LET'S TALK ABOUT YOUR CAREER!

OPPORTUNITIES AFTER YOUR MSC PROGRAMME

UNIVERSITY OF TWENTE.



HI THERE, BACHELOR!

THE UNIVERSITY OF TWENTE CONGRATULATES YOU ON OBTAINING YOUR BACHELOR OF SCIENCE DEGREE!

NOW FOR THE NEXT STEPS... PERHAPS, LIKE THE MAJORITY OF BSC GRADUATES, YOU ARE ALREADY HEADING
FOR A MASTER'S PROGRAMME AND HAVE EVEN DECIDED WHICH ONE TO TAKE. NO MAJOR QUESTIONS THERE.

BUT WHAT ABOUT AFTER THAT? THIS BROCHURE OFFERS YOU A BRIEF OVERVIEW OF POSSIBILITIES YOU

MIGHT PURSUE INSIDE OR OUTSIDE THE UNIVERSITY ONCE YOU HAVE OBTAINED YOUR MASTER'S DEGREE.

NOT SURE WHICH MSC PROGRAMME TO DO?

If you have not yet decided which MSc programme to choose on completion of your Bachelor's, please visit www.utwente.nl/en/education/master/ or contact your study advisor.

POSITIONS IN INDUSTRY

Going straight into the world of work after your Master's can be a great option. MSc graduates of the Faculty of Engineering Technology are favoured by industry, so there is a big chance that you will find a suitable position soon after graduation. Most MSc graduates start as an employee in the field they studied. This is when your student life comes to an end and you enter a new era of developing yourself and earning money in a professional job. A traineeship or junior position is often a great way to start. In these positions, you can gain practical experience in the workplace and improve your soft skills, too, such as project management, teamwork, problem solving and communication.

POSITIONS AT THE UNIVERSITY OF TWENTE

Here at the University of Twente, you can pursue a career in scientific research after completing your Master's programme. This will lead to a PhD degree. You can also opt for a more practical, design-oriented Professional Doctorate in Engineering (PDEng). This relatively new programme is more carefully aligned with the direct problem solving/design needs of industry instead of the more research focussed PhD

(that can also be done in collaboration with industry).

These high-quality educational programmes are coordinated by the Twente Graduate School (TGS). Each programme centres on topics closely related to the work going on at our research institutes and is taught and supervised by expert researchers and designers. Our structured PhD and PDEng programmes are aimed at outstanding graduate students who are keen to pursue a career as a scientific researcher or technological designer.

PHD (DOCTOR OF PHILOSOPHY)

A PhD involves spending four years of in-depth studying and researching in a particular area. You can do this within one of our research groups or in one of our structured PhD programmes. Here are some good examples of programmes for students with a Civil Engineering, Industrial Engineering or Mechanical Engineering background:



- Science-Based Engineering (SBE Graduate School)
- Nanotechnology (MESA+ Graduate School)
- Biomedical Engineering (MIRA Graduate School)
- Social Sciences, Innovation and Governance (IGS Graduate School)

For projects within the research groups, please take a look at www.utwente.nl/vacancies.

Your tasks as a PhD researcher include research activities, attending training courses and teaching activities. Your research activities are the most important of the three. They will provide you with skills and experience you need to become an independent researcher. Part of your research is also to disseminate the knowledge you acquire, for example, through publications in academic journals.

During the 4-year PhD programme you take at least 30 credits worth of PhD courses. These cover academic skills and career development, indepth disciplinary and wide-ranging courses. An integral part of a PhD is writing your PhD thesis at the end and then, of course, presenting and defend your research in public. After successfully completing your PhD, you will be awarded the title of Doctor (Dr., equivalent to PhD).

If you have not yet started your MSc programme, you may find it interesting to know that you can integrate your Master's and PhD programmes through our MSc+PhD trajectory. This involves a research route through one of our accredited two-year Master's programmes, followed by the PhD phase (which in this case takes three years, not four). Typically, you will work on your PhD research topic or proposal during the last part of the Master's programme. In order to set out on such an integrated track, you need to consult the director of the Master's programme and the intended PhD supervisor (UT professor). Admission to the PhD part is depending on the results you obtain in the Master phase.

PDENG (PROFESSIONAL DOCTORATE IN ENGINEERING)

The other, more practically oriented, route you can opt for at the university is a PDEng programme. These programmes focus on



technological design and take two years to complete. The University of Twente offers PDEng programmes in the fields of Civil Engineering, Energy & Process Technology, Maintenance and Robotics. Always drawn up on close consultation with an external organisation, these tailored programmes are developed to equip you as a high-level technological designer. By combining education at the University (~60 EC) with a practical design in industry (~60 EC), the Post-Master PDEng programmes integrate academic research in a professional context, while providing education in a range of related subjects. The courses in the educational part offer both breadth and depth, with ample attention for your professional development. They will give you the foundation you need to develop a technological design within a company. During the practical part of the programme, you will spend your time working in industry on a challenging and innovative technological design project – a real problem that needs to be solved. In this design project, you will transfer knowledge and research results into technological innovation in industry and society. Throughout the project, you will be supervised by engineers from industry as well as by university staff. In that way you will gain scientific knowledge, practical design experience and project management expertise at the same time. After successful completion of a PDEng programme, you are entitled to use the academic degree of Professional Doctorate in Engineering (PDEng).



MORE INFORMATION ABOUT POST-MSC OPPORTUNITIES AT THE UT? PHD

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PDENG

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HONOURS PROGRAMMES

Do you want to get the best possible preparation for a position in Industry, PhD or PDEng? Our honours programmes offer ambitious, talented students the opportunity to develop themselves in one of three roles: as a designer, organizer or researcher. The UT has four Master's Honours Programmes: Change Leaders, Design Honours, Research Honours and the HTSM Honours Master's.

Visit <u>www.utwente.nl/en/excellence/</u> for more information.

