various purposes in mind.

- 1. It will help me to get a better understanding of proportion, form and show my ability to translate a vision from a sketch to a physical object in a coherent way. Together with the interior design, a vision of the future context will be created and presented to communicate the story behind the design.
- 2. It is necessary to evaluate the design and discuss it. This is similar to the process in the automotive design world.
- 3. It is an advantage to have a physical prototype for further job opportunities.

Relation and relevance to the domain of Industrial Design Engineering, the chosen master direction and the IDE pillars

Explain the relation of your project with the domain of Industrial Design Engineering and your master direction IPD, DfI or SPD.

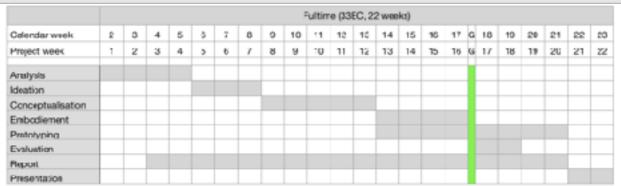
1. Relation of you project to the master IPD, DfI or SPD

Furthermore describe the interface of your project with each of the IDE pillars:

- 2 Rusines
- 3. Human Interaction
- 4. Technology
- 1. The project fits the IPD master mainly because it concerns an integrated design and development process. The final design has multiple aspects integrated such as brand identity of Škoda, technological development, future trends and future contexts relevant to the future vehicle user.
- 2. The main goal regarding the business aspect is to provide a direction for the design department of Škoda. Creating a vision will be an important tool to anticipate and discuss the future in relation to the company and brand of Škoda.
- 3. A vehicle interior is the part where people interact with the vehicle. Therefor the user will be in the centre during the whole process. For this reason I will apply the VIP method; to ensure that the context and interaction form the common thread in the project.
- 4. Technology is an important part of this project. Multiple technological development will be explored which could be relevant for a future interior. This project will also showcase the applications of these technologies, how they can be implemented in the interior and what advantages it could bring for the users, the space of the interior and how users experience it.

Planning

Present your planning in a Gantt Chart, which can easily be made in Excel, see example underneath. Make sure a print in black and white is still readable. Mention the main phases of the project as described at Approach + number of weeks. Indicate only main activities, milestones, meetings. Take notice: 33 EC = 22 full-time weeks! Indicate periods of part-time graduation project activity and/or periods of not spending time on your graduation project, if any, for instance because of holidays .



Brief explanatory remarks on the planning, if any.

Since I am still within the old master system my graduation project will last 22 full time weeks (33EC).

APPROVAL BY CHAIR

Date of approval	
Signature of Chair	