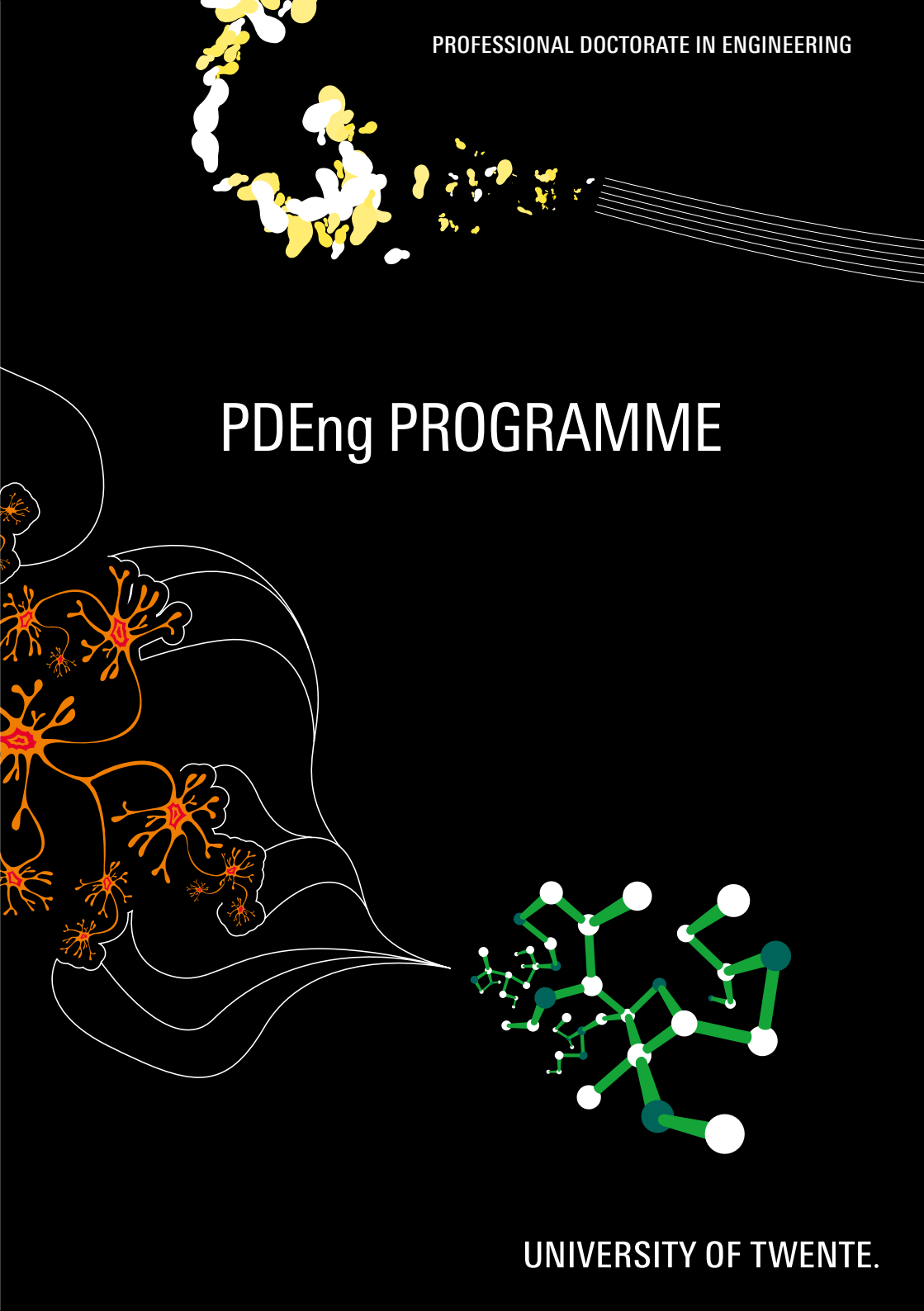


PROFESSIONAL DOCTORATE IN ENGINEERING

PDEng PROGRAMME



UNIVERSITY OF TWENTE.



PDEng PROGRAMME

ARE YOU A GRADUATED MASTER WHO IS INTERESTED IN TECHNOLOGICAL DESIGNS AND WOULD YOU LIKE TO JUMP-START YOUR CAREER?

OR IS YOUR ORGANISATION SEARCHING FOR A DESIGN SOLUTION FOR A TECHNICAL PROBLEM?

THE PROFESSIONAL DOCTORATE IN ENGINEERING PROGRAMMES AT THE UNIVERSITY OF TWENTE MIGHT BE JUST THE TICKET!

