The Interactive Environments minor explores the possibilities for dynamic, interactive spaces in which people and buildings engage in a mutual relationship. By connecting data and experiences that develop through this relationship, the built environment becomes an interactive, adaptive and animate entity.

The course aims to merge experimental architecture, CNC prototyping technologies, human-computer interaction and the techniques of sketching with technology, to provide ambitious, multidisciplinary students with the conceptual and practical tools for mastering a newly emerging phenomenon: interactive environments.

The course structure of the minor Interactive Environments is built around a group project assignment to design for a relevant and concrete context (for example a children’s hospital). The students design, fabricate and construct an interactive environment to address the needs of users in this context.

What’s in it for you
- Learn to design for our technology-rich world. By applying strategic design methodologies via computation and interaction design techniques to produce socially, environmentally and economically sound design solutions and to demonstrate their qualities by developing prototypes.
- Learn how to collaborate in multi-disciplinary teams consisting of students from engineering, industrial design and architecture backgrounds. You are guided by a staff of researchers and teachers from similar disciplines.
- During the semester you will work from a dedicated design studio at the TU Delft Science Centre.
- A budget is available for prototyping.

Do you want to go beyond paper prototypes and build interactive installations?

Kuda: an installation that makes communication between people tangible by coding it with different color fluids throughout its intricate web of tubes.
The programme

The minor Interactive Environments spans a full semester of 30 EC.

- **Minor kick-off event**
  The minor starts with a two weeks long immersion into interaction design. There are various hands-on activities including a visit to Ars Electronica Festival in Linz Austria.

- **Main design track**
  The main course of the minor consists of five parts. Students start conceptualising in the first part by designing and building interactive prototypes. In the second part a 1:1 scale interactive prototype of the concept for an interactive environment is realised. The third part is dedicated to testing the environment with users. In the fourth part, the interactive behaviour is tuned in order to arrive at meaningful and understandable interaction. The last part is about exhibiting the environment at a public venue (for example the main hall of the IDE building).

- **Skill building courses**
  You will be exposed to programming (with Max/MSP and Arduino), 3D modelling (Rhino and Grasshopper) and also learn how to use laser cutters and CNC milling machines.

- **Workshops**
  To apply the learned skills in a design assignment, small workshops are given that deliver concrete results.

- **Inspirational lectures**
  Topics such as: experience design, modular architecture, multidisciplinary collaboration, copywriting, programming and exhibition design.

For whom

Selection takes place by means of a random draw. The following formula is used:

- 1/3 students of the TU Delft faculty of Industrial Design Engineering;
- 1/3 other TU Delft disciplines from constructive or design engineering related programmes;
- 1/3 other disciplines.

This allocation is done to meet the interdisciplinary nature of the minor.

Minors of the faculty of Industrial Design Engineering are open only for students from academic programmes.