

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.

- Multiphysics Simulation and Design of Power Electronics, Industrial/PhD course, Aalborg University, Aalborg, Denmark (2018-Present).

- Design Considerations for Robust and Reliable Power Semiconductor Modules, Industrial/PhD course, Aalborg University, Aalborg, Denmark (2018-Present).

- Embedded Micro Processors: Applications and C Programming, Master course, Aalborg University, Aalborg, Denmark (2020-Present).

- Real-time Systems and Programming Languages, Bachelor course, Aalborg University, Aalborg, Denmark (2020-Present).

Supervised Postdocs:

- Novel Optimized Technologies in Cooling System of Wind Power Converters, Wahid Cherief, 2017.

Supervised Research Assistants:

- Fatigue and Lifetime Modeling of Fuses, Praveen C., 2020-

- Fatigue Analysis and Degradation Modeling of Fuses in Power Electronics, Simon Mosbjerg Jensen, 2017.

Co-Supervised PhD Projects:

- Multi-Time Scale Modelling of Power Electronic Converters in Power System Applications, Martin Bendix Fogsgaard, 2019-

- Condition Monitoring and Remaining Useful Life Estimation for Power Electronic Components, Afshin Loghmani Moghaddam Toussi, 2019-

- Thermal Management of Power Electronics - with Focus on Forced Convection and Two-Phase Cooling Applications, Ali Yahyaee Nujukambari, 2018-

Supervised Master Projects:

- FEM Modeling of the WBG Power Module Degradation for Accurate Lifetime Estimation, 9th-semester project, 2022,

- CFD Optimization and Experimental Validation of Cooling Panel for IGBT, 2017-2018.

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.

None

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

- Aalborg University Pedagogy course (Adjunktpædagogikum, 2017-2018)

. The training consists of a number of workshops, teaching experiments, pedagogical supervisors observations in class, etc.

It covers the following five modules:

- Teaching at a PBL university

- Planning and implementation of group instruction

- The use of IT and Media for learning and teaching

- The PBL group-collaboration, process and supervision

- Planning, development and quality assurance of study programs

In addition to the above modules, other elective modules were taken as well:

- Working with institutions and companies in project work

- Creative project processes through blended learning

- Design of development projects to strengthen quality (quality assurance)

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.

None

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.

Multiphysics Simulation and Design of Power Electronics, Industrial/PhD course

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

None

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)

My courses consist of two parts: lectures and exercises. In the lecture session, I use a combination of teaching methods: PowerPoint presentation, blackboard, and online resources like YouTube videos. In the exercise session, students do the given exercises in groups of 5-6 students. They have the chance to help each other and solve their problems with the support of teaching assistants and myself.

My teaching philosophy is based on the engagement of students in the lectures. I usually initiate simple examples and open a discussion in the classroom to better understand complex engineering problems. I also try to keep my teaching level average, so both the top and weak students can follow and enjoy the course.

8. Any other information or comments.

Type your answer here...