The Professional Doctorate in Engineering (PDEng) programmes educate trainees to develop high-quality, creative and innovative designs for complex technological issues. The technological designer will be highly capable in linking various disciplines and thereafter integrating them to produce effective designs. The programme combines state-of-the-art technical expertise with professional development to result in an inspiring and relevant learning process.

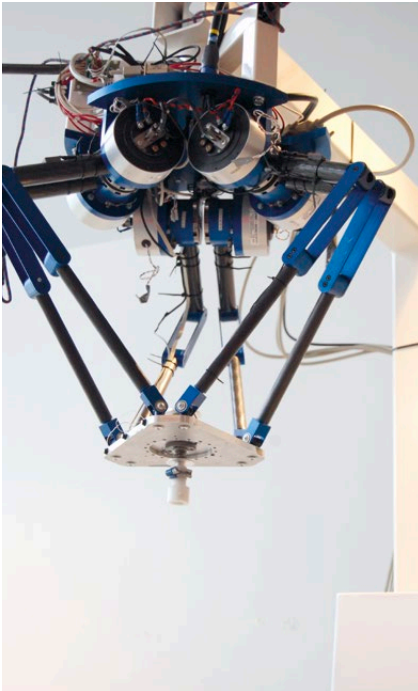
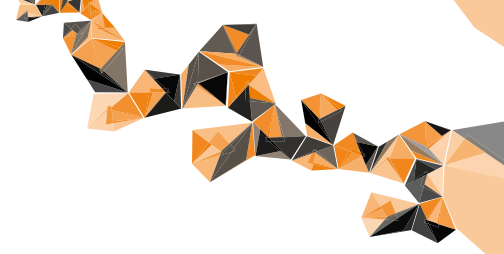
A PDEng trainee follows a 2 year post-Master's designer programme at the University of Twente. In consultation with an organisation, this tailor made programme will be designed to educate trainees who are

able to design high level and creative designs for complex issues with a multidisciplinary character. Amongst others, this means that the trainee can:

- create a design for multidisciplinary issues individually for an organisation;
- give input on larger projects both individually and together with colleagues;
- change quickly between different kind of levels;
- give direction to the realisation of a design with a team.

The University of Twente offers a diversity of post-Master PDEng programmes.

See www.utwente.nl/pdeng for the description of the specific PDEng programmes.



project – a real problem that needs to be solved. This project will integrate a number of (sub-) disciplines.

The educational component and the design project can be scheduled parallel or sequentially. This will be looked at with the placement organisation and the opportunities available at the university.

During the programme, the trainee will be supervised by both engineers from industry as well as university staff.

First year

Second year

Professional development courses (~10%)

Deepening and broadening courses (~40%)

Design Project (~50%)

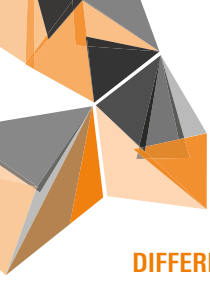
TRAINEES

The PDEng programmes combine academic research in a professional context with education in a range of related subjects. The two years consist of three main components: professional development, in-depth and broadening courses, and a technological design project:

- The courses provide the trainee the necessary technological and non-technical background to evaluate the effects in the industrial context.
- During the design project, the trainee will spend his time working in industry on a challenging and innovative technological design

DIPLOMA AND DEGREE

After successful completion of the programme, the trainee will receive a certified diploma. He/she will be entitled to use the degree of PDEng and will be registered as a Technological Designer in the register kept by the Royal Institute of Engineers in the Netherlands (KIVI). The quality of the programme is assured by an assessment and certification procedure carried out by the Dutch Certification Committee for Technological Designer Programmes (CCTO).



DIFFERENCES BETWEEN PDENG AND PHD

Although the PDEng and PhD are both recognised as postgraduate titles, the PDEng is a practical oriented professional doctorate in engineering which is better suited to the direct needs of industry, whereas the PhD focuses on scientific research. The three most pronounced differences between a PhD and PDEng programme are:

- The PDEng has a duration of 2 years whereas the PhD has a duration of 4 years;
- The PDEng trainee is engaged with the professional field, the PhD trainee is directly engaged with the university;
- The PDEng focuses on (technological) designs, the PhD focuses on research.

If you are an ambitious student who has completed a Master's degree and would like to focus on technological designs, then a PDEng programme might be the perfect opportunity for you!

