



**ALAR**  
Training Center



**SUMMER SCHOOL**

# **NUCLEAR ENGINEERING**

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**On-line / On-campus : July 17 – 28, 2023**

**READY TO LEARN ABOUT AUTOMATIC VOLTAGE  
REGULATORS PRINCIPLES OF OPