

Teaching portfolio

1. Teaching CV: A list of teaching and supervision tasks, including specification of academic fields, scope, level (bachelor, master, continuing education, PhD). Please state the teaching method used (e.g. lecture, class teaching, exercises, supervision, examination, coexamination, distance teaching, internet-based teaching and evaluation of teaching). Please also indicate the language of instruction.

Teaching (Courses)

Test and Validation including System Set-up and Understanding, AIE6, spring 2021, 9/9 lectures, 5ECTS

Test and Validation including System Set-up and Understanding, AIE6, spring 2022, 9/9 lectures, 5ECTS

Test and Validation including System Set-up and Understanding, AIE6, spring 2023, 9/9 lectures, 5ECTS

Test and Validation including System Set-up and Understanding, AIE6, spring 2024, 9/9 lectures, 5ECTS

Teaching Assistance (Courses)

Process Control, Instrumentation and Safety + Fundamental Control Theory, (KBT6, CBT6, M6, EN4, AIE4), spring 2021, Laboratory part

Process Control, Instrumentation and Safety + Fundamental Control Theory, (KBT6, CBT6, M6, EN4, AIE4), spring 2022, Laboratory part

Process Control, Instrumentation and Safety + Fundamental Control Theory, (KBT6, CBT6, M6, EN4, AIE4), spring 2023, Laboratory part

Process Control, Instrumentation and Safety + Fundamental Control Theory, (KBT6, CBT6, M6, EN4, AIE4), spring 2024, Laboratory part

Non-linear control and Multi-body Systems, (IRS1, OES3), Teaching Assistant, fall 2022

Non-linear control and Multi-body Systems, (IRS1, OES3), Teaching Assistant, fall 2023

Applied Optimisation for Energy Systems Engineering, (APEL3/OES3), Teaching Assistant, fall 2022

Teaching (Supervisor)

Autonomous Emergency Braking, AIE1, 50%, fall 2021

Sun Tracking, AIE1, 50%, fall 2021

Smart Home Security, AIE1, 50%, fall 2021

Smart Bike Lock, AIE1, 50%, fall 2021

Det Sol Forsynede Hus, EN1, fall 2021

Cocktail Machine, AIE2, 50%, spring 2022

Elevator, AIE2, 50%, spring 2022

Transport Drone, AIE2, 50%, spring 2022

Underwater Transport, AIE2, 50%, spring 2022

Energiø: HVDC, LeadENG, EN2, spring 2022

Energiø: PtX, EN1, spring 2022

Bølgeenergi, EN1, spring 2022

Sun Tracker, AIE1, 50%, fall 2022

Boat Balancing with Fluid Tanks, AIE1, 50%, fall 2022

Autonomous Removal of Plastic Waste: Catamaran, LeadENG, AIE1, 50%, fall 2022

Autonomous Removal of Plastic Waste: Plastic Sensor, LeadENG, AIE1, 50%, fall 2022

Autonomous Emergency Braking, AIE1, 50%, fall 2022

Gantry Crane: State Space, AIE5, fall 2022

Gantry Crane: Fault Detection, APEL1, fall 2022

Digital Twin: Vibration Plate, MA5, fall 2022

Catamaran, Onboard Energy System, LeadENG, EN2, spring 2023

Catamaran, Charging Hub, LeadENG, EN2, spring 2023

Two-Axis Elevator, AIE2, spring 2023

Solar-Battery Charger Circuit, AIE2, spring 2023

Hand-Arm Prosthetics, AIE2, spring 2023

Shelf-Floor Storage Routing, AIE2, spring 2023

Gantry Crane: Genetic Algorithm, AIE4, spring 2023

Gantry Crane: PIDs, AIE4, spring 2023

Vector Thrust, AIE4, spring 2023

Gantry Crane: Energy Optimization, EN4, spring 2023

Gantry Crane: System Identification + Genetic Algorithm, EN6, spring 2023

Self-Sustainable House 1, EN1, 50%, fall 2023

Self-Sustainable House 2, EN1, 50%, fall 2023

Self-Sustainable House: Insolation, EN1, 50%, fall 2023

Smart Water Bottle, AIE1, 50%, fall 2023

Smart Plant Pot, AIE1, 50%, fall 2023

Industrial Plant Pot, AIE1, 50%, fall 2023

Domestic Plant Pot, AIE1, 50%, fall 2023

Bottling Machine, AIE1, 50%, fall 2023
Eco-System Box, AIE1, 50%, fall 2023
Wind Turbine: Monitoring, AIE3, fall 2023
Radar Anti-Drone Turret, AIE3, fall 2023
Gantry Crane: State Space, AIE5, fall 2023
Gantry Crane: State Space, Genetic Algorithm, EN5, fall 2023
Steward Platform: Setup and State Space, EN5, fall 2023
Three-Phase Separator: Modeling and Control, APEL 9, fall 2023
Hydrogen Storage 1, RISK 9, 50%, fall 2023
Hydrogen Storage 2, RISK 9, 50%, fall 2023

2. Study/programme administration and management: Experience in programme management and coordination. A list of study administration tasks, e.g. study board membership, chair of study board, semester or course coordinator, accreditation tasks, etc. Experience in planning teaching activities. Experience in programme development. Participating in committees and commissions etc. on education issues.

Semester coordinator, AIE1, fall 2021, fall 2022, - NOW
Semester coordinator, AIE2, spring 2022, spring 2023, - NOW
Semester coordinator, EN1, fall 2022, - NOW

3. Formal pedagogical training: A list of completed courses in university pedagogy, PBL courses, workshops, academic development projects, collegial guidance and supervision, etc. Written assessment from the course in university pedagogy for assistant professors. Participation in conferences on pedagogy and didactics. Please enclose any documentation of the above, such as course certificates, references, etc

University Pedagogy for Assistant Professors 2022

4. Other qualifications: Conference contributions and attendance, contributions to debates, scientific articles on pedagogical issues etc. Peer supervision, editorials, mentoring experience or other types of competence development activities.

TBD

5. Pedagogical development and research: Development of new courses, teaching materials, teaching methods, examination types or other types of pedagogical development. Didactic and pedagogical research. Cooperation with external collaboration partners.

TBD

6. References on your teaching skills from superiors or colleagues. Teaching evaluations and any teaching awards received.

Teacher of the year at Study Board of Energy 2022

7. Personal reflections and initiatives: Here you may state any personal deliberations as regards teaching and supervision, any wishes and plans for further pedagogical development, plans for following up on student feedback/evaluations, etc. Personal reflections on your own pedagogical practice, including objectives, methods and implementation. This should include an analysis and a reasoned description of your pedagogical activities in relation to your pedagogical understanding and student learning. Thoughts on the teaching method at Aalborg University (which is largely based on group-organised project work and problem-based learning)

Great teaching is an ever-evolving task that requires adaptation of teaching method and materials according to students' feedback and preferences. From feedback, it was clear that even early semester students benefit from being engaged with a company. Therefore, I continually strive to design and connect semester projects with possibility of industry collaboration. Additionally, I prioritize creating, maintaining, and providing an environment where student groups can

produce prototypes through various means to boost learning engagement through ownership.

8. Any other information or comments.

I coordinate multiple workshops for primary and high school related to drones, automation, offshore wind, control, ptx and other local research areas with the purpose to both inform the participants about engineering and research and to promote Aalborg University.