

## Course: Sustainable Energy Technology

credits: 5

<b>Course code</b>	ELVP22SET	<b>Modes of delivery</b>	Problem-based learning
<b>Name</b>	Sustainable Energy Technology	<b>Assessments</b>	Sustainable Energy Technology - Assignment
<b>Study year</b>	2022-2023		
<b>ECTS credits</b>	5		
<b>Language</b>	Dutch, with parts in English		
<b>Coordinator</b>	A.H.P. Van Rest		

### 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  
Electrical Engineering Major Mechatronics

### School(s)

Institute of Engineering