# Overview offer of all MSc courses in Spring Semester 2024-2025

# Rules for selecting courses **for cohort sept 2024 students and IPD February 2024 starters**:

- The Faculty Core course 2 (IDEM4201 Design Process + Practices ) is mandatory.
- At least three programme electives from your **own** Master need to be part of your exam programme.
  - for DfI and SPD there is also a small offer of programme electives in the Fall semester (Q2)- see overview of programme electives offer .
- For Dfl and SPD, select **one** elective design studio from your **own** Master.
- For IPD, all students follow the course IDEM2200 Product Futures Design Studio. The studio has three tracks, allocation will be done based on the IPD programme elective you choose in Q3.
- Design Studios of another Master **cannot** be followed as elective.
- Extra programme electives of your own and programme electives of the other Masters **can** be followed as part of your elective space.

Do you want to apply for the Medisgn specialization? Read the information on this website.

### Rules for selecting courses for all other students:

- Start with checking the transition rules for mandatory courses if you have still have to (re-)do mandatory courses of your exam programme.
- Also check (in the <u>Digital Study Guide</u>) if some courses or electives cannot be taken because you already completed similiar courses or electives in the old MSc programmes.
- Need to do electives?
- Read the information on this website

Note:

- Design Studios of another Master cannot be followed as elective
- Extra programme electives of your own and programme electives of the other Masters **can** be followed as part of your elective space

### How to plan your roster/Spring semester

Take the following steps to select the courses for your Spring semester:

- Check above the information about the rules that apply to you.
- In the overview below all courses of the Spring semester are shown per quarter. For information about the courses: read the course description in the Digital <u>Study Guide</u>. For the programme- and faculty electives, you can also visit the poster market (in week 2.4 and 2.5) and/or go to the course information session in the Synergy week on Monday December 2<sup>nd</sup> from 14.00 till 16.00 h.. Both will be held in the main hall of the IDE building.
- Indicate your chosen courses in the row above (for Q3 and Q4) in the quarter overviews below to see how your week will look like for the contact hours! You can only follow one course per day-part and a total of 30 EC (registration for a maximum study load of 40 EC per semester is allowed)
- Don't forget to register for the chosen courses in OSIRIS!
- If you later decide not to follow a course, please unenroll in OSIRIS

### Q3 courses

| Course<br>code | Title  | Programme<br>and Theme | Monday Morning | Monday Afternoon | Tuesday Morning | Tuesday Afternoon | Wednesday Morning | Wednesday Afternoon | Thursday Morning | Thursday Afternoon | Friday morning | Friday Afternoon |
|----------------|--|------------------------|----------------|------------------|-----------------|-------------------|-------------------|---------------------|------------------|--------------------|----------------|------------------|
| Your<br>choice | Choose three courses and max.<br>one course per day part<br>(Design Studios have two day-<br>parts per week) |                        |                |                  |                 |                   |                   |                     |                  |                    |                |                  |

### Faculty Core Course (Q3)

| IDEM4201 | Design Process and Practices |  |  |  |  |  |  |  |
|----------|------------------------------|--|--|--|--|--|--|--|
|          |                              |  |  |  |  |  |  |  |

### Design Courses Q3 (+ Q4)

| IDEM1210 | Multi Sensory Design Studio    | <u>Dfl 1</u>   |  |  |  |  |  |
|----------|--------------------------------|----------------|--|--|--|--|--|
| IDEM1230 | Speculative Design Studio      | <u>Dfl 3</u>   |  |  |  |  |  |
|          | Systemia Design Studia         | <u>Dfl 2</u> + |  |  |  |  |  |
| IDEM4220 | Systemic Design Studio         | <u>SPD 2</u>   |  |  |  |  |  |
| IDEM3210 | Tech-enabled Innovation Studio | <u>SPD 1</u>   |  |  |  |  |  |
| IDEM2200 | Product Futures Studio         | IPD all        |  |  |  |  |  |

### **Program Electives Q3**

| IDEM1211 | Design for Emotion & Well-being | <u>Dfl 1</u> |  |  |  |  |  |
|----------|---------------------------------|--------------|--|--|--|--|--|
| IDEM1221 | Social Design                   | <u>Dfl 2</u> |  |  |  |  |  |
|          |                                 |              |  |  |  |  |  |
| IDFM2211 | Al Products and Services        | IPD 1        |  |  |  |  |  |

| IDEM2211 | Al Products and Services                   | <u>IPD 1</u> |  |  |  |  |  |
|----------|--|--------------|--|--|--|--|--|
|          | Strategic Integration of Sustainability in | <u>IPD 2</u> |  |  |  |  |  |
| IDEM2221 | Design                                     |              |  |  |  |  |  |
| IDEM2231 | Material Driven Design                     | <u>IPD 3</u> |  |  |  |  |  |
|          |  |              |  |  |  |  |  |
| IDEM3211 | Technology and Strategic Design            | <u>SPD 1</u> |  |  |  |  |  |
| IDEM3221 | Societal Missions: Theory and Practice     | <u>SPD 2</u> |  |  |  |  |  |

