Information for companies MINOR-INTERNSHIP - MECHANICAL ENGINEERING (ME)

In the Mechanical Engineering (ME) bachelor programmes of the University of Twente (UT) and the Vrije Universiteit (VU), as part of the minors in the third year, students can choose to do an internship in cooperation with a company. During this minor-internship students work on a design/engineering-oriented assignment in professional practice, offered by the company, and related to themes of the first and second year of the bachelor programme Mechanical Engineering. We focus on companies located around the UT and the VU and where engineering plays a major role in the work.

The minor-internship Mechanical Engineering aims for students to 'taste' the engineering environment and experience what Mechanical Engineering entails in practice, to facilitate their orientation toward a master study and future career. Companies can in such cooperation get a small project worked out and connect with technical students, and find benefits in keeping up with new methods and concepts, promoting the company on campus, and relations with academic staff.

What is the minor-internship Mechanical Engineering (ME)

The ME minor-internship is an educational design/engineering-oriented assignment from and executed in the company, under the guidance of an internal supervisor (from the university) and a supervisor from the company. One or two students may work on one assignment, according to the desired approach of the company and the students.

In the assignment, students can translate between contents from the educational programme and a real-life case, experience what a company setting is like, and work independently and in cooperation with engineers in the company. The student can learn in a real engineering environment and put acquired knowledge and skills into practice.

The student finalises the internship with a report of the assignment, and a reflection on gained experiences. Also, a presentation in the company can be given towards the finalisation of the assignment.

Scope of assignments

Assignments should be in the field of technology, and ideally provide a solution to a mechanical engineering problem. The topics and tasks can be diverse. For example, working on a (partial) design or a small engineering case, offering suggestions on existing methods, analysing data, programming, product development, or production (re)organisation.

Assignments should be disconnected from the company's operations to prevent planning-related issues for the student. The assignment should fit in 10 weeks (420 hours) and have a 'beginning and end' and be of use to the company. Any necessary facilities, such as a test set-up or required data, must be available so the student does not lose time.

The level should fit with courses the students have completed in the first and second year of the Mechanical Engineering bachelor, at the University of Twente (UT) or the Vrije Universiteit (VU).

Providing an assignment from your company

Describe the assignment, the level of specification may vary. Preferably tasks are mentioned. Consider that the assignment should be executed in 10 weeks, and define it such that the student can get results. Indicate the feasible period in the minor's planning: <u>September until mid-November // mid-November until end-January</u>.

Send the assignment description to internship-utvu-me@utwente.nl

A member of the Mechanical Engineering programme will be involved in finetuning the assignment. Then the assignment will be published to the students registered for the minor-internship.

Interview and student appointment

- Upon interest of a student in the assignment, the student will mail a job application to the company, and an interview between the company and the student takes place. When positive, the company offers the student the assignment.
- The assignment and tasks are discussed between the student and the company, and the student defines personal learning goals for the internship, related to the technical content and skills of the academic courses. The university supervisor is involved and should approve the set 'assignment proposal' to allow the student to start the internship.
- The start and end date of the internship is agreed between company and student, and an assignment agreement (covering insurance, reward, confidentiality) should be agreed between the student and company and university.

Supervision by the company and by the university

The company supervisor and the university supervisor act as a 'tandem' in the preparation and guidance of the project. The company supervisor is expected to provide daily supervision, and have weekly meetings to look back and forward with the student. The university supervisor will focus and guide on the approach, academic level, progress, and appropriate opportunities for the student to apply competencies. The university supervisor has the final responsibility for grading the project, and herein will take input from the company supervisor into consideration.

