

Energy transition - the path towards net zero

Subject area: Mechanical Engineering

University:	TU/e
Level:	MA all years
Teaching mode:	blended: mostly online, but presence on campus required in certain period
Instructor(s):	dr. W. Bartels, dr. M. Rücker

Short description

International Challenge Based Learning Summer Course. Some challenges need to be solved in a global setting, such as the Energy Transition. Participants get the opportunity to develop skills to bring the latest research on Energy Technology to application within an international environment. By attending academic conference talks and forming international teams, participants experience the gap between research and society AND attempt to bridge that gap in their project. A real challenge!

Full description

<https://studiegids.tue.nl/opleidingen/graduate-school/masters-programs/sustainable-energy-technology/international-experience/>

Learning outcomes

At the end of the course, the learner will be able to:

1. Plan and execute projects on Energy technology in an international project team.
 - a. Use individual knowledge and expertise in an interdisciplinary and international team to develop an innovative, practical, and scientifically sound solution related to energy technology.
 - b. Understand more about the group dynamics and cultural aspects e.g. communication in an international project team.
 - c. Build/Use computational tools and databases to draw conclusions regarding the topic of the project.
2. Communicate the results of the aforementioned projects to audiences with different background levels.
3. Reflect on the most recent developments in Energy technology research (year specific) and the (lack of) application/implementation in society.

Recommended in particular for students of the following study programmes

Sustainable Energy Technology, other technical disciplines with affinity for energy technology.

General information

Contact hours per week:	on average 15 hours per week
Total workload:	140 hours (in student hours for the whole course)
ECTS credits:	5
Language:	English
Course start date:	07 August 2023
Course end date:	25 August 2023
Add. info about start date:	
Weekly teaching day/time:	
Time zone:	CET (Denmark, Germany, France, Netherlands, Switzerland, Czech Republic)
Further information:	
Prerequisites:	Sustainable Energy Technology, MSc level technical courses related to Energy Technology
Activities and methods:	Seminars, Group work, Self-study
Presence on campus:	On campus TU/e- from Mon 21st of Aug up to and including Fri 25th of Aug

Final examination

Form:	short report on lectures (individual), reflection report (individual), final presentation (group), video (group)
Date:	25 August 2023
Location/format:	on campus of host institution
Re-sit possibility:	no
Transcript available:	on request
Add. info/requirements:	

Registration

To register for this course, contact euroteq-courses@tue.nl before June 12th, 2023.

Administration

Number of places:	20
Minimum participants:	9
Internal course code:	4CBLM00
Contact:	EuroTeQ Courses < euroteq-courses@tue.nl >

This course is part of the EuroTeQ Engineering University joint course catalogue 2023. This is a collaborative activity of the partner universities DTU, L'X, TU/e, TalTech, CTU, TUM as well as Technion. Students from these universities can participate in the offered courses. It is the responsibility of the student to check if you fulfil the requirements to participate in a specific course. Students are also advised to check with their home institution how to get recognition of the ECTS credits gained in courses of the EuroTeQ course catalogue. For further information about EuroTeQ Engineering University, visit www.euroteq.eu or get in touch with the above-mentioned point of contact.