

SEMESTER 1 (Fall) - Faculty Industrial Design Engineering - TU Delft

Master Courses for Exchange Students – updated February 2024

For graduate exchange students or for students who studied 3 years or longer on the moment of application.

Due to scheduling and availability incoming exchange students need to choose a course package. Free choice of courses is not possible.

Below you will find the list of course packages we offer. Since we cannot guarantee enrolment in your first choice, it is obligatory to mention a second choice and a third choice in OSIAAN. In case you apply for two semesters you only have to choose for the first semester.

The academic year consists of two semesters (60 EC), each semester (30 EC) is divided in two quarters of each 10 weeks (15 EC). Fall semester (Q1 + Q2) starts at the end of August and finishes early February.

The MSc programmes are in the final stages of a renewal process. The new programmes will start in September 2024. Extensive course information is not yet available and will become available at a later stage on studyguide.tudelft.nl Short descriptions per course can be found in the links below.

Master Packages – [see explanation](#) on the different masters

[INTEGRATED PRODUCT DESIGN SEMESTER 1 \(Portfolio is needed\)](#)

Subject Code	Subject Title – total	30 EC
	Delft Lectures on Design	5
	Advanced Product Engineering	5
	Cognitive and Psychological Foundations for Product Design	5
	Empirical Design Research	5
	Design Studio 1: Products Now Studio	10

[DESIGN FOR INTERACTION SEMESTER 1 \(Portfolio is needed\)](#)

Subject Code	Subject Title – total	30 EC
	Delft Lectures on Design	5
	Human-Centred Design (and Beyond)	5
	Consequences of Design	5
	Research to/for/through Design	5
	Design Studio 1: Dare to Design Studio	10

[STRATEGIC PRODUCT DESIGN SEMESTER 1 \(Portfolio is needed\)](#)

Subject Code	Subject Title – total	30 EC
	Delft Lectures on Design	5
	Foresight and Backcasting	5
	Research Methods for Strategic Design	5
	Deep Dive into Organisations	5
	Design Studio 1: Strategic Design Studio	10

MASTER ELECTIVE COURSES SEMESTER 1 (see following page, portfolio is needed)

Subject Code	Subject Title – total	30 EC
	Master Elective courses – semester 1 Process on this package will be communicated after application. The electives offer is also currently being renewed. To give you an impression of courses, please have a look at the overview of courses on the following page. <u>NB. it is not possible to include MSc courses from the packages above.</u>	

Please note that some minor changes may occur in the offered course packages.

Additional information elective offer for exchange students

You can find an overview of the renewed electives below. Most of them are based on existing electives. If this is the case, we added a link to the old description of the elective. In case of new electives, we added short descriptions below.

Subject Title	Period	EC
Advanced Visualisation for Communication	p2	5
Advanced Visualisation for Design	p1 & p2	5
Advanced Service Thinking and Design Practice	p1	5
Animated Materials	p2	5
Automotive Design in Future Mobility	p4	5
Biomechanics	p1	5
BlueDot: Design Contest	p2	3
Brand Experience Across Technologies	p2	5
Build Your Startup 1: Idea Validation	p1	5
Build Your Startup 2: Prototyping	p2	5
Child and Play Perspectives	p1	5
Civic Data and Analytics	p2	5
Cognitive Ergonomics for Complex Systems	p1	5
Computational Fabrication and MetaMaterials	p1	5
Contextmapping Skills	p2	5
Creative Facilitation	p2	5
Design & the City	p1	5
Design for Emerging Markets	p1	5
Design in Health: Theory & Practice	p1	5
Designing Responsible AI	p1	5
eHealth Design for a Healthy Society	p2	5
Exploring Design Intelligence	p2	5
Food & Eating Design	p2	5
Fundamentals of Textile Systems	p1	5
Generative AI & Design	p1	5
Design Justice, Inclusion and Diversity	p2	5
Exploring AI Entanglements	p2	5
Introspective Design	p2	5
Lifestyle Research and Design	p1	5
Lighting Design	p2	5
PerForm the Unseen	p3	5
Position & Roles of Designers	p2	5
Repair & Recycling!	p2	5
Supporting Humans	p2	5
Sustainable Consumer Behaviour	p2	5
Strategic Automotive	p1	5
Videography	p2 & p4	5
When Images Remain	p2	5

New electives in 2024/2025

Advanced Visualisation for Communication

This course focuses on the accurate and communicative visualisation (depiction) of information and processes, which concerns (design) narratives such as journeys, roadmaps, data visualisation and design proposals, etc.

Advanced Visualisation for Design

This course advances the students' knowledge of, and skills in visualization principles, methodologies and techniques. Besides bringing knowledge and skills to a higher level, the course also broadens the students' knowledge of visualization and offers methodologies and techniques that are highly relevant for exploring and expressing design ideas and/ or – concepts. It covers a wide range of theories and topics concerning sketching and visualization.

Generative AI & Design

The course Generative AI and Design equips students to design and develop generative AI solutions and analyse their practical and ethical implications in a design context. Generative AI technologies such as Large Language Models (LLMs) and Latent Diffusion Models (LDMs), and generative AI tools such as ChatGPT and MidJourney, have the ability to generate content or data that is novel, creative, and often human-like. As generative AI systems display emergent reasoning abilities, we can use them to design adaptive and self-reflective systems to pursue goals previously only possible by human minds. This course explores how we can use these new capabilities for creating new products and services and new ways of designing

Position & Roles of Designers

In designing for societal challenges, designers can play various roles. This course dives into the position designers can take and how to articulate designers' unique expertise when designing for societal innovation.

Some designers become experts at designing artefacts, others in guiding others moving through stagnation (stakeholders, citizens, actors in support systems). Some provoke existing world views, others help others envision better futures. The design landscape is diverse, and designers will benefit from being able to articulate their specific agency and delivery for their design projects in relation to others involved in the project and beyond.

Supporting Humans

Have you ever tried to be a musician, lose weight, become a master in CAD, or a great chess player? These are just a few examples of the goals we may set ourselves in life. But how do we achieve these goals? These goals require motivation and perseverance from the user, but how can products or systems enable and support you to improve your skills? As a designer, can you imagine a journey that allows people to achieve these goals? And if so, how do you embody (physically or digitally) this journey of inspiration that optimises Challenge and Control in order to Engage with your design. These are the questions we will explore in Supporting Humans. In this course you will learn how to increase the usability and persuasiveness of your designs using knowledge from human factors, behavioural economics and psychology to empower people to achieve their life goals.

Videography

Video, with its inherent narrative structure, visual and auditory richness, and ability to visualise future contexts, offers much potential for design and designers. In this course you will unlock some of this potential by learning how to use videography as a tool in your design process. You will be taught videography techniques and cinematic principles, and apply these in hands-on assignments.