Welcome to the Faculty of Behavioural Sciences!

The Faculty of Behavioural Sciences provides specialized Master’s programmes in the disciplines of Psychology, Educational Science and Technology, Philosophy of Science, Technology and Society, Communication Studies and Teaching. Representing the “human touch” in the University of Twente’s “high tech-human touch” philosophy, we offer Master’s degrees that represent solid scientific and professional training in each of these disciplines.

Karen van Oudenhoven, dean of the Faculty of Behavioural Sciences

We are unique because we emphasize the principles of human behaviour in society. How can we design social and technical interventions that promote the quality of life of patients and the elderly? How can we design educational tools to improve learning processes throughout people’s lives?

Students also learn how to evaluate the impact of social and technological interventions on human behaviour. How does the internet change the development of friendships and professional communication? What is the impact on a citizen’s experience of safety when cameras are introduced in public spaces (airports, shopping centres)? What are the ethical considerations of introducing new technologies such as robots in hospitals? Students learn to apply scientific principles in a practical and multidisciplinary context.

Teaching takes place in an open atmosphere built on close collaboration between staff and students. We believe that excellence grows in a context where we place high demands on students, who in their turn place high demands on a stimulating learning environment. We also believe in individual initiative and in education that is tailored to the student’s needs. There are plenty of opportunities for students to create an educational programme that reflects their own interests and learning objectives. Our aim is to develop the individual talent that the world needs to build a sustainable and creative future. We invite students who share this ambition to come and study with us!
PROGRAMME

The Master’s in PSTS is the premier programme for learning how to critically analyse and assess the impact of scientific and technological developments on society.

How are information and communication technologies affecting our privacy? Can we anticipate the future implications of nanotechnology for society? Are there ethical limits to genetic modifications of animals and human beings? How do new technologies change our behaviour and our perceptions of the world? These are just some of the questions that you will explore in the Master’s in Philosophy of Science, Technology and Society.

PSTS is characterized by its empirical orientation. Rather than focusing only on the philosophical tradition or aiming to understand technology in general, you will analyse specific technologies and their impact on society. This combination of philosophy and technology is the hallmark of the PSTS programme, making it an ideal choice for philosophy students, for social science students and for students with a technical background.

PSTS has a strong international orientation: several of our lecturers are from abroad and the programme attracts students from all over the world.

You will analyse specific technologies and their impact on society

The PSTS programme has three profiles:
- Technology and the Human Being
- Technology and Values
- Dynamics of Science, Technology and Society

PROFILES

TECHNOLOGY AND THE HUMAN BEING

What is a human being? What is (personal) identity? Which cultural and/or natural features constitute human nature? How is the human being different from other animals? These questions revolve around how to understand and conceptualize the human condition. They have been investigated within different frameworks such as classical ontology (Aristotle), economy (Marx), phenomenology (Scheler, Heidegger), existentialism (Kierkegaard, Sartre), and psychoanalysis (Freud). In the twentieth century, authors like Plessner, Gehlen, and Foucault have, implicitly or explicitly, argued that technology plays an important role in the constitution of human nature and identity. According to them, humans have always shaped and extended themselves by virtue of technical tools and artefacts. In our modern era, technology (microscopes, MRI scans) has become an inherent part of scientific investigation and diagnosis, which also affects our view of human nature.

This profile focuses on how technology influences and constitutes human nature and human existence. In this context we also study how traditional boundaries between design and use are blurred in the interaction between the human actor and technological artefacts. Another important topic in this profile is the rapid development of mind- and body-enhancing technologies and their influence on human faculties such as rationality, self-consciousness, agency, and autonomy. In addition, we also reflect on the moral and ethical impact of these technologies on our daily lives.

TECHNOLOGY AND VALUES

This profile focuses on normative, evaluative and critical issues in relation to technology and society. Its central questions are on how technology can be developed and used in an ethical way, what good technology is, and
how both society and engineering should be organized so as to have technology that is ethically and politically acceptable. The normative focus of the cluster is reflected in its emphasis on public and private values in relation to individuals and society, and it evaluates or prescribes directions for the development of technology according to these values. We study values including freedom, justice, democracy, autonomy, privacy, human dignity, the intrinsic value of humans and nature, responsibility and well-being. We examine technologies including information technology and robotics, biomedicine, nanotechnology, environmental technology, and others. We consider a wide range of topics such as the ethical development of technology, ethical uses of technology, the ethics and politics of regulating technology, the ethics of emerging technologies, technology and the good life, technology and the quality of society, technology and the environment, technology and globalization and others.

The profile focuses on studies in ethics and social and political philosophy and combines these with studies from other disciplines, including science and technology studies (technology assessment, sociology of users, scenario studies, governance studies), social sciences, engineering and medicine.

