

# Sustainable Buildings and Green Cities

Simulate a campus building and optimize its energy performance

Check out our  
[website!](#)



## Expect these Contents

Explore the energy efficiency of buildings on a micro-level, and consider districts on a macro-level, while learning about building performance simulation and district supply systems. A district from the living lab project SmartQuart will serve as a use case. SmartQuart's core technological element is the exchange of energy and intelligent networking within and between the smart districts.

- ▶ Understand the mathematical and physical basics to work with dynamic building simulation and plant operation simulations
- ▶ Implement models using computer-based numerical methods and the object-oriented modeling language Modelica
- ▶ Identify influential factors on CO2 emissions and costs in the operation of a power system through a sensitivity analysis
- ▶ Simulate a single zone of a building for a complete year

## Quick Facts

### Your Summer School at a glance

 July 14 - July 27, 2024 (2 weeks)	 2,250 €
 On campus	 Mentoring and Supporting Program
 RWTH Certificate with 3 ECTS (approx. 75 hours)	 Accommodation included

## Explore a model of sustainable living

In times of energy transition, new technologies are emerging faster and faster. Become the next to shape a sustainable future! Do you want to experience the future of energy management up close? Our partner SmartQuart will help you understand the future of sustainable cities!

