



**ENGD
PROGRAMME
ENERGY &
PROCESS
TECHNOLOGY**

UNIVERSITY OF TWENTE.

ENGD PROGRAMME ENERGY & PROCESS TECHNOLOGY

Have you finished your master's programme and are you ready for a new challenge? Are you interested in technological designs and would you like to jump-start your career?

The EngD programme Energy & Process Technology at the University of Twente might be just the ticket! It's a two-year post-master's programme with a focus on design.

The EngD (Engineering Doctorate) programme Energy & Process Technology will educate you to develop high-quality, creative and innovative designs for complex technological issues. As a technological designer, you will be perfectly capable in linking various disciplines and then integrating them to produce effective designs.

THE PROGRAMME

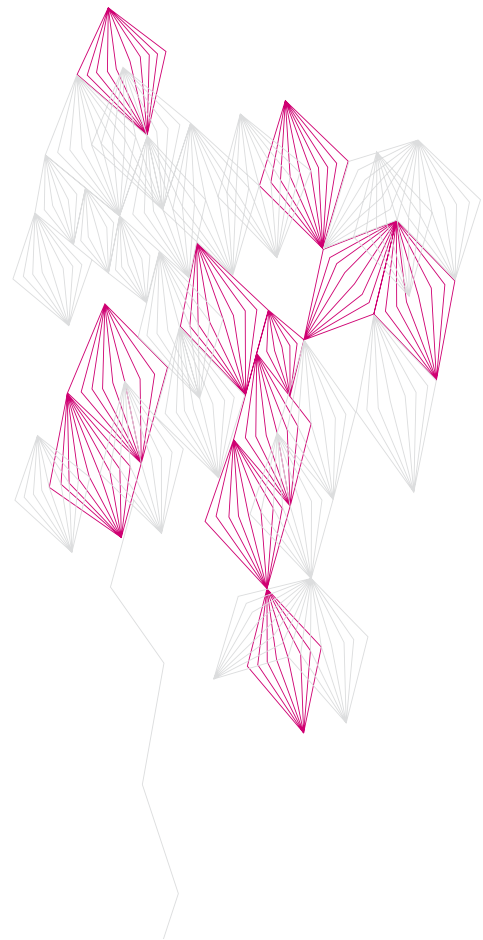
The post-master EngD programme combines academic research in a professional context with education in a range of related subjects. It involves coursework and culminates in a design project. As a trainee, you will be employed by the University of Twente or you will be placed at a company. During your employment you will receive a salary.

The two-year programme comprises three main components: professional development, in-depth and broadening coursework, and a technological design project for a company. The educational component and the design project can be scheduled parallel or sequentially. For each EngD trainee, the educational programme is tailored to the specific design project. The EngD programme is build up as follows:

1. **Professional development** (~10% of programme), including professional effectiveness and electives such as technical writing, project management, interviewing skills, and conflict management ;
2. **State-of-the-art post-graduate education** (~40% of programme), comprising generic courses such as Systems Engineering and Design Methodology, and courses that are focused on the design project. See www.utwente.nl/go/engd-ept-courses for an anthology of courses;
3. **A technological design project** (~50% of programme), focusing on the execution of a design as a technological solution in the energy, process, or material industry. During the design project, you will directly apply your newly acquired expertise. Create technological innovations relevant for industry and society.

DIPLOMA AND DEGREE

You will receive a certified diploma upon successful completion of the programme. You will be entitled to use the academic degree Engineering Doctorate (EngD) and you 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 Netherlands Certification Committee for Technological Designer Programmes (CCTO, Nederlandse Certificatie Commissie voor Opleidingen tot Technologisch Ontwerper).



ENERGY AND PROCESS TECHNOLOGY

Projects in the field of energy and process technology are becoming more and more complex. Therefore, the market requires highly qualified designers who are experts in the various technical and non-technical aspects of conflicting issues. Furthermore, the market requires employees who are skilled in working in a multidisciplinary design team and knows how to approach complex issues and arrive at practical solutions.

