

Starting in August 2015, the Chair of Architecture and Building Systems (A/S) offers a research position in the field of

Building Systems Simulation and Data Analytics (80-100%)

Research and teaching at the Architecture and Building Systems Group focuses on new approaches for the design, planning and operation of buildings as integrated, dynamic systems. The motivation and aim of our research is to reduce greenhouse gas emissions and increase the efficiency of using energy and resources in the built environment. The research is based on the identification and integration of advanced technologies, methods and processes from the fields of building systems, information and communication technologies.

Your Tasks: Your work will contribute to research, development and application of building energy simulation and building systems simulations. This includes building modeling (e.g. in Rhino, Revit etc.), building energy- and climate systems modeling, simulation and results data analysis. As a key part of your work you will support teaching on bachelor and master level by tutoring course work and integrated design projects.

Your Profile: We are looking for highly motivated candidates holding a master's degree in architectural-, energy-, environmental-, mechanical- or civil engineering, ideally with background in sustainable buildings / sustainable building systems. Your skill set should entail:

- very good knowledge of the state of the art building systems: envelope, HVAC systems, (ideally LowEx systems), basic control
- excellent skills and experience in building energy and systems simulation using state of the art software such as EnergyPlus, Transys, Modelica or Polysun.
- good CAD / BIM modeling skills, ideally Rhino + Grasshopper and / or Autodesk Revit
- good skills in statistics and methods of data analysis (e.g. clustering, fuzzy functions)
- basic programming skills and interest in further developing

Your English must be fluent, both written and spoken. German / French / Italian skills are welcome.

Our offer:

We offer a position in our international and interdisciplinary research group based at ETH Zurich at the Institute of Technology in Architecture (ITA), which is a renowned, vibrant and highly innovative setting. In addition to the inspiring research culture at the ITA and the Department of Architecture, the ETH offers a competitive salary for researchers.

Dependent on profile and qualification this position can be transformed into a PhD position after 6-12 months duration.

How to Apply:

Please apply including a comprehensive CV and selected samples of your most relevant work. Please apply online on www.jobs.ethz.ch. For questions please contact Valérie Gass (gass@arch.ethz.ch).