Hanzehogeschool Groningen
University of Applied Sciences

Vak: Power2Hydrogen — credits: 5

Vakcode	RWVM23P2U
Naam	Power2Hydrogen
Studiejaar	2023-2024
ECTS credits	5
Taal	Engels
Coördinator	A. Perl

Werkvormen	Onderwijs
Toetsen	Assignment 1 - Opdracht Assignment 2 - Opdracht

Leeruitkomsten

By completing the module the student demonstrates knowledge and understanding of:

E2.2.a.1 theoretical constructs and scientific frameworks relevant to power-to-hydrogen
E2.2.a.2 main sources of energy dissipation in electrolysers and fuel cells
E2.2.b.1 power-to-hydrogen value chains for mobility

And is able to:

E2.1.c.1 design scientific experiments to analyse the performance of electrolysers
E2.3.e.1 define and measure the energy efficiency of electrolysers
E1.1.c.1 archive and communicate effectively experimental results

Inhoud

Theory (3 EC):

- Electrochemistry basics
- Electrochemical storage - overview on electrochemical storage, including fundamentals of batteries and fuel cells. Limits and applications
- Electrolysis: theory and electrolyser design
- Fuel cells: theory and design

Experiments (2 EC):

- Electrolyser and fuel cell measurements

Adsorption (storage) measurements

Opgenomen in opleiding(en)

European Master in Renewable Energy

School(s)

Instituut voor Engineering