

Vak: Power2Hydrogen

credits: 5

Vakcode	ZWVH19P2U	Werkvormen	Onderwijs
Naam	Power2Hydrogen	Toetsen	Assignments - Opdracht
Studiejaar	2020-2021		theory - Schriftelijk, organisatie
ECTS credits	5		tentamenbureau
Taal	Engels		
Coördinator	J. Bekkering		

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 electrolyzers 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 electrolyzers

E2.3.e.1 define and measure the energy efficiency of electrolyzers

E1.1.c.1 archive and communicate effectively experimental results

Inhoud

Content of the module:

Theory (3 EC):

- Overview power-to-hydrogen supply chain
- electrochemistry basics
- batteries
- electrolysis: theory and electrolyser design
- fuel cells: theory and design

Experiments (2 EC):

- Electrolyser measurements
- Adsorption (storage) measurements

Opgenomen in opleiding(en)

European Master in Renewable Energy

School(s)

Instituut voor Engineering