### **Faculty Electives Q3**

| IDEM104 | Creative Facilitation             |  |  |   |  |  |   |  |
|---------|-----------------------------------|--|--|---|--|--|---|--|
| IDEM202 | Advanced Visualisation for Design |  |  | * |  |  | * |  |
| IDEM216 | PerForm the Unseen                |  |  |   |  |  |   |  |
| IDEM221 | Making and Prototyping Skills     |  |  |   |  |  |   |  |

\*Day-part depends on the track in the course

| Mandatory for all MSc |
|-----------------------|
| Dfl                   |
| IPD                   |
| SPD                   |

# Q4 courses

| Course<br>code | Title  | Programme<br>and Theme | Monday Morning | Monday Afternoon | Tuesday Morning | Tuesday Afternoon | Wednesday Morning | Wednesday Afternoon | Thursday Morning | Thursday Afternoon | Friday morning | Friday Afternoon |
|----------------|--|------------------------|----------------|------------------|-----------------|-------------------|-------------------|---------------------|------------------|--------------------|----------------|------------------|
| Your<br>choice | Choose three courses and<br>max. one course per day part<br>(Design Studios have two day-<br>parts per week) |                        |                |                  |                 |                   |                   |                     |                  |                    |                |                  |

### Design Courses (Q3 +) Q4 (semester course, so same as in Q3)

| IDEM1210 | Multi Sensory Design Studio    | <u>Dfl 1</u>   |  |  |  |  |  |
|----------|--------------------------------|----------------|--|--|--|--|--|
| IDEM1230 | Speculative Design Studio      | <u>Dfl 3</u>   |  |  |  |  |  |
|          | Systemic Design Studio         | <u>Dfl 2</u> + |  |  |  |  |  |
| IDEM4220 | Systemic Design Studio         | SPD 2          |  |  |  |  |  |
| IDEM3210 | Tech-enabled Innovation Studio | <u>SPD 1</u>   |  |  |  |  |  |
| IDEM2200 | Product Futures Studio         | <u>IPD</u>     |  |  |  |  |  |

### **Programme Electives Q4**

| IDEM1212 | Assessment for Impact     | <u>Dfl 1</u> |  |  |  |  |  |
|----------|---------------------------|--------------|--|--|--|--|--|
| IDEM1222 | Designing Transformations | <u>Dfl 2</u> |  |  |  |  |  |
| IDEM1232 | More-than-Human Design    | <u>Dfl 3</u> |  |  |  |  |  |

| IDEM2212 | Intelligent Interactive Systems    | <u>IPD 1</u> |  |  |  |  |  |
|----------|------------------------------------|--------------|--|--|--|--|--|
|          | Data-Centric Design for Conceptual | <u>IPD 1</u> |  |  |  |  |  |
| IDEM2213 | Products                           |              |  |  |  |  |  |
| IDEM2222 | Life Cycle Assessment Methods      | <u>IPD 2</u> |  |  |  |  |  |
|          | Design Approaches for              | <u>IPD 2</u> |  |  |  |  |  |
| IDEM2223 | Sustainability                     |              |  |  |  |  |  |
| IDEM2232 | Computational Design               | <u>IPD 3</u> |  |  |  |  |  |
| IDEM2233 | Fundamentals of Biodesign          | <u>IPD 3</u> |  |  |  |  |  |

| IDEM3201 | Qualitative Research Methods for<br>Strategic Design | <u>SPD</u>   |  |  |  |  |  |
|----------|--|--------------|--|--|--|--|--|
|          | Quantitative Research Methods for                    | <u>SPD</u>   |  |  |  |  |  |
| IDEM3202 | Strategic Design                                     |              |  |  |  |  |  |
| IDEM3212 | Tech-enabled Entrepreneurship                        | <u>SPD 1</u> |  |  |  |  |  |
| IDEM3222 | Responsible Marketing                                | <u>SPD 2</u> |  |  |  |  |  |

### **Faculty Electives Q4**

| IDEM218 | Systemic Automotive Design |  |  |  |  |  |  |
|---------|----------------------------|--|--|--|--|--|--|
| IDEM219 | Videography                |  |  |  |  |  |  |
| IDEM308 | Graduation Launchpad       |  |  |  |  |  |  |



# Explanation of the schedule above

|  |  | Means the course is scheduled on the first 2 hours of the day part  |  |  |  |  |  |
|--|--|---|--|--|--|--|--|
|  |  | Means the course is scheduled on the second 2 hours of the day part |  |  |  |  |  |
|  |  | Means the course is scheduled on the whole day part                 |  |  |  |  |  |

# Other elective space opportunities

| Within the IDE faculty   | Outside the IDE faculty   | Outside the TU<br>Delft                                |
|--|---|--|
| <ul> <li>IDE MSc faculty electives (overview above)</li> <li>Extra MSc programme electives of your own MSc</li> <li>MSc programme electives of other IDE MSc programmes.</li> <li>Internship (15 EC)</li> <li>Study Abroad (30 EC)</li> <li>MSc elective courses without registration in MYTUDelft and no fixed schedule:         <ul> <li>ID5534 Cases on Tour (2 EC) – register via ID study association</li> <li>ID5541 Design Contest/Workshop (3 EC)</li> <li>ID555X Project Organisation (1 – 3EC) registration via ID Study association)</li> <li>IDEM403 Research (3 EC)</li> <li>IDEM404 Research (5 EC)</li> <li>Flight case (registration via ID Study association, scheduled on Monday morning in Q4)</li> </ul> </li> </ul> | <ul> <li>Courses from<br/>other TU Delft<br/>faculties (see the<br/><u>Study Guide)</u></li> <li>Courses at the<br/><u>Delft Centre of</u><br/><u>Entrepreneurship</u></li> </ul> | Courses at other<br>universities in the<br>Netherlands |

### Themes

### **Integrated Product Design**

### 1 Digital Design and AI

This theme focuses on the intersection of advanced digital technologies and design. You will explore Smart Products/Services, Data, Internet of Things, and Machine Learning to create reliable, responsible, and impactful design solutions.

Through a captivating blend of creative exploration, technology prototyping, and experimental research, you'll gain a profound understanding of how digital technologies reshape design methods, processes, and outcomes. This theme fosters an innovative mindset, empowering you to embrace the future with confidence and purpose.

### 2 Sustainable Design

Step into a world where products, services, businesses, and experiences come alive through sustainable and circular design. This theme empowers you to make responsible decisions about material sourcing, global supply chains, business models, product architecture, usage, recovery, and end-of-life processes.

### 3 Materialising Futures

This theme revolves around crafting innovative products fuelled by novel materials like smart textiles and living materials. You'll explore the power of computational design, diving into parametric and generative design techniques. Additionally, we'll delve into advanced fabrication technologies such as biofabrication and 3D/4D printing. The core of this theme lies in developing a profound understanding of these technologies through hands-on tinkering and making. Technical and experiential characterisation along with modelling and simulation form the backbone of our approach. With a strong emphasis on hybrid and adaptive material systems, we are driven by a common goal: creating designs that benefit people, society, and the planet.

### **Design for Interaction**

#### 1 Design for Human Interaction

This theme combines established design domains with modern notions of wellbeing. It emphasises understanding human needs in context and creating user-friendly designs that deliver meaningful experiences. You will explore micro- and meso-level interactions, connecting people with their environment through physical, perceptual, cognitive, and social means. You will learn to relate human needs to design characteristics and develop skills to conceptualise new interactions. This theme puts an emphasis on testing and evaluating effects on people to ensure impact in practice.

#### 2 Design for Societal Innovation

This theme explores how design can tackle important challenges in our communities, like sustainability, health, safety, and more. You will learn both theory and practical research methods to create meaningful solutions for society. Dive into the real-world complexities of governmental organisations and institutions, and discover how design can make a positive impact. You will learn to work with collaborative methods to shape public spaces and improve public services.

### 3 Design for Emerging Sustainable Futures

This theme explores design's capacity to discover, amplify, and imagine possible new realities. Courses invite students to strengthen their future literacy and teach them how to use it as lever for transformation. The theories and methods that are part of the theme will provide students with cutting edge perspectives on social, environmental and technological issues, and will help them formulate a role for themselves as critical, reflective and creative future-makers.

### **Strategic Product Design**

#### 1 Strategic Design for Technology-enabled Innovation

In this theme, we will explore how designers can play a pivotal role in driving technology transitions and tech-enabled innovation. Get ready to delve into the potential and impact of emerging technologies, honing your skills to craft visionary roadmaps, solutions, and business models. As a strategic designer, you will bridge the gap between technological advancements and human needs, ensuring alignment with societal priorities. Additionally, you will master the art of setting up interdisciplinary design-driven processes, fostering collaborative ecosystems centred around technology.

#### 2 Strategic Design for Social and Sustainable innovation

This theme focuses on empowering designers to play a strategic role in shaping innovation strategies within networks of organisations, governments, businesses, public sectors, and non-profit organisations. Creating a positive societal impact and fostering inclusivity lie at the heart of these collaborations. You will dive into the dynamics, enablers, and barriers of mission-driven innovation; explore how design can influence policy making and drive systems change; learn to design for sustainable consumer behaviour; discover how marketing strategies can support responsible innovation; and embrace the power of systemic design to address the complex and strategic aspects of social and sustainable innovation.