

Information DTU – TU/e exchange 1-1 program

The DTU (Technical University of Denmark) – TU/e exchange 1-1 program supports the exchange of TU/e students enrolled in the Sustainable Energy Technology MSc program and DTU students enrolled in the MSc program in Sustainable Energy with a specialization in Energy Conversion and Storage.

In this document students can find more information about the DTU- TU/e exchange program.

Suggested mobility tracks

Below the research groups / specializations are presented that are participating in this 1-1 exchange MSc program. Students need to be enrolled in one of the research groups indicated below to be able to carry out their graduation project/ thesis work in the linked specialization at DTU. The maximum number of students that can perform their thesis work in a research group at DTU is set at 2 (two) per specialization/research topic. Up to 5 SET students per year can participate in this exchange program.

TU/e research groups and research topic	DTU specialization and research topic
Energy Technology & Fluid Dynamics (Mechanical Engineering): <ul style="list-style-type: none"> - E-methane - Heat battery - Smart energy products/systems 	<ul style="list-style-type: none"> - Thermal Energy Storage - Fuel Cells-Electrolysis/Cells
Power & Flow (Mechanical Engineering) <ul style="list-style-type: none"> - Combustion systems and their fuels - Metal Fuels as dense energy carriers - Complex multiphase flows 	<ul style="list-style-type: none"> - Metal fuels - Biofuel and Gasifiers
Electrical Energy Systems (ElectricalEngineering): <ul style="list-style-type: none"> - Smart grids - Electrical power conversion technologies - Integration of renewables in - electrical infrastructures 	<ul style="list-style-type: none"> - Design of Sustainable Energy Systems
Plasma & Materials Processing (Applied Physics): <ul style="list-style-type: none"> - Photovoltaics - Electro-catalysis - Batteries 	<ul style="list-style-type: none"> - Processing nanomaterials - Batteries - Photovoltaics - materials and systems

Table 1: suggested mobility tracks

Study plan

Students must have obtained at least 55 credits in their first year before they can start the second year at DTU. The core program is part of these 55 credits. The two options for students running their second year at DTU are shown below.

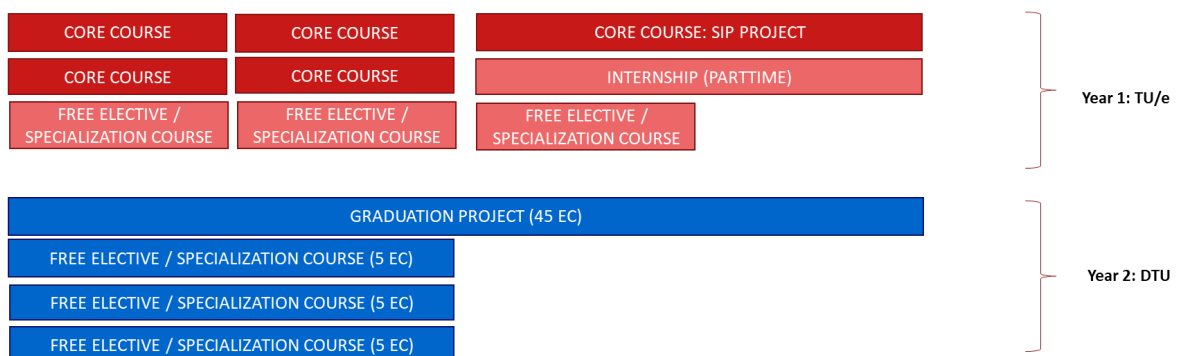
Option 1

For option one at DTU the students take three specialization courses or free electives of 5 EC together with a graduation project of 45 EC for their second year. No extra entry requirements are set to start the graduation project so students can run their courses at DTU in parallel with running the graduation project. At least two courses should be planned in the first half year.

In their first year at TU/e, students run their internship of 15 EC (or 20 EC in case of an extension) in Q3 and Q4 (part-time). This can either be a research internship carried out at TU/e or a company internship in the Eindhoven area. Depending on whether or not the student has extended his internship with 5 EC, there is the option in Q3 or Q4 at TU/e to follow one specialization course or free elective.

For students with a Bachelor's degree at Higher Vocational Education (HBO) level as always this should be a research internship carried out at TU/e.

