

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.

Autumn 2014

- Assistant teacher in "Energitekniske Grundfag"(EN1, 1st semester) 5 ECTS
- Assistant teacher in "Numerical Methods" (TE5, MP5, IE7, IP5, TE5, EE5, MCE5, DS5, TP5 (5th and 7th semester) 5 ECTS
- Co-supervisor TEPE1 (3 students) "Investigating Drag, Lift and Frequency Changes as a Result of Vortex Shedding on a Circular Cylinder in Crossflow when Introducing a Tripping Rod", 15 ECTS

Spring 2015

- Co-supervisor TE6 (4 students) "Fluid Flow Study of an Axial Mixing Impeller", 15 ECTS
- Co-supervisor TE6 (4 students) "Design af to aksiale propeller og tests af deres indvirkning på en fluids flowmønster i en mixertank ved brug af PIV", 15 ECTS
- Co-supervisor TEPE4 (1 student) "Modelling of Plates in Free Fall - Development of a Predictive Trajectory Model by an Experimental and Numerical Approach", 30 ECTS

Autumn 2015

- Assistant teacher in "Fundamental Energy System Physics and Topology" (EN3, 3rd semester) 5 ECTS
- Assistant teacher in "Thermodynamics, Heat Transfer and Fluid Dynamics" (EN3, 3rd semester) 5 ECTS
- Assistant teacher in "Numerical Methods" (MP5, IE7, IP5, TE5, EE5, MCE5, DS5, TP5, 5th and 7th) 5 ECTS
- Co-supervisor TEPE7 (4 students) "Investigation of Change of Aerodynamic Properties of a Wing Section Covered by Ice", 15 ECTS

Autumn 2016

- Co-supervisor TEPE1 (5 students) "Investigation of the Flow in the Near-tongue Region of a Waste Water Pump", 15 ECTS
- Co-supervisor TEPE3 (2 students) "CFD modelling and experimental verification of erosion in a pipe bend by water flow transported solid particles", 30 ECTS

Spring 2017

- Co-supervisor TE6 (4 students) "Investigation of Flow and Clogging Inside Impeller and Housing of a Centrifugal Pump", 15 ECTS
- Co-supervisor TE6 (3 students) "Undersøgelser af en spildevandspumpes tilstopningsfænomener", 15 ECTS
- Co-supervisor TEPE4 (2 students), "CFD modelling and experimental verification of erosion in pump", 30 ECTS

Autumn 2019

- Assistant teacher in "Thermodynamics, heat transfer and fluid dynamics ", EN3, 5 ECTS

Spring 2020

- Teacher in "Flow Machines", TE6, 18 students, 8/11 lectures, 5 ECTS
- Co-supervisor TE6 (4 students), Topic: Modelling of Pelton turbine, 15 ECTS

Autumn 2020

- Co-supervisor TEPE1 (4 students) Topic: Large Eddy Simulations of Flow Mixing in a Square T-Junction Studying the Impact of Turbulence Intensity, 15 ECTS
- Co-supervisor TEPE1 (4 students) Topic: Fluid Mixing in a T-junction with a pulsating and a turbulent inlet modelled with CFD and validated with PIV, 15 ECTS
- Teacher in "Thermodynamics, Heat Transfer and Fluid Dynamics", EN3, 51 students, 4/12 lectures, 5 ECTS
- Hjælpeleærer i "Thermodynamics, Heat Transfer and Fluid Dynamics", EN3, 51 students 5/12 lectures
- Assistant teacher in "Numerical methods", (MP5, IE7, IP5, TE5, EE5, MCE5, DS5, TP5), 5 ECTS
- Co-organizer of Girls Day in Science in AAU
- Responsible for workshop on Girls Day in Science in AAU

Spring 2021

- Teacher in "Flow machines", TE6, 9 students, 8/11 lektioner, 5 ECTS
- Supervisor EN2 (6 students) Topic: Performance analyse af en vertikal akslet tidevandsturbine med roterende vingeprofiler, 15 ECTS
- Online teaching on flow around airfoils for Vesthimmerlands Gymnasium. Use of External Flow (<https://externalflow.energy.aau.dk/>)

Autumn 2021

- Teacher in "Thermodynamics, Heat Transfer and Fluid Dynamics, EN3, 43 studerende, 5/12 lectures (incl. lecture in Flow lab), 5 ECTS
- Assistant Teacher in "Energisystemers grundlæggende fysik og opbygning", EN2, 5 ECTS
- Assistant Teacher in "Numerical methods", EN5, 5 ECTS
- Co-organizer of Girls Day in Science in AAU
- Responsible for workshop on Girls Day in Science in AAU

Spring 2023

- Supervisor TE6 (4 students) Topic: Development of impeller for centrifugal pump, 15 ECTS
- Supervisor TE6 (1 student) Topic: Development of impeller for centrifugal pump, 15 ECTS

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.

Member of the Study Board of Energy since February 2021

Fall 2021

- Semester coordinator TE5

Spring 2023

- Semester coordinator TE6

3. University pedagogy qualifications: A list of any completed courses in university pedagogy, PBL courses, workshops, academic development projects, collegial guidance and supervision, etc.**Completed Courses****2014**

"Basic Course in Pedagogy for University Teachers", 2 ECTS

2020-2021

"University Pedagogy for Assistant Professors", 10 ECTS

2021

"Supervisor Workshop". The course focused on the relationship between PhD student and supervisor. Total workload of 24 hours.

4. Other qualifications: Conference attendance, editorials, presentations, etc. relating to education, 'University Teaching Day', etc.**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.****2020**

- Development of teaching material for the course in Flow Machines (6. semester, 5 ECTS). The course was taught online.

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.****8. Any other information or comments.**