Teaching portfolio

1. Teaching CV: A list of any lecturing and supervision tasks, including specification of academic fields, scope, level (bachelor, master, continuing education, PhD) as well as any external examiner tasks.

Student supervision

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 - Projekteksamen – 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

Teaching:
EIN990005L - Workshop in Test and validation with laboratory test and supervision. 2019
EEE440003V - Realtidssystemer og programmeringssprog, EN4, 4 lectures in Labview programming and real time systems.

2. Study administration: A list of any study administration tasks, e.g. study board membership, head of studies or semester or course coordinator, accreditation, etc.

Koordinator og supervisor of the Shell Eco-Marathon team: Team Aalborg Energy (Design, development, construction)

Since 2011 I have been supervising and coordinating the Ecoracer team with an average of 15 students each year. These activities have earned the Team several top placements in the annual European Shell-Ecomarathon competition, where we have competed against other university teams in the fuel cell category.

3. University pedagogy qualifications: A list of any completed courses in university pedagogy, PBL courses, workshops, academic development projects, collegial guidance and supervision, etc.

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. Other qualifications: Conference attendance, editorials, presentations, etc. relating to education, 'University Teaching Day', etc.

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 attented 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. Teaching activity development and teaching materials: A list of any contributions to the development of new modules, teaching materials, study programmes, e-learning, collaboration with external business partners, etc.

6. Teaching awards you may have received or been nominated for.

7. Personal reflections and initiatives: Here you may state any personal deliberations as regards teaching and supervision, any wishes and plans for further pedagogic development, plans for following up on feedback/evaluations from students, etc.

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. Any other information or comments.