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 at Aalborg University since autumn semester 2021:

Lectures

- MSc01 ARC 2021 & 2022 & 2023 & 2024: Lectures focusing on building performance simulation tools in course module “Advanced Integrated Design I: Sustainable-tectonic Design with Integration of Structure, Site and Climate Conditions (AST)” and in project module “Sustainable-Tectonic Architecture: Integrated Social Sustainability and Climate Impact (STAR)”
- MSc01 ARC 2021 & 2022 & 2023 & 2024: Lecture in project module “Sustainable-Tectonic Architecture: Integrated Social Sustainability and Climate Impact (STAR)”: Sustainable settlement – climate, topography, ecology and construction
- BSc05 ARK/URB 2021 & 2022 & 2023 & 2024: Lectures in project module on urban simulation ”Formgivning af den tætte by: Integrationen af by-klimatekniske, infrastrukturelle og vejtekniske krav”: Mikroklimatiskeforhold – lysforhold og komfort II
- BSc04 ARK/URB 2022 & 2023 & 2024: Lectures in project module ”Formgivning af det offentlige byggeri: Integration af bruger krav og energioptimering”
- MSc02 ARC 2022 & 2023 & 2024: Lecture focusing on thermal bridge assessment in course module “Advanced Integrated Design III-C: Critical-experimental Studies in Life Cycle Assessment and Materiality to Support Sustainable-tectonic Design Thinking”

Workshops, study trips

- MSc01 ARC 2021 & 2022 & 2023: Workshop/ Pin-up in course module “Advanced Integrated DesignI: Sustainable-tectonic Design with Integration of Structure, Site and Climate Conditions (AST)”
- MSc01 ARC 2021 & 2022: Excursion in course module “Advanced Integrated Design I:Sustainable-tectonic Design with Integration of Structure, Site and Climate Conditions (AST)”: Excursion to and registration of building site in Pebermosen
- MSc01 ARC 2021: Excursion in project module “Sustainable-Tectonic Architecture: Integrated Social Sustainability and Climate Impact (STAR)”: Contemporary sustainable communities in Aarhus and visit to project site in Arden
- MSc01 ARC 2021 & 2022 & 2023: Workshop in project module “Sustainable-Tectonic Architecture: Integrated Social Sustainability and Climate Impact (STAR)”: Climate, topography, ecology, and construction
- BSc04 ARK/URB 2022 & 2023 & 2024: Workshops and pin-ups in project module ”Formgivning af det offentlige byggeri: Integration af brugerkrav og energioptimering”: focusing on methods for identifying and registering users' needs, form and function as well as form, energy, and indoor environment
- MSc02 ARC/URB 2022: Study trip to Vienna
- MSc02 ARC/URB 2023 & 2024: Study trip to Vienna and Vorarlberg
- BSc03 ARK/URB 2022 & 2023: Workshop in project module “Formgivning af den kompakte bolig: Integration af kontekst, konstruktion og klima”

Supervision and examination

- MSc01 ARC 2021 & 2022 & 2023: Supervision and examination in course module “Advanced Integrated Design I: Sustainable-tectonic Design with Integration of Structure, Site and Climate Conditions (AST)”
- MSc01 ARC 2021 & 2022 & 2023: Supervision and examination in project module “Sustainable-Tectonic Architecture: Integrated Social Sustainability and Climate Impact (STAR)”
- MSc03 ARC 2021: Supervision and examination in project module “Independent choice: Research, Practice or Development in Architectural Design-engineering/Internships”
- BSc04 ARK/URB 2022 & 2023 & 2024: Supervision and examination in project module ”Formgivning af det offentlige byggeri: Integration af brugerkrav og energioptimering”
- MSc02 ARC 2022 & 2023 & 2024: Workshop, pin-up, and supervision in course module “Advanced Integrated Design III-C: Critical-experimental Studies in Life Cycle Assessment and Materiality to Support Sustainable-tectonic Design Thinking”
- MSc04 ARC/URB 2022 & 2023 & 2024: Supervision of Master Thesis

Censorship

- MSc03 ARC 2021: Internships/ project module “Independent choice: Research, Practice or Development in Architectural Design-engineering”
- MSc01 ARC 2022 & 2023: Course module “Advanced Integrated Design II: Green Building Strategies with Focus on Energy and Emission Assessment (AGB)”

