

# Course: Sustainable Energy Technology

credits: 5

Course code ELVP22SET

Name Sustainable Energy Technology

**Study year** 2023-2024

**ECTS credits** 5

**Language** Dutch, with parts in English

**Coordinator** A.H.P. Van Rest

Modes of delivery Problem-based learning

**Assessments** Sustainable Energy Technology - Assignment

# Learning outcomes

# **Defining**

The student clearly identifies a problem or customer need, contextualizes it, consults relevant sources, and converts it into a goal, problem statement, and electrical engineering requirements.

### Designing

The student considers various solution directions to arrive at a detailed and well-founded electrical engineered product/service/process based on the program of requirements, using appropriate design methodologies and taking into account societal interests and engineering standards.

## **Professionalizing**

The student is able to acquire and maintain skills, is self-directed, constructive in giving and receiving feedback, shows flexibility, and can communicate clearly.

#### Content

This course focuses on sustainable energy technologies and their applications in a practical environment.

#### For example:

- Sustainable energy generation, such as geothermal heat, wind, water-, and solar energy, as well as biomass
- Sustainable energy transport, such as hydrogen and other (synthetic) gases and heat networks
- Sustainable energy usage, such as the energy transition and system integration of sustainable energy sources
- Sustainable energy storage, such as hydrogen, heat/cold storage, and batteries

## Included in programme(s)

Electrical Engineering Major Sensor Technology Electrical Engineering Major Electronics

# School(s)

Institute of Engineering