Our Mechatronic Systems Designer,

Your technological solutions

Partnering with TU/e’s professional post-master program ‘Mechatronic Systems Design’ boosts your innovation capacity and gives your company the extra competitive edge it is looking for.

Eindhoven University of Technology (TU/e) houses a wide variety of technological expertise, top-notch research facilities, excellent researchers, and numerous spin-offs. With its various research programs, the TU/e ranks amongst the best universities in the world. Specifically for the high-tech mechatronic industry TU/e offers since 2015 a two-year post-master level engineering degree programme (Professional Doctorate in Engineering, PDEng), specialized in **Mechatronic Systems Design** (MSD).

The focus of the program is on systems engineering and the multidisciplinary design aspects of project-based research and engineering in high-tech systems of systems. It is executed by TU/e research groups from four different departments (Applied Physics, Electrical Engineering, Mathematics & Computer Science, Mechanical Engineering). The program is an initiative of the TU/e High Tech Systems Center, which aims to understand, teach and innovate system synthesis and design of complex equipment, instruments, robotic and manufacturing systems and systems-of-systems, by combining in-depth understanding of the classical engineering fields, with multi-disciplinary, model based systems engineering to conceive, predict and verify cutting-edge system functionalities and architecture.

**Solving practical industrial problems**

As part of this programme, the MSD trainees participate in an industrial design / development project for a period of 12 months (module 5). For you, the industrial partner, such a project is a fixed-date, fixed-price project. This design project, which is focused on delivering solutions to your practical industrial (design) problem, enables industrial partners and TU/e to establish a close partnership. The MSD design trainees are highly skilled engineers who use the science available at the university to solve complex technological problems. The projects in module 5 will be defined by your company and executed by our MSD trainees; the result is usually a proof of principle, and/or proof of concept.

**Scouting talent**

Scouting and attracting talented engineers / designers allows your company to be a step ahead of the competition in terms of the employment market. Investing in and involving a talented MSD design trainee during the final project provides you the opportunity to get to know the trainee well and to find an optimal match within your company. Once the programme has been completed, the Mechatronic Systems Designer is ready to join your company!
The value proposition in a nutshell\(^1\)

Within this partnership, the TU/e cooperates with partners in the high-tech industry willing to actively participate in this two-year programme. The industrial partner defines a design project according to its own current state-of-the-art technology and hosts the trainee for the ten-month project period.

**Benefits**

The program delivers the following benefits for your organization:

- On-site execution of a real-life design project done by the trainee
- The intellectual property rights resulting from the design results, will lie with the industrial partner
- Visibility and access to potential employees (all MSD trainees)
- ‘Trial’ period of twelve months enabling the partner to assess the match potential with the trainee
- Opportunity to hire excellent candidates, educated to Dutch standards, also for the international partner’s international sites.

**Intellectual Property**

Clear agreements about the intellectual property ownership are important. TU/e agrees to transfer all intellectual property rights to the industrial partners according to the mutual agreement signed prior to the start of the final project.

**Publication rights**

When performing projects for industry, the University still needs to fulfil its publication duty. However, where this may conflict your company interests, due to potential confidentiality issues, we will draw up custom-made agreements with you that always benefit your company.

**Interested?**

Contact the MSD programme management\(^2\) for more detailed information regarding this programme and your partnership with TU/e.

[www.tue.nl/asd](http://www.tue.nl/asd)

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\(^1\) All information regarding the financial agreements, involvement of the industrial partner within the final project as well as the intellectual property rights issues are part of the contractual agreement (‘TU/e standard TOIO contract’) between the Eindhoven University of Technology and the industrial partner.

\(^2\) MSD is independent, but organizational a track of the ASD (Automotive Systems Design) program