

### **27.03.03 System analysis and management**

#### **«Information, measurement and control systems for cyber-physical devices and installations»**

##### **Program description:**

This program aims to provide Bachelor's students with advanced technologies and fundamental interdisciplinary training that would enable them to research, design, develop, produce and operate information-measuring and control systems of cyber-physical devices and installations for nuclear industry, as well as their components and means of system analyses, automated control, modelling, mathematical and software support. It also provides a solid background for prospective Master's studies in the field.

##### **Key features of the program:**

The main unique feature of the program is its curriculum that comprises of disciplines that focus on analysis and design of cyber-physical devices and systems, processes and systems modelling, AI-methods implementation for control systems and data analysis. It also includes a number of disciplines that provide a special focus on nuclear power engineering.

The program is also characterized by the significant amount of time dedicated of practicums at the labs with advanced equipment and internships at nuclear power enterprises.

##### **Key disciplines of the program:**

Automation for Design and Development of Cyber-physical Devices and Systems,

Information Equipment and Digital Signal Processing,

Algorithmic Modelling,

Distributed Computer Measuring and Control Systems,

Processes and Systems Modelling,

Automated Control Systems,

AI Methods for Management Systems.