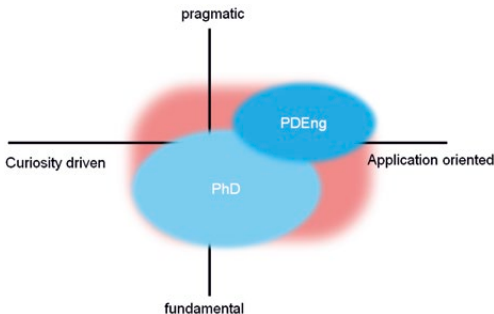
TESTIMONIAL

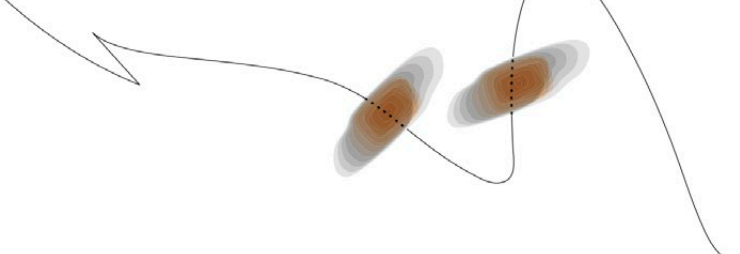


NIELS VOSSEBELD TRAINEE PDENG IN CIVIL ENGINEERING

"What I like the most about the programme is the tailor made character of it. There is a lot of freedom in choices for all parties. Another big advantage - compared to a PhD - is that the PDEng programme is shorter and it better fits to my pragmatic mind set."

"Of course I could have chosen for a regular job or a traineeship in the professional field, but the PDEng has a knowledge based approach. With the knowledge I can distinguish myself."





ORGANISATIONS

The focus of the programme is on design, and there are lots of possible choices for specialisation in a specific field.

The organisation in which the trainee is placed, is asked to come up with a design problem. The trainee is responsible for a solution in consultation with the organisation and the University of Twente. The basic principle of the PDEng programme is that the trainee, the set of courses and the expert coaching will come together with only one thought: 'the best possible solution for the design problem'. Therefore the trainee, the composition of the curriculum, and the choice of his supervisor/professor will be made together with the placement organisation.

Trainees all have a Master's degree, but comparing to a regular Master's student, the PDEng trainee has more advantages. You have access to a trainee who is able to switch quickly between different levels, has a wider range of skills in creativity and thinking out-of-the-box, and is able to make better connections between different disciplines and integrate them into a design. Within the PDEng programme there will be ample attention for professional development.

The selection procedure for this PDEng programme is very strict, which means only the best MSc graduates will be hired!

An added value is that during the project the organisation will become familiar with the trainee and can determine if he/she fits within the organisation when the project has ended. Many graduates have found challenging jobs at their placement organisations.

It is also possible that employees in an organisation would like to pursue a PDEng programme. With the correct background, these employees can smoothly enrol in the PDEng programme as well.

FINANCING

The PDEng is a joint financed programme by the organisation and the university. The trainee can be on the payroll of the organisation or on the payroll of the University of Twente:

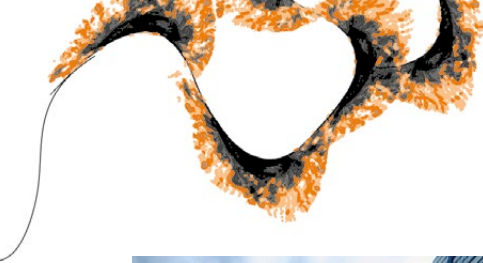
1) the trainee is on payroll of the organisation

Costs: € 15.000 a year for education, supervision and the possibilities to make use of the knowledge infrastructure of the University.

2) the trainee is on payroll of the University

Costs: € 32.500 a year for salary of the trainee, education, supervision and the possibilities to make use of the knowledge infrastructure of the University.

Other methods are also possible, and can be negotiated in consultation with the organisation and the University of Twente.



THE UNIVERSITY OF TWENTE

High tech, human touch. That is the University of Twente, located centrally in Europe in the east of the Netherlands in the city Enschede. The University of Twente is where talent can best realise its full potential. Together, 3300 scientists and professionals carry out groundbreaking research, bring about socially relevant innovation, and provide inspiring teaching for more than 9000 students. To us, entrepreneurship comes as second nature.

PDEng, AN INITIATIVE OF THE 3TU FEDERATION

Hundreds of companies have already had good experiences with the PDEng programmes that are offered at the three universities of technology in Netherlands. The universities of Delft, Eindhoven and Twente are responsible for the post-master design programmes offered under the auspices of the Stan Ackermans Institute, 3TU School for Technological Design. For more information: www.3tu.nl/sai

INTERESTED?

The PDEng programme is the perfect opportunity for talented students to boost their career and for organisations that need solutions for technological design problems. For more information, see our website www.utwente.nl/pdeng, or contact us via the contact details below.

Information for organisations

Dr.ir. V.T. (Timo) Meinders
Coordinator PDEng programmes at the University of Twente
Tel: + 31 53 489 4360
Email: v.t.meinders@utwente.nl

Information for students

P. (Peter) Jansen, MSc.
Office manager PDEng programmes at the University of Twente
Email: p.jansen@utwente.nl