The purpose of the EngD programme is to educate trainees who will be the 'new experts' in modern company. Providing relevant developments for the products and processes is the main objective. The programme is based on functional and market based requirements and focuses on quality, environment en sustainability. The branches where you can work for vary from large multinationals to smaller companies in the energy-, process- and materials sector.

STUDYING AFTER YOUR MASTER'S: ENGD OR PHD?

Although the EngD and PhD are both postgraduate titles, the EngD programme and the PhD process are not equivalent. The EngD is a practical oriented doctorate in engineering which is better suited to the needs of industry, whereas the PhD focuses on scientific research.

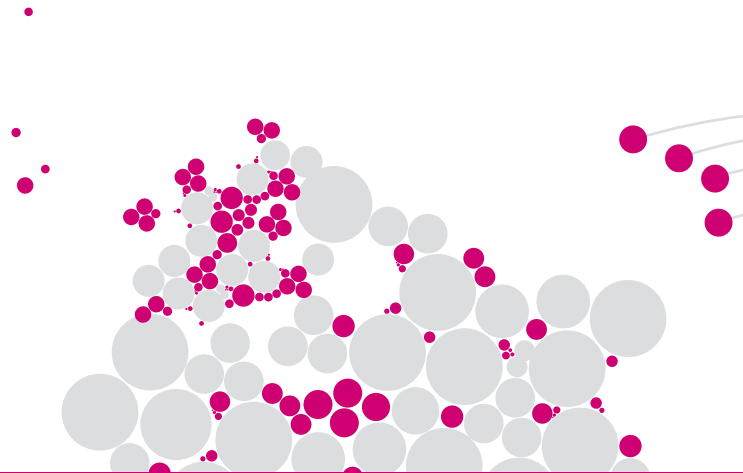
The three most pronounced differences between a PhD and the EngD programme for you as a trainee are:

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

To summarise: if you are an ambitious student who has completed a master's degree and would like to focus more on design and less on science, then the EngD programme Energy & Process Technology is the perfect opportunity for you!

INTERESTED?

The EngD programme is the ideal step for talented students with a master's in Mechanical Engineering, Chemical Engineering, Sustainable Energy Technology, Process Engineering, Energy Technology, etc., who are interested in designing solutions for complex technological problems. If you would like to apply for this EngD programme, check www.utwente.nl/vacancies to see if there are any open vacancies, or look at www.utwente.nl/go/engd-admission for an open application.



"For the development of tires, extensive road tests are necessary. Up to date, there is no lab method and equipment to measure dry grip with a satisfying correlation with road vehicle tire performance. The goal of my project i"

- Marzieh Salehi -



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. Students and staff are the key. Together, 3300 scientists and professionals carry out ground-breaking research, bring about socially relevant innovation, and provide inspiring teaching for more than 9000 students. To us, entrepreneurship comes as second nature. The campus is home to around 100 businesses, including student-run businesses. The University of Twente has also generated more than 700 successful spin-off companies. The university's business park, Kennispark Twente, encourages and assists entrepreneurs to start new companies. But there's so much more than that happening on our wonderful, green campus. Our sports and cultural facilities are unique and we host events such as the world's largest student think tank, Create Tomorrow.

TWENTE GRADUATE SCHOOL (TGS)

The Post-Master EngD programmes at the University of Twente are part of TGS, which is the University section that registers doctoral students and EngD trainees. The mission of TGS is to train and educate excellent researchers and designers, usually at the start of their career, and to present and promote excellent research via clustered or separate (professional) doctoral programmes. TGS coordinates high-quality educational programmes

based on topics closely related to the work of the university's research institutes, taught and supervised by expert researchers.

ENG D, AN INITIATIVE OF THE 4TU FEDERATION

Hundreds of companies have already had good experiences with the EngD programmes that are offered at the four universities of technology in the Netherlands. The universities of Delft, Eindhoven, Twente and Wageningen are responsible for the joint post-master's design programmes offered under the auspices of the Stan Ackermans Institute, 4TU School for Technological Design. For more information: www.4tu.nl/sai

INFORMATION ABOUT THE PROGRAMME

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