I'M DESIGNING AN INTELLIGENT MICROSCOPE FOR THERMO FISHER SCIENTIFIC

**Dmytro Kondrashov,
PDEng trainee
Software Technology**

PDENG PROGRAM

Software Technology (ST)

TU/e

**EINDHOVEN
UNIVERSITY OF
TECHNOLOGY**

TU/e PDEng programs

Are you about to receive your master's degree, but are you not quite done learning? Are you ready to sink your teeth into a high-tech project of your own? Join one of the Professional Doctorate in Engineering (PDEng) programs at the Eindhoven University of Technology (TU/e). You will become an expert in high-level technological design and gain valuable work experience in the leading high-tech companies. In this brochure, you will learn more about the PDEng Software Technology program.

ABOUT SOFTWARE TECHNOLOGY

The high tech industry needs highly skilled professionals. The market is constantly changing and the emergence of new technologies means there are many exciting opportunities for innovative products and new business. These developments result in increased product complexity. Technological designers and architects can handle such complexity and lead the process of creating and delivering new high tech products. Such products involve a great deal of software nowadays. As a technological designer you can have the rewarding task of translating new ideas into software and system designs for innovative products. When you want to pursue such a career on your own, you - as a newly graduated MSc - will have a long way to go. However, the designer program on Software Technology (ST) will prepare you for such a career and give you a head start. In the ST program we provide near-life situations where you work in teams on actual industrial problems provided by our industry partners. You will experience the challenges mentioned above and learn how to deal with them in different roles while coming up with a sound solution.

PROGRAM STRUCTURE

ST is a two-year, full-time and prestigious PDEng program. You will be registered as an employee of TU/e and receive a salary as well as an attractive benefits package. Upon completion of the program, you will be awarded the Professional Doctorate in Engineering (PDEng) Degree.

Courses
During the first 14 months you learn new technologies and broaden and deepen your knowledge of software technologies. You spend about half your time following courses and workshops, supervised by lecturers who have several decades of worldwide design experience with high tech companies. The lecture program is

CONQUERING CHALLENGES REQUIRES KNOWLEDGE AND MOTIVATION. KNOWLEDGE COMES FROM THE PDENG PROGRAM, MOTIVATION COMES FROM THE HEART

**Dr. Wilbert Alberts PDEng
Senior Software Architect, ASML**

ABOUT TU/e

- Leading in engineering, science & technology
- High-quality research and education
- Excellent modern facilities
- International community of more than 80 nationalities
- Friendly, open culture
- International network with prominent universities and institutes
- TU/e alumni in high demand among employers
- Strong position in Brainport Eindhoven, the Dutch high-tech region

structured to provide the solid background needed for industrial projects, including software architecting and technological design methods and tools.

ST is complemented with state of the art workshops on topics from areas such as data science, model-driven development, Artificial Intelligence and Internet of Things, especially tailored to the program and delivered by our TU/e staff.

Training projects

The other half of your time is spent working on projects (real problems) from industry that are assigned by industrial partners,

including well-known international companies such as ASML, Océ, ESA, CERN, Bosch and Philips. During these training projects you work in teams as is common in industry. You solve problems and develop innovative solutions meeting industry standards.

You master all the aspects of teamwork, different roles, supported by non-technical courses and professional development.

Design project

You will spend the last ten months in industry at a company working on a challenging and innovative technological

design project. This project integrates a number of (sub) disciplines. The project will enable you to demonstrate your designer competencies and realize a well-designed and architected solution. You will start from a solid analysis and synthesize a solution that takes the company situation into account. You will be supervised by experienced software professionals from industry as well as by university staff with clear and relevant design experience. This way you are supported by scientific knowledge, practical design experience and project management expertise. You will acquire independence, learn to make well-founded choices and work in a structured, project-based manner.

AFTER YOU GRADUATE

With a PDEng degree from TU/e, you are set to make an excellent start in the labor market. It would take many more years to gain the same experience in industry, if possible at all. The depth and experience you have gained through your course work and projects gives you a distinct advantage compared to university graduates.
ST graduates are sought after in industry and generally able to have a jump-start in one of the high tech multinationals or other innovative companies in the Eindhoven area and beyond.

PROGRAM SUMMARY
- Program workload: Full-time
- Degree: Professional Doctorate in Engineering (PDEng)
- Language: English
- Start time: around November 1
- Duration: 2 years
- Salary: 1913 € per month

MORE INFORMATION
ST is open to the best graduates with a Computer Science or a related MSc degree, comparable to a degree from a Dutch technical university. Acceptance in a TU/e PDEng program is on an application basis. Key qualities in the selection are excellence in engineering, motivation, ambition, (English) communication skills and critical thinking. Interested in applying? Read more at www.tue.nl/softwaretechnology.