

## Undervisningsportfolio

### 1. Undervisnings-CV: Oversigt over undervisnings- og vejledningsopgaver med angivelse af fagområder, omfang, niveau (BA, kandidat, EVU, Ph.d) samt evt. censoropgaver.

Studenter-vejledning:

IDM660018C - MCE6 - Bachelorprojekt - Juni 2016 /Design and Control of a Large Scale 3D Printer  
IDH100004C - HYTEC4 - Kandidatspeciale - June 2017 / Modelling of start-up condition for methanol reformed high temperature PEM fuel cell system  
EET990018P - Internship MSc3 – JAN 2018 / Modeling of a Methanol Reformed Fuel Cell system  
EEE550002P - EE5/TE5/ME5 - Projektexamen – JAN 2018 / Increasing the capacity of the gas boiler station at Gasværksvej 28 via flue gas condensation  
EEE440002P - EN4 Aalborg - Semesterrapport - Juni 2018 / Control of brushless DC motor for AAU Eco-Racer  
EEM100002C - MCE4 - Master's Thesis - June 2018 / Design af brændselscelle/batteri hybrid system  
EEA440003P - EN4 Aalborg - Regulering af energiomsættende systemer - juni 2019 / Temperaturregulering af en PEM-brændselscellestak  
EEE440002P - Semester projekt, EN4, juni 2020 / Position Control of Pendulum  
EEE330002P - Semesterprojekt, EN3, december 2020 / Integration af varmepumpe i ventilationsaggregat

### 2. Studieadministration: Oversigt over studieadministrative opgaver, eksempelvis medlem af studienævn, studieleder, semesterkoordinator, fagkoordinator, akkreditering m.v.

Koordinator og vejleder af Shell Eco-Marathon hold: Team Aalborg Energy (Design, udvikling, konstruktion)

### 3. Universitetspædagogiske kvalifikationsforløb: Oversigt over gennemførte universitetspædagogiske kursusforløb, PBL-kurser, workshops, udviklingsprojekter, kollegial supervision o.l.

AP AAL - Course module 1: Teaching at a PBL University (2019)  
AP AAL - Course module 2: Planning and Implementation of Group Instruction (2019)  
AP AAL - Course module 3: The Use of IT and Media for Learning and Teaching (2019)  
AP AAL - Course module 4: The PBL Group – Collaboration, Process and Supervision (2019)  
AP AAL - Course module 5: Planning, Development and Quality Assurance of Study Programmes (2019)

Electives courses:

Enable your students' creativity during your teaching

PBL in Engineering and Science

Education for Sustainable Development

Report Topic:

Flipped classroom in labview programming. How to increase motivation with gamification.

### 4. Anden form for kvalificering: Konferencedeltagelse, debatindlæg, oplæg m.v. i relation til uddannelse, "Undervisningens dag", o.l.

Have in the past presented several times on the design and participation with the Ecoracer and fuel cell technology in general. The most recent one was on "bæredygtighedsfestival" where we attended with our ecoracer and I gave an introduction to our work at the university.

I have also arranged several "show and tell" where we presented the ecoracer at HI-messen (technomania), AUB and Danish Airshow 2018.

### 5. Undervisningsudviklingsforløb og undervisningsmateriale: Oversigt over medvirken til udvikling af nye moduler, undervisningsmateriale, uddannelser, e-learning, samarbejde med eksterne samarbejdspartnere o.l.

### 6. Nominering til og/eller modtagelse af undervisningspriser.

### 7. Evt. personlige refleksioner og initiativer: Personlige overvejelser knyttet til undervisning og vejledning, ønsker til og planer for pædagogisk videreudvikling, planer for opfølgning på undervisningsevalueringer m.v.

I have during my Adjunkpædagogikum course considered several ways to implement Flipped classroom and gamification in the course "Realtime programming and microprocessors". I have had the ability to combine my Labview experience with online cloud applications, which in the future can help motivate and teach students in an interactive and exciting way.

## **8. Andet.**