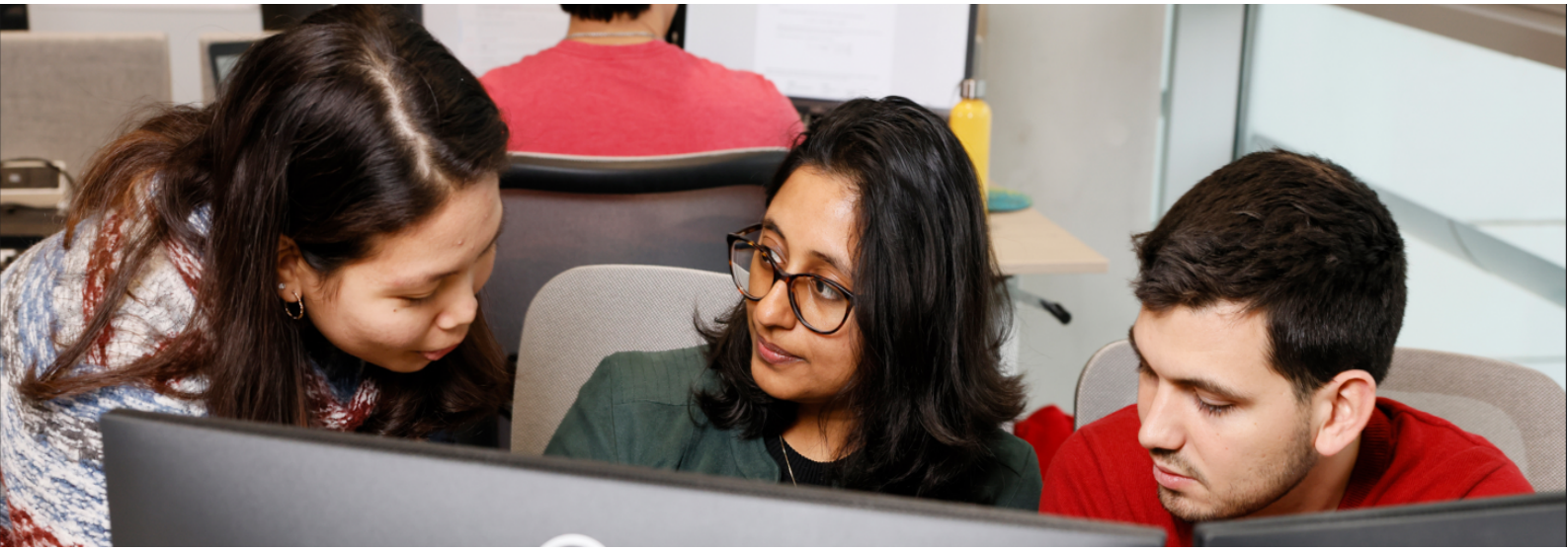
EngD
design the future

ENGINEERING DOCTORATE
www.tudelft.nl/engd

Engineering Doctorate in Product, Process and Equipment Design

Kick off your career in the process industry in Delft!



ABOUT THE PROGRAMME

Join a unique programme, where you apply your technical knowledge to projects with major players in the process industry at a doctorate level

Our Engineering Doctorate (EngD) programme in Product, Process and Equipment Design will train you to design fit-for-purpose, first-of-its-kind products, processes and equipment. In addition to deepening and broadening your knowledge, you will learn about multi-disciplinary problem-solving, project management and functioning in multicultural teams. You'll also gain expertise in process development, conceptual design and engineering.

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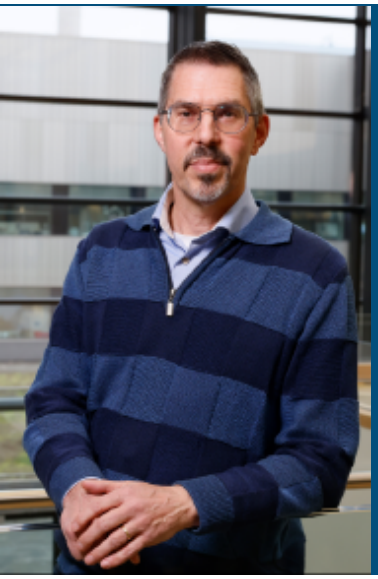
Duration	24 months
Credits	120 EC
Language	English
Salary	€2,618 per month



"Product and process design – driving innovation" is the Engineering Doctorate (EngD) degree's main trademark.

This EngD programme lets you acquire and develop your product and process design skills while working on real design challenges for and with our partners.
You will learn how innovation is sped-up by bringing the latest design methodologies, tools and technological developments to bear in solving challenges in the energy transition, circular economy and health & nutrition fields. As an Engineering Doctorate ("the innovation degree") graduate with significantly broadened knowledge, design and personal skill set, you are ready for a head start in innovation in (chemical) industry and beyond."

Pieter Swinkels
Programme Director

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REQUIREMENTS

Keen on international and innovation work experience, excellent English, you have an open, creative mind and a critical attitude.

The programme welcomes applications from well-qualified students who have successfully completed 5 years of university training (MSc, Ir, Drs):

- You must hold an MSc degree in Chemical Engineering, Biochemical Engineering; Applied Mechanical Engineering (with specialization related to process engineering, such as Industrial Process Equipment and Energy Systems), Applied Earth Sciences (with specialization Raw Material Processing or Petroleum Engineering), Physical Technology.
- We expect an interdisciplinary attitude, an eye for application of technology in industry and team skills.

Marianna Kaloutsi
EngD trainee PED

My Individual Design Project is on blue hydrogen with Shell. During the span of one year, I apply the knowledge and experience gained in the first year.

The systems design approach and team working skills experienced in the group design project are key competences. Blue hydrogen is produced from fossil fuel feedstock. However, the carbon dioxide produced, instead of emitted, is captured and stored, reducing the carbon footprint of the hydrogen. My project focuses on evaluating different technologies and designing alternative processes which are attractive from an economic and environmental aspect.

THE LEARNING PROCESS

In your first year, you'll follow advanced courses in engineering and gamma disciplines and you'll participate in a group design project. During your second year, you'll execute an individual design project at, or in close collaboration with, a partner in the process industry. Here's where your industrial and academic knowledge will truly be tested as you apply it in the real world. Our projects cover product, process and/or equipment design in the areas of oil & gas, energy, base & specialty chemicals, pharmaceuticals, and the food industry.

Application Deadline	
For September start	1 May
For February start	1 October

You will be working in an inspiring international scientific ecosystem with fellow trainees from all over the world. If all goes well, this two-year position will lead to an Engineering Doctorate degree, focused on integrating several disciplines to innovatively design processes and process equipment. This expertise is in demand and you will enjoy great prospects for a professional future career in the Dutch and international industries.

Further information

Sabine Venema
Interim Prog. Coordinator

+31(0)15-2786223
ped-engd@tudelft.nl

Van der Maasweg 9 2628
HZ Delft

Faculty of Applied Sciences
Department of Chemical Engineering

TU Delft