

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.

Bachelor of Science

Teaching (each 5 ECTS courses): Hygrothermal Building Physics and Building Energy Consumption (Civil Engineering 4th semester) [multiple lectures, exercises, miniproject supervision, both face-to-face and distance teaching]; Integrated Design-Engineering IV: Passive and Active Design Strategies to Support Sustainable Building Design (Architecture & Design 4th semester) [multiple lectures, exercises, miniproject supervision, both face-to-face and distance teaching]; Thermodynamics - Supplementary teaching (Civil Engineering 2nd semester) [class teaching, exercises]; Indoor Environmental Analysis and Measurements (Sustainable Building Processes 1st semester, Civil Engineering 5th semester) [multiple lectures, exercises, laboratory exercises, coexamination, English and Danish].

Supervision and examination: 1st semester project groups (Civil Engineering) on Introduction to Technical Project Writing/Reality and Models in Civil Engineering (5/10 ECTS); 2nd semester project groups (Civil Engineering) on Fundamental Modelling and Calculations in Structural and Civil Engineering (15 ECTS); 4th semester project groups (Civil Engineering) on Building Structure and Energy Consumption (15 ECTS); 3rd semester project groups (General Engineering) on SDG 3 Good Health and Well-Being (15 ECTS).

Teaching and supervision on Bachelor level has been conducted in Danish unless otherwise specified.

Master of Science

Teaching (each 5 ECTS courses): Building Heat, Moisture and Energy Modelling (Building Energy Design 1st semester) [multiple lectures, exercises, miniproject supervision, both face-to-face and distance teaching]; Indoor Environmental Analysis and Measurement (Building Energy Design 2nd semester) [lecture, laboratory exercises].

Supervision and examination: Master Thesis supervision, co-supervision and examination for >10 students (Indoor Environmental and Energy Engineering, Building Energy Design; 30 - 50 ECTS); 1st semester project groups (Indoor Environmental and Energy Engineering) on Ventilation, Airflow and Contaminant Transport in Buildings (15 ECTS); 2nd semester project groups (Building Energy Design) on Building Heating, Ventilation and Cooling (15 ECTS); 3rd semester project groups (Building Energy Design) on Building Commissioning Operation and Environmental impact (15 ECTS).

Teaching and supervision on Master level has been conducted in English unless otherwise specified.

All supervision and teaching has been conducted at Aalborg University. In total, teaching of >1200 hours and supervision of >350 students.

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.

- Part of the Coordination Group for the BSc in General Engineering (Study Board of Energy). Facilitate and improve information management between the coordination group and students, hereunder by improving visual presentation of the different pathways in the educational programme.

- Semester coordinator for the BSc in General Engineering (2nd and 3rd semester).

- Course coordinator for Indoor Environmental Analysis and Measurements (Sustainable Building Processes 1st semester).

- Facilitating the development/optimisation of the course Hygrothermal Building Physics and Building Energy Consumption (Civil Engineering 4th semester) and Building Heat, Moisture and Energy Modelling (Building Energy Design 1st semester).

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

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.

Mentoring of 1st year students in the BSc in Civil Engineering to promote better study habits, increase motivation and reduce drop-out rates. Conducted through presentations, coordinated group sessions and individual consultations.

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.

- Development of a 1-month long workshop on Bio-based Building Materials as a collaboration between students from Aalborg University (MSc in Indoor Environmental and Energy Engineering, 2nd semester) and equivalent students from IUT Rennes. This encompassed in-house lectures, guest lectures, laboratory exercises, software workshop and supervision of a final report. The workshop was developed in collaboration with Associate Professor Hicham Johra (Aalborg University) and Professor Florence Collet (IUT Rennes).

- Co-organisier of Girls' Day in Science at Aalborg University to promote STEM education.

- Co-organisier of Civil Cup for Civil Engineering students at Aalborg University to increase understanding among first-year students of the educational programme and of the individual specialisations.

- Development of an app in the software COMSOL for educational purposes in connection with the course Hygrothermal Building Physics and Building Energy Consumption.

- Contributed with an online lecture on Sustainability in Buildings for the AAU Play initiative (an online University lecture for students in secondary school and gymnasium).

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

Candidate for the Teacher of the Year 2023 from the Study Board of Energy

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)

Strive to integrate research from my PhD into teaching material for our Engineering students, e.g. through Master Theses and the Bio-Based Materials workshop mentioned in Question 5.

8. Any other information or comments.