

creative technology – a new bachelor at UTwente

contact information

dr Z. Ruttkay
Faculty of Electrical Engineering, Mathematics and Computer Science
University of Twente
email: zsofi@cs.utwente.nl

Content and approach

The programme has four major components: Technology, Creativity, Design and Business. Technology covers the basics of Mathematics and Computer Science, and the themes New Media and Smart Technology. Students make a choice between the two themes as a track of specialisation.

In the didactic concept the stimulus for creativity in study units Creative Applications and Creative Explorations is central. Students will build their portfolio, and are encouraged to start companies. The concept of just-in-time learning has not been adopted. The programme is a mixture of disciplinary courses and project based study units. Study load of the entire programme is 180 EC (in both tracks).

Expected students

Students with any VWO profile may be enrolled. The intake procedure is elaborate. Every potential student who applies is thoroughly screened and gets an individual advice about the chances of success. This approach is chosen to meet the challenge of attracting more students and to educate the new type of engineer. The quality of this education will gain from the presence of students with all kinds of backgrounds. An intake of at least 60 students per year is expected. Market research shows an even higher potential.

Our mission

Our mission is to develop creative minds capable of designing new concepts and applications for newly developed and developing Information and Communication Technologies. Artistic, technical and practical aspects in systems in the fields of new media and smart technologies are integrated with an academic approach and methodology. We nurture creative minds and offer theoretical, technical and practical training in a stimulating atmosphere. Creative Technology is a multidisciplinary curriculum, incorporating design, electrical engineering, computer science and mathematics in new ways, with a strong attention for the psychological as well as philosophical context.

Motivation and context

Creative Technology is meant to be the first university bachelor of science curriculum in the Netherlands, dedicated in content and in teaching methods to develop creativity of young people on an academic level to invent novel technological applications.

These new types of engineers should not only have a creative and artistic mind, but also bear the signature of an academic education, with regard to their technological knowledge, the capability for an abstract and analytical approach to problems, and a scientific methodology to frame and test the feasibility and social implications of proposed solutions as well as to inventory the perceived need by possible users. Moreover, they should be able to identify if specific expertise is needed, and eventually collaborate in a multidisciplinary team.

The National ICT Strategy towards the Creative Industry

In recent years we have seen in the Netherlands a number of responses to ICT developments, demonstrating the potential(s) of the Creative Industry in our country. The most prominent and in the near future most influential action along this line is the formation of the ICT Innovation Platform Creative Industry in Spring 2007. In the Strategic Research Agenda, launched on 8 May 2008 at the ICT Delta Congress, it is explicitly stated that **creativity is the white spot in academic education**, (IIPCREATE¹ p.15). The Creative Technology bachelor of science programme embedded in a technical university is a direct response to these needs.

¹www.iipcreate.com