## 14.03.01 Nuclear Power Engineering and Thermophysics

## **Nuclear Technologies**

The program strives to attract and develop outstanding and diverse students to provide the best education in nuclear engineering.

## Curriculum subject areas:

- homeland security
- power generation
- radiation transport methods
- nondestructive imaging and detection
- advanced nuclear materials,
- nuclear reactor thermal hydraulics
- nuclear safeguards and nonproliferation.

When undergoing practical training, students are becoming a part of research teams and contribute to cutting-edge research in the following subject areas:

- high-performance computing
- code benchmarking
- advanced reactor design
- fuels for space nuclear power and propulsion
- neutron transport methods and their application for simulation of real-life nuclear systems
- nuclear reactor physics
- advanced nuclear fuel design
- non-destructive testing and detection.