limeline	(for internships starting September 2025 or mid-November 2025)		
Preparation	Companies provide assignment suggestion(s) & finetuning with the university	February-March 2025	
Publication	Assignment publication to students, students sign up for the minor	24 March 2025	
Selection	Students orientate and meet with the company for an interview	April - May	
	The company + student + university supervisor discuss assignment and tasks, agree on start and end date, and student draws up personal learning goals. Approval of assignment proposal by university supervisor. An internship contract is agreed between company and student.	May - June	
Execution	Start of the internship, the student works on the assignment in the company	September	mid-November
	Daily supervision by the company supervisor Planned start-mid-final meetings with the university supervisor	Ţ	Ţ
	End of internship	mid-November	end-January
Final	Hand in internship report to the company and university	within 1 month after end-date	

0005

The Mechanical Engineering bachelor programmes

The three-year bachelor programme Mechanical Engineering is provided by the University of Twente and in collaboration with the Vrije Universiteit Amsterdam. Herein we offer more students the possibility to apply for a technical bachelor at a university in their region, and cater for the demand for academically-trained professionals in the labour market.

The Mechanical Engineering programme focuses on designing, improving and maintaining all kinds of machines, devices and installations, as well as structures and processes. The different aspects are integrated into several projects in which students participate during their bachelor programme. The student finishes the bachelor with the graduation assignment. The UT bachelor programme takes place in Twente, the UT-VU bachelor programme in Amsterdam and partly in Twente. The minors fit for UT-VU in 'semester 5' and for UT in 'module 9' and 'module 10'.

After graduating, the students can continue into the master Mechanical Engineering at UT or other masters.

Contact and information

Marike Rupert & Miranda de Vries Mechanical Engineering UT & UTVU email: <u>internship-utvu-me@utwente.nl</u> phone: 06 48170737 | 06 41600746

for information on company collaborations with our Mechanical Engineering programme: www.utwente.nl/company-u/

Formal arrangements for the internship assignment

Assignment agreement, insurance and costs

A three-party 'assignment agreement' should be signed between the student, company, and university. This is to address issues like working hours, allowance, insurance. It is desired that the assignment will not result in any extra costs for the student, therefore the company is asked to compensate for travelling and accommodation costs, mostly realised by an internship compensation. When the students are working at your company, your company is liable for accidents, we therefore request your organisation's accident insurance also to cover the student's assignment.

The university (the student) provides the <u>assignment agreement</u> (three-party: company-student-university) to record arrangements for the above-mentioned aspects. This format is used as the preferred standard.

Report and confidentiality

The student writes an internship report describing the project in a maximum of 20 pages, excluding appendices.

For educational reasons and external audits, it is important to have the paper available at the university's disposal. If a paper contains confidential information, we understand your company does not want to disclose this.

We strive to make public all information resulting from the student project. As such, this information should be available for publication by the student and supervisor. Normally the thesis will be added to the UT library public repository. Having the right to publish the report and the outcomes of work is important for the student's career and résumé, and serves as an inspiration for other students. Furthermore, it shows the type of work our students do and with which companies. It is therefore important to produce a report that can be published. A paper is by default publicly available.

The university aims to avoid confidentiality agreements (NDA's) as much as possible. We request the company to discuss in an early stage of the assignment the approach for the research paper with the university supervisor.

To fulfil the interests of all parties, the following arrangements are possible (in order of preference):

- (1) The report does not contain confidential information. Confidential information will after consultation be removed from the paper. This arrangement is preferable if the removed contents are of little importance for the assignment.
- (2) Confidential information will be incorporated in a separate non-public annex. This non-public annex will be kept in embargo maximum one year. The main paper will be disclosed and needs therefore to be understandable on its own.
- (3) The main paper (including appendices) will be kept on embargo for maximum one year after the assessment date. During this embargo, the paper will be available to the examination board and the supervisor, and if requested to the accreditation committee. Besides the report, the student delivers a public report containing at least the research methodology. To avoid disclosure of confidential information, the student needs to consult the supervisor beforehand to agree upon the material to be presented. If in exceptional situations a two-year confidentiality may be required, a written argumentation for that purpose should be submitted to the university.

The university provides a <u>format</u> to identify arrangements for the above-mentioned aspects.