Exchange TU/e SET student (variant 1)



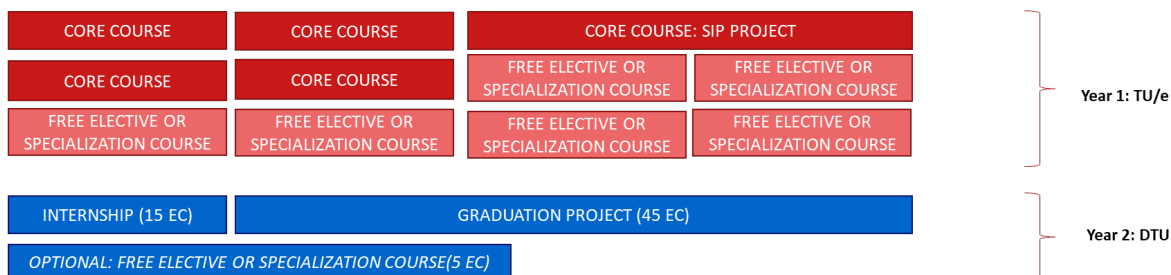
Option 2

In option 2 students take their first year at TU/e following all the courses. For the second year at DTU students do both their internship of 15 EC (or 20 EC in case of an extension) and graduation project (45 EC). The internship is organized by DTU and can either be a research internship at DTU or a company internship in industry. Depending on whether or not the student has extended his internship with 5 EC or how many credits are secured in the first year at TU/e, there is the option in the second year at DTU to follow one specialization course or a free elective.

For students with a Bachelor's degree at Higher Vocational Education (HBO) level as always this

should be a research internship, for this program this will be carried out at DTU.

Exchange TU/e SET student (variant 2)



Further requirements

Courses

The student must choose courses at the host institution that have no or only little overlap with courses taken at the TU/e.

Internship / project courses

Students can either undertake internships if this is part of a "project course" (DTU) and is agreed upon by both supervisors. In case the student undergoes an internship or project course during his/her mobility at DTU the local assessment rules of DTU apply. However, students are obliged to upload the final internship report in [Sharepoint](#) at TU/e. Students can search the [DTU Internship and Project Bank](#) where company projects are posted, among other things.

Graduation project/ thesis work

The master thesis work will be conducted with co-supervision from both TU/e and DTU. The appointed master thesis supervisor at DTU, where the master thesis work is conducted, will act as the main supervisor, and will have the primary responsibility for the student.

Prior to the start of the master thesis work, the subject of the master thesis as well as a project description must be approved and accepted by both thesis supervisors at the TU/e and DTU.

The master thesis presentation and defense fulfil the rules and regulations of the TU/e and are attended by both supervisors. The composition of the graduation committee has to meet the requirements of both universities. At least two examiners from TU/e and DTU have a seat in the graduation committee (leading to a minimum number of examiners of four). Videoconferencing can be used to accommodate for the participation of all supervisors and external examiners.

The master thesis project is evaluated according to TU/e grading system. The rules and regulations concerning the thesis work as described in the 'Program and Examination Regulations' of both

institutions are leading.

The Dutch grade of the master's thesis project will be determined by the TU/e supervisor after consultation with the DTU supervisor and the other graduation committee members. At DTU, the master thesis project is graded using the 7-grade scale. The grade of the thesis project and all courses appear on the transcript of record/grade sheet, according to scaling agreement.

Organization & practicalities

Deadline

The deadline for receiving applications at the partner (host) institution is 1 April to start in the autumn semester (September).

Study plan

As part of their application for the 1:1 exchange program, students need to prepare a study plan.

In this situation a study plan consists of:

- Motivation letter & CV
- Course program form as used by the TU/e
- In addition: if students take courses at DTU, specific course information has to be added for the examination committee
- Research proposal 'Graduation Project Abroad' (can be found [here](#) under downloads)
- Planning of each period with courses and projects

The study program is always first submitted to the mentor, program coordinator of the SET program and the intended thesis supervisors from both universities. In addition, the study program must be approved by the Examination Committee of the TU/e.

Transcript of records & diploma

After completion of the exchange, DTU will provide the student upon request with an official transcript of records. That is necessary to proceed with credit transfer to the degree that TU/e issues.

More information about how to arrange (registration and other practicalities) this exchange program can be found [here](#) (under downloads). For information on possible scholarships, please see the page [Scholarships](#).