

## 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.**

19 years of experience in higher education teaching between Cairo, Stuttgart and Copenhagen, in addition to several short term teaching in Connecticut, Virginia, Nuremberg and several others.

Teaching activities included activities for the regular German Master's and Bachelor's programs (in German), ITECH (English Master's program - Stuttgart: Integrative Technologies & Architectural Design Research) and IUSD (English Master's program: Integrated Urbanism & Sustainable Design) as well as Sustainable Design Engineering Courses and PBL (Problem Based Learning - Projects and Design Studios) in Copenhagen (English) at the Aalborg University.

Supervised 7 PHD thesis that are still in progress and a total of ca. 20 awarded master thesis between Copenhagen, Stuttgart and Cairo.

Exams were both in a written report format and a public final presentation. Courses varied between seminar courses of 5 or 6 ECTS and design studios of 15 ECTS. In many courses, intensive courses were first given in the first half of the course, followed by \*hands-on\* towards fabrication and design activities.

**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.**

Coordinating the technical input of the undergraduate courses of the Bachelor and Master studies of Sustainable Design Engineering- Department of Planning- TECH (current - 2023)

Establishment of the BioMat@Copenhagen research centre Department of Planning- TECH- (2022)

Coordination of the VR-Lab scientific and research vision- Department of Planning- TECH-Copenhagen, Aalborg University (since 2022)

Coordination of the first Doctoral Colloquium of the Faculty of Architecture and Urban Planning at the University of Stuttgart (2018, 2020).

Member of the Faculty Council and the Doctoral Committee of Faculty 01 at the University of Stuttgart (2016-2022).

Member of the following appointment committees at the University of Stuttgart (between 2017-2019):

W3 Landscape Planning and Ecology : (Faculty 01: Architecture and Urban Planning)

TT W1 Computing in Architecture: (Faculty 01: Architecture and Urban Planning)

TT W1 Robotic Construction: (Faculty 2: Civil and Environmental Engineering)

W3 Technical Environmental Biology and Ecosystem Analysis: (Faculty 2: Civil and Environmental Engineering)

W3 Lightweight Structures, Design and Construction (Faculty 2: Civil and Environmental Engineering)

Endowed professorship "Entrepreneurship in Technology and Digitalization: (Rectorate/TTI)

W3 Intelligent bio-integrative systems: (Faculty 4 Energy, Process and Bioengineering)

**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**

Numerous pedagogical trainings in Germany and Egypt, as well as workshops in innovative leadership (University of Stuttgart), blue engineering learning and teaching with regard to society and ecology (TU-Berlin) and awarded the highest distinction in higher education teaching in Germany (Excellence in Teaching) by the Stifterverband/Baden-Württemberg Stiftung for establishment of new teaching directions in design academic teaching included \*Learning by Doing\* and \*experimental design approaches\*.

Furthermore, diverse workshops and conferences were attended to further update individual teaching concepts and methods in the higher educational section. The workshops covered diverse themes including: Data standards, inclusivity, leadership, vision and sustainability in the framework of the event: The University: Future Festival (over Digitalization integration in Teaching), that took place on 4. Nov. 2021. In addition and in regards to mentorship, a workshop about mentoring PHD candidates who wish to apply for sponsorship for their startups was attended. Mentoring and how to include those concepts in PHD teaching courses and supervising skills were covered topics in this workshop, that took place on 19. January 2021.

**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.**

Peer Reviewer - UIA Conference Copenhagen 2023

Founding member of the Stuttgart Research Centre for Architecture:

Founding member of the Biointelligence Competence Centre.

Founding member and spokesperson of the Stuttgart Research Initiative (SRI) Biomass Utilisation

Member of the SFB-TRR 141: Biological Design and Integrative Structures - Analysis, Simulation and Implementation in Architecture

Member of the Cluster of Excellence EXC 2120 Integrative Planning and Building

Chairman of the JEC Biocomposites Conference, Paris 2016

**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 the new design philosophy : Materials as a Design Tool through which material properties as a design tool, merging the fields of Material Research, Architectural and Product Design, as well as Digital Fabrication to create feasible sustainable applications for the built environment. Hundreds of collaborative work took place among all globe continents in the fields of fabrication, automation, design and construction. The collaboration took place through exchanging experiences between industry and research.

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

Type your answer here...

**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)**

Type your answer here...

**8. Any other information or comments.**

Type your answer here...