Teaching before autumn semester 2021 at TU Wien, Austria (Master level):

- Thermal building performance simulation
- Current issues in building informatics
- Human ecology
- Current topics in building performance
- IMPAQT Life-long Learning Course Building Performance Computing; TU Wien, Austria /Nile University, Egypt
- IMPAQT Life-long Learning Course Building Ecology; TU Wien, Austria / Nile University, Egypt

Co-supervision of graduate students:
- Florian Regnath: master thesis title " Application of agent-based modeling to assess the impact of occupant behavior on buildings' energy use" (completed 2021)
- Amin Hadeer: master thesis title "A critical study of the suggested role of occupants in the building-related energy performance gap " (completed 2021)
- Ivanova Ana: master thesis title "Thermal and visual performance of vernacular revival buildings in Plovdiv, Bulgaria" (completed 2021)
- Nándor Mihály: master thesis title "Perception of Indoor Environmental Conditions in a Hungarian Secondary School" (completed 2020)
- Eduardo Vidal: master thesis title "Urban micro-climate implications of Barcelona's superblocks strategy: a computational assessment" (completed 2020)
- Sören Eikemeier: doctoral thesis title "Simulation-supported design optimisation for lifecycle-oriented buildings" (supervision support)

Instruction language of all above-listed teaching activities: English

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.

- BSc04 ARK/URB 2022 & 2023 & 2024: Semester coordination

- BSc04 ARK/URB 2022 & 2023 & 2024: Project coordination

- MSc01 ARK 2024: Course coordination

- Task group within the Create Integrated Architecture research group that focuses on progression of A&D teaching with regard to energy, indoor environmental aspects, passive design, and LCA over the course of the curriculum

- Project member of the IMPAQT ("Integrative Multidisciplinary People-centered Architectural Qualification & Training") project which focused on the development and implementation of an architectural-engineering curriculum (2017-2021). More specifically: The IMPAQT project funded by the European Commission (Erasmus+ Capacity Building in Higher Education (CBHE)) aimed to promote a more integrative, multidisciplinary, people-centered, and technologically agile architectural education. Toward this end, a consortium of expert partners from Europe and Egypt worked on realizing this vision through several outputs: On the one hand, the project developed a five-year architectural-engineering undergraduate curriculum towards a BSc in Architecture and Urban Design at the School of Engineering and Applied Sciences at Nile University in Egypt. On the other hand, the project developed life-long learning modules in three fields of specialization, drawing upon the specialization of the partners. These include building ecology / building physics, human requirements, and contemporary city. As project member, I contributed expertise to the design and development of the course sequence in the field of building technology.

- Master of Building Science and Technology (2-year program at TU Wien, Austria): Contribution to the preparation of educational material; Guidance of graduate students; Input to the refinement of curriculum (2018-2021)

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

- Adjunct Pedagogikum at Aalborg University 2022 (completed: December 2022)
- Basic Course in Problem Based Learning (completed: January 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.

Article publications regarding integration of building physics and building technology content in architecture education as well as article publications regarding building science education and teaching in a problem-based learning context (see for instance:

- Berger, C., and Olsen, T.V. (to be published). An explorative tracing of peer learning dynamics in a PBL-oriented design engineering education.

- Berger, C., dos Santos, L.F., and Hellwig, R.T. (2024). Pedagogical insights of using urban and building performance simulation in a problem-based learning context. E3S conference series: BuildSim Nordic 2024 Conference.

- Mahdavi, A., Martens, B., Pont, U., Schuss, M., Teufl, H., and Berger, C. (2022). Excellence in Building Science Education: Experiences with a Central European Experiment. Proceedings of the CESB22 conference (Central Europe towards Sustainable Building 2022), Prague, Czech Republic, 4-6 July 2022.

- Berger, C. and Mahdavi, A. (2019). Integrating Building Physics and Performance Simulation in Architectural Curricula: A Collaborative Effort. Proceedings of the 16th IBPSA Conference. Rome, Italy, 2-4 September 2019. https://doi.org/10.26868/25222708.2019.210117.

- Berger, C., and Mahdavi, A. (2020). Integration of Building Science in Architecture Education - the IMPAQT Experience. Proceedings of the 35th PLEA conference sustainable architecture and urban design. Planning Post Carbon Cities. A Coruña, 1-3 September 2020.

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.

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

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)

8. Any other information or comments.