

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.

I have extended the PBL models to the (Co)supervision of the following projects:

PhD project Co-supervision

1. Modeling of Solar Cells and Environmental Conditions for Space Microgrids (2019-2021)
2. Planning and Energy Management of Multi-Microgrid Clusters for Lunar Bases (2020-2023)
3. Cyber-Resilient Control Structures in DC Microgrids with Cyber-Physical Threats (2019-2023)
4. Energy Optimization at Seaport by Integrating Microgrid Control Strategies (2020-2024)
5. Brain-Inspired Artificial Intelligence for Advanced Microgrid Protection (2021-2024)
6. A Digital Twin framework including Renewable Generation and Energy Storage (2021-2025)

MSc project (Co)-supervision:

1. EPSH3-1035 Optimal Control and Solutions for AC Microgrids- Aalborg University (English)
2. PED3-940 An Energy Management Solution for Residential Microgrids- Aalborg University (English)
3. Optimal operation of eco-industrial clusters for the provision of grid services- DTU Engineering Technology (English)

BSc project (Co)-supervision:

1. EN4-404 Energy Management System in Residential Microgrids (English)
2. EN2-204 Energistyring af satellitter og prospekter for mikrobølge WPT (Danish-English)
3. EN2-207 Simulering og Analyse af WPT mellem to satellitter (Danish-English)

Regarding teaching methods, we have used face-to-face ones, virtual (during the COVID-19 pandemic situation), and hybrid courses.

Teaching in PhD Courses

1. PhD/Industrial course on "Advanced Optimization and Control in Power and Energy Systems", AAU Energy, Aalborg University, Denmark.
2. PhD/Industrial course on "Microgrids: Modelling, Control, and Energy Management", AAU Energy, Aalborg University, Denmark
3. PhD/Industrial course on "Maritime Microgrids", AAU Energy, Aalborg University, Denmark.
4. PhD/Industrial course on "Energy Management Systems for Microgrids", AAU Energy, Aalborg University, Denmark.
5. PhD/Industrial course on "Models, Methods, and Optimization Tools for Energy Systems", AAU Energy, Aalborg University, Denmark.

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.

Type your answer here...

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

I have the following formal pedagogic training:

- Basic Course in PBL for University Teachers, Aalborg University, Denmark.
- University Pedagogy Program, Aalborg University, Denmark.
- Studerende med psykiske diagnoser – hvad gør du så?, Aalborg University.

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.

- Masterclass: Missions for you: Mindset and Method, Aalborg University, Denmark.
- Arbejdsmiljøuddannelsen, Aalborg University, Denmark.

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 new courses at the PhD level

1. Organizer of the PhD/Industrial course on "Microgrids: Modelling, Control, and Energy Management", AAU Energy, Aalborg University, Denmark, 4 ECTS.
2. Organizer of the PhD/Industrial course on "Advanced Optimization and Control in Power and Energy Systems", AAU Energy, Aalborg University, Denmark, 3.5 ECTS.

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

All my courses received positive evaluations from course participants.

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)

As an academic involved in multiple roles—including teacher, supervisor, and mentor—I have always been passionate about sharing knowledge with students and supporting their academic and personal growth. My current teaching and supervision style has developed through a mix of personal experiences as a student at various universities, participation in pedagogical training courses over recent years, and practical experience as a teaching assistant, research assistant, postdoctoral researcher, and assistant professor. Furthermore, I constantly reflect on and improve my practices by learning from the experiences and strategies of my colleagues.

I am deeply aligned with the problem-based learning (PBL) model that underpins the educational philosophy at Aalborg University. I consider PBL not only an effective way to engage students with real-world challenges but also a powerful means to foster critical thinking, collaboration, and lifelong learning. In my view, the ultimate goal of higher education is to help students learn how to learn—to equip them with the ability to independently acquire, evaluate, and apply knowledge in new contexts.

In my teaching and supervision, I actively implement the principles of PBL. I encourage students to work with real-life and interdisciplinary problems that require them to think across traditional subject boundaries. I strive to act not merely as a lecturer but as a facilitator of learning—someone who guides and supports students through regular supervision meetings, open communication, and timely feedback. I maintain a high level of availability and approachability to ensure that students feel supported throughout their learning process.

Moreover, I am committed to continuously developing my pedagogical practice. I regularly reflect on student feedback and course evaluations and use them constructively to adapt and improve my teaching methods. I am also open to experimenting with new teaching strategies and tools that can enhance engagement and student learning outcomes.

In summary, my teaching philosophy is grounded in the belief that education should be active, reflective, and student-centered. I aim to create a supportive learning environment that empowers students to take ownership of their learning and prepares them to tackle complex problems in both academic and professional contexts.

8. Any other information or comments.

Type your answer here...