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DYNAMICS OF SCIENCE, TECHNOLOGY AND SOCIETY
This profile explores the dynamics of science, technology and society by focusing on their practices, interactions, institutional and material arrangements, and their dynamic co-evolution. We address key questions such as: How is the development of knowledge shaped by its practical application and by the material and conceptual resources (instruments, models, laboratory settings) of its time, in a particular place or discipline? How do science and society mutually shape each other? Which patterns follow from socio-technical change? What are the limitations and the inherent potential of governing socio-technical change? How can these insights be mobilized for real-world innovation processes, such as supporting a more sustainable energy system?

During the courses we move from a detailed view of processes of knowledge development in the lab to a broader perspective which examines how socio-technical systems are embedded in particular ways of usage, production and regulation, and how socio-technical change may come about. Finally, we expand our historical and geographic perception in order to better conceive of how practices, arrangements and the dynamics of science, technology and society are situated in time and space. The profile is decidedly interdisciplinary, drawing on the perspectives and tools taken from philosophy, sociology, history and geography.
CAREER OPPORTUNITIES

PSTS graduates are skilled in analyzing and evaluating the impact of science and technology on society from a philosophical and multidisciplinary perspective. The employment market is clamouring for academics and professionals who possess these skills. Knowledge of actual technological developments combined with the skills to philosophically and methodically reflect on those technologies equips PSTS graduates with wide-ranging expertise.

Your professional profile will be a valuable asset both in the corporate world and government institutions. Our graduates go on to find employment in the academic world, R&D, consultancy, policy organizations, and commercial companies. A PSTS study advisor can help you plan your career after graduating.

You will be ideally suited for a job in:
- Policy making / Government (e.g. Cogem, Rathenau Institute)
- Academic world (e.g. a PhD position at Radboud University Nijmegen researching alternatives to animal testing)
- Consultancy (e.g. Tauw (environmental and civil engineering), Technopolis (innovation))
- Industry / business (e.g. food, textiles, oil, chemicals, machinery, automotive, IT, communication or journalism, depending on your Bachelor’s degree)
- Research & Development (e.g. TNO, Energy Research Centre of the Netherlands ECN)

ACADEMIC CAREER

If you are interested in obtaining a PhD, you may wish to consider applying for a place on the 3TU Ethics and Technology programme (see www.utwente.nl/tgs/programmes for details).

ADMISSION REQUIREMENTS

DUTCH HBO STUDENTS
Graduates with a Bachelor’s degree in a relevant field of study of a Dutch HBO may be considered for admission. Students need to pass an English academic writing language test. Invited to apply for admission. In addition international students need to pass an English academic writing test. More detailed admission requirements are available at www.utwente.nl/master/psts

UNIVERSITY OF TWENTE AND DUTCH UNIVERSITY STUDENTS
Students holding a Bachelor’s degree in (Applied) Natural Sciences, Engineering Science, Social Science and Philosophy from a Dutch University qualify for direct admission; conditions may apply.

INTERNATIONAL STUDENTS
International students with a Bachelor’s degree or equivalent qualification in (Applied) Natural Sciences, Engineering Sciences, Social Sciences or Philosophy are invited to apply for admission. In addition international students need to pass an English academic writing test. More detailed admission requirements are available at www.utwente.nl/master/psts

academic career
If you are interested in obtaining a PhD, you may wish to consider applying for a place on the 3TU Ethics and Technology programme (see www.utwente.nl/tgs/programmes for details).
Lars Assen received his Bachelor’s degree in Technical Medicine. He is currently enrolled in the Master’s programme in Philosophy of Science, Technology and Society (PSTS).

“You can be admitted to the PSTS programme with a Bachelor’s degree in any technological background. During my Bachelor’s I realized that I was more interested in reflecting on technologies than in engineering or programming. The Master’s is about reflecting on technology and science. PSTS students learn to reflect and use empirical data to arrive at better informed discussions about actual problems in society. My aim is to make philosophy practical. However, I can use insights from my Bachelor’s and combine my knowledge about medicine and the medial practice with the skills and insights from my Master’s.

The Master’s focuses on the development of skills such as discussions, argumentation, reading, text analysis and presenting. During the Master’s you’ll write a lot of papers and essays, which will help you to develop your writing and argumentation skills. My most important insights came when I was still writing as a scientist, which has a major impact on the eventual structure and argument of the paper. I think that all of the papers helped me to become a better philosopher and assisted me in assessing technology and science differently.”

I don’t think society or human beings can live or exist without technology, but I think that it’s important to evaluate what is desirable and whether some technology is in fact controversial. For me, the question often is: how do we want to implement the technology or how do we want to use scientific information?”