

Educational vision Healthcare studies University of Twente

Pioneering and agenda-setting healthcare education

Healthcare is in constant motion. The many trends and developments affecting the sector have profound implications for the education aimed at preparing students for a career in this field. The population is ageing, people are living longer and the pressure on budgets is growing. Patients are demanding more control and more personalized solutions. Perspectives on illness, health and lifestyle are shifting. Scientific and technological developments are blurring the boundaries between disciplines and regions. Exciting new opportunities are emerging, creating space for new synergies, roles and specializations.

Leading the way in an unpredictable, complex and globalized world

The healthcare programmes at the University of Twente provide pioneering and agenda-setting education aimed at preparing students for a career in this sector. With our Bachelor's and Master's programmes Health Sciences, Biomedical Engineering and Technical Medicine we equip science professionals to implement innovative, relevant healthcare improvements in today's unpredictable, complex and globalized world.

Seven essential skills and qualities

In order to achieve this, our educational vision focuses not only on providing students with knowledge and skills in their field of study, but also on developing a broader range of '21st century' skills and personal qualities. We stimulate students:

- to acquire in-depth knowledge and skills in their own field of study;
- to understand and anticipate on current trends and developments;
- to develop a working attitude focused on self-reflection and lifelong learning;
- to address and solve complex problems from a cross-disciplinary perspective;
- to gain insight into the role, the possibilities and the limitations of new technologies;
- to look for synergies across and beyond disciplinary and cultural boundaries;
- and, above all, to demonstrate creativity, courage and ambition in making new, surprising connections and facing new challenges.

High Tech, Human Touch

Our healthcare programmes are a compelling illustration of the University of Twente's 'High Tech, Human Touch' philosophy. We believe the future of healthcare lies in this crossing of disciplines. The University of Twente breathes technology and for this reason our educational vision focuses on healthcare *and* technology. Our immediate access within the university to technical-medical research, technological innovations and state-of-the-art facilities provides us with the necessary conditions to live out our vision and ambitions. It gives us a unique position as healthcare educators. The opening of the Technical Medical Centre at the University of Twente, as a breeding ground for (international) education, research and the realization of health innovations, will only strengthen this position and the opportunities it creates.

Application-orientated and socially relevant

The University of Twente has traditionally drawn its (scientific) questions from societal issues. Our drive to combine fundamental science with real value for society uniquely equips us to connect deeply with our research domains. Thus technology, social involvement and the search for real solutions are central to all our programmes. By bringing students into contact with societal groups and 'letting them loose' on social issues throughout their education, we help them become mature and engaged citizens, with a strong sense of connection with the world around them.

Distinctive courses that complement and strengthen each other

Our healthcare programmes Health Sciences, Biomedical Technology and Technical Medicine operate on a level of equality, each complementing and strengthening the others. We train Health Scientists to analyse healthcare issues and trends from different perspectives, and to advise on using and implementing new technologies. Our Biomedical Technology students are trained to design and develop technologies. And we teach Technical Medicine students how to harness the potential of technology in treating individual patients. At that point it is up to the Health Scientists, once again, to evaluate the use of the technologies in question.

Qualification, socialization and personalization

Healthcare is a singularly human-oriented sector. In a society in which technology is becoming increasingly dominant, having an eye and an ear for the human factor can make a huge difference. Our educational vision embraces this fact. This is why, with all of our students, we work hard on three developmental aspects:

- Qualification (acquiring professional skills and knowledge in the relevant field of study);
- Socialization (learning to act responsibly in social relationships);
- Personal development (independent, creative and (self-)critical thinking and acting).

As students participating in our education face an increasingly globalized job market, all of these aspects have an international dimension. We incorporate international knowledge and insights into our education and train professionals to have an open and respectful attitude towards others and themselves. Our graduates are professionals who are aware of their own actions and of the people around them. They can handle diversity, have a cosmopolitan view and can adapt their behaviour to different social, cultural and medical conditions.^{1, 2}

Twente's Educational Model

Our Twente Educational Model supports us in carrying out our vision. Designed to bring out the best in our students, it has become a powerful tool for preparing students for tomorrow's challenges. A number of key points are important to us:

- 'Student-driven Learning', in which we give students control over their own learning process, helping them to become more responsible, self-aware and entrepreneurial;
- A strong emphasis on team projects centred on social issues and relevant fields of study, in which students apply knowledge, learn to collaborate and develop more understanding of themselves and their field of work;
- A focus on 'T-shaped professionals' who possess in-depth knowledge of their own field of study and a strong ability to connect with colleagues from other domains or cultures.³

High expectations

We have high expectations for our education. We want to train students to be self-aware professionals capable of finding new paths, recognizing and understanding new challenges, and designing new solutions. This means we also have high expectations of our students *and* our staff. We realize that our vision places constantly shifting demands on our staff. It requires them to be flexible, alert, focussed on people. It means we must have a strong ability to team up with students in order to encourage, question, challenge, trust and release them – not as know-alls, but as experts, coaches, supervisors. This is how we help students to grow, to draw out the best in themselves and their studies and to take their place in the field and in society. It is what makes our university a 'community of learners', an environment that is constantly learning and growing from a basis of shared educational values and standards – and an environment that continues to attract students and professionals from elsewhere.

Sources

¹ Dutch Ministry of Education, Culture and Science (Ministerie van Onderwijs, Cultuur en Wetenschap) (2015), *Strategische agenda hoger onderwijs en onderzoek 2015-2025*.

² Dutch Ministry of Education, Culture and Science (Ministerie van Onderwijs, Cultuur en Wetenschap) (2016), *Voortgangsbrief internationalisering van het onderwijs*.

³ University of Twente (2017), *Student-driven learning at the University of Twente*.