Model, Simulate, Build and Interact with CPS!
This course develops a solid basis for students to model and simulate cyber-physical systems!
In this course you will:

- **Become proficient** with the bleeding-edge computer-based object-oriented equation-based modeling language, Modelica (http://modelica.org), and learn about open access Functional Mock-up Interface (FMI) standard supported by more than +100 tools (https://fmi-standard.org/), and being used to develop products in multiple industries: aerospace, automotive, built environment, power and energy, etc.

- **Learn** to use the world-leading CPS simulation software tool Dymola: http://dymola.com/

- **Create models with high reusability, portability and interaction**, from a PC to VR!

- **Design CPSs** that include embedded controls systems, will be studied “virtually” (by simulation) and physically using low-cost hardware platforms for:
  - Real-time and hardware-in-the-loop simulation for control models.
  - Real-time controller-in-the-loop simulation for embedded systems.

- **Apply your knowledge**: Build a model for a system from scratch through the final project!

Do you want to find out more!