



## This is TU/e:

- Medium-sized university
- Open and friendly atmosphere
- Personal contact with lecturers and staff
- More than 70 nationalities represented
- Best Dutch university in Times World University Rankings 2010
- English spoken everywhere in the Netherlands
- TU/e students in high demand among employers
- Brainport Eindhoven: part of the world's most intelligent community 2011

### More information about the Innovation Sciences graduate program

School of Innovation Sciences  
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e-mail: [graduate.is@tue.nl](mailto:graduate.is@tue.nl)  
[www.tue.nl/graduateprograms/is](http://www.tue.nl/graduateprograms/is)

### More information about TU/e, admission and enrollment

Education and Student Service Center  
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TU/e Graduate School  
2012-2013

Department of Industrial Engineering & Innovation Sciences

**TU/e** Technische Universiteit  
Eindhoven  
University of Technology



## Graduate program Innovation Sciences

## PhD programs

### Innovation Sciences

After gaining an MSc degree or PDEng degree, you can apply for a PhD position within the School of Innovation Sciences where you will learn to become, over a period of four years, an independent researcher. You will choose an individual research topic under professorial supervision and you will receive supplementary training in academic skills and advanced disciplinary knowledge (psychology, economics, sociology, development studies, science and technology studies (STS), history of technology, and/or ethics). You will present your work at international conferences and publish your research results in scientific papers. As part of your PhD project, you will also be involved in the teaching activities of the School. As a PhD student, you will become a member of the Eindhoven Centre for Innovation Studies (ECIS), which currently hosts 64 researchers and 38 PhD students (see <http://ecis.ieis.tue.nl>).

After gaining your PhD, you can continue your research at the university. Companies and government institutes are also keen to employ PhDs as you will have the ability to work at a very high scientific level. You possess specific knowledge that can be of great value for a company or government institute.

- Study possibilities: Full-time
- Degree: PhD
- Language: English
- Times of entry: All year round
- Duration: 4 years

Social media, new drugs, sustainable energy; these are just a few examples of new technologies that greatly affect our lives. Innovation is needed to deal with pertinent social problems such as aging, poverty and climate change as well as to enhance productivity and global competitiveness of firms and countries. On the one hand, these technologies provide us with new opportunities, yet on the other they create new challenges for people, firms and society as a whole. The Innovation Sciences program provides you with training on how to understand, to assess and to manage technological innovation from a multidisciplinary perspective, ranging from engineering, economics and psychology to sociology, history and ethics.

Within the Innovation Sciences graduate program, the following programs are available:

### Master programs

- Innovation Sciences
- Human-Technology Interaction

### PhD programs

- Innovation Sciences
- Human-Technology Interaction



## Student Niels Reijmer

Master Human-Technology Interaction

“I’ve always found it strange that products that are supposed to help us are so difficult to use. Technology should be usable by everyone. At Human-Technology Interaction you learn how to improve the interaction between technology and human users. That’s why I chose this Master. I’m currently doing research into recommender systems. For example the online bookstore bol.com uses one of these systems to show games, books and CDs that you might be interested in buying. To improve systems of this kind requires knowledge of how people take decisions, and how to make the collection of data as user-friendly as possible, but also of how this information can be used by an algorithm. That means you have to understand both technology and how people behave.”



## Student Berna Çelebi-Kalk

Master Innovation Sciences

“I studied Industrial Engineering in Ankara, Turkey. But this study was too much technical oriented with a micro view on problems. I wanted to learn more about societal aspects related to technical development. That is why the Master program Innovation Sciences suits me perfectly. It’s like a tasty soup with many beautiful ingredients: an engineering approach combined with sociological, economical, political and even psychological views. I believe you’ll find this soup only at the TU/e! The TU/e has a very good reputation in my country. It’s especially known for its international work field. In addition, my department is very flexible concerning graduation topics. So I’m graduating in sustainability issues in developing countries. I would like to contribute to make the world a more sustainable place.”

## Master programs

### Innovation Sciences

While innovation is crucial for economic growth, sustainable development and welfare, many inspiring technological ideas never make it into society. Innovation depends on technological development, but its success depends on a range of economic, social and cultural factors. You will learn to understand innovation and how you can improve innovation and direct it. You study the processes underlying the development and assessment of new technological options, for example, in the domain of environmental innovation, ICTs or health. You deal with technical, economic, social, legal, psychological and ethical aspects of innovation to formulate effective innovation policies, both in the context of developed and developing countries. Specialization topics in the first year of the program include Sustainability, Internet, Knowledge Economy and Globalization.

### Graduation options

The second year of the Master program consists of your international semester and the final Master project. During the Master you will spend one semester at a university in another country specializing in technology and innovation. The Master project is carried out in a business or non-profit organization, governmental agency, international organization or at the School of Innovation Sciences. The final MSc thesis project can be carried out either in the Netherlands or abroad.

### Human-Technology Interaction

Technological development offers new possibilities to make people’s daily live healthy, safe, fun and comfortable as well as enable people to make more sense of their lives. Nevertheless, most innovations are not readily accepted by users. For technologies to be really useful and successful, people need to be able to use them properly, and will have to trust, accept and adopt these technologies. Users need to be involved in the design and testing of new technologies so as to fulfill user needs. Effective technological development thus requires technical knowledge of artifacts and psychological knowledge of human behavior. This Master program provides fundamental knowledge of the psychological sciences covering basic themes such as perception, cognition, communication, motivation and attitudes. This basic knowledge is applied to a technological domain of your choice: Information and Communication Technology (ICT), sustainable energy or the built environment.

### Graduation options

The second year of the Master program contains your international track, your research project and your Master project. The research project consists of your first empirical research project, which is carried out in a team. The Master project consists of a research project carried out individually under the supervision of one of the researchers in the Human-Technology Interaction group of the School of Innovation Sciences. To meet the requirements,

your project must have the right balance between human behavioral and technological aspects. You can carry out your final project in the Human-Technology group of the School of Innovation Sciences, in a company or in a public organization.

### For all Master programs

- Study possibilities: Full-time
- Degree: Master of Science
- Language: English
- Times of entry: September and February
- Duration: 2 years (120 ECTS)