Designing Sustainability Transitions

What would a sustainable future look like? And how can we design for it? Developing your own answers to these two questions will be at the centre of this minor.

You will learn about advanced topics of sustainability and explore different perspectives on how to enact societal change, including the model of a circular economy. You will explore in detail different design methods and their effects on sustainability. You will be given numerous opportunities to develop specific technical and professional skills and will critically reflect on the ethical considerations of design for sustainability.

Throughout the semester you will work in teams composed of students from diverse educational backgrounds to apply the skills learnt in the course to a concrete design challenge, connected to external stakeholders (companies, charities, etc.). The underlying philosophy of this minor is that, in order to design for sustainability, you need to consider the whole system and rethink current structures beyond resource-efficient products and services. Sustainability will be approached from both environmental and social perspectives.

The learning approaches of this minor will combine a design project in interdisciplinary groups with lectures, expert talks, workshops, group discussions and field trips.

What’s in it for you
• You will gain a thorough understanding of the complex, multidisciplinary challenge of addressing societal needs within our planetary boundaries.
• You will be exposed to diverse perspectives on how societal transitions can take place and you will be supported into developing your own position on the topic, in line with your views and values.
• You will be exposed to a wide range of state-of-the-art design tools and methodologies and will be stimulated to develop your own sustainable design toolkit. Experts will give guest workshops and you will be given the opportunity to apply the methods in practical labs.
• You will gain unique experience in working with some leading organisations in multidisciplinary teams. The minor collaborates with different organisations and faculties on exploratory projects.
The programme
The minor Designing Sustainability Transitions spans 30 EC and comprises the following courses:

• **Sustainability issues and societal change**
  The minor starts with a two week course combining lectures, discussions and readings, aimed at deepening your understanding of the issues of sustainability and at exploring different views of how change can be enacted in society.

• **Value sensitive design**
  Designers rarely have the time to consider the long-term and indirect effects of their technologies. What are effects of the product on the larger community, what happens when the product is used in different cultures, and after the product is thrown away? Value Sensitive Design provides theory and method to account for human values in a principled and systematic manner throughout the design process.

• **Design approaches**
  You will receive introductory courses on three key design approaches for sustainability, including data-driven design and circular product design. You will get a chance to experiment with each of these in practice labs.

• **Demystify Green**
  In Demystify Green, you will investigate and numerically substantiate a sustainable claim found in current media.

• **Masterclasses**
  A series of masterclasses will expose you to a wider range of design techniques and professional skills, e.g. biomaterials, system mapping, or entrepreneurship.

• **Design challenge**
  The design challenge is a team effort: you will work together in groups of 4-5 students from different faculties. You will explore a specific sustainability transition topic, most likely provided by an external client, and put to practice the acquired knowledge and design techniques. You will be designing a concept for a new product, service, system, or transition design. You will also develop your own sustainable design toolkit.

For whom
Engineering, architecture, design and business students from universities worldwide on a level comparable to that of the TU Delft. Minors of the IDE faculty are open only for students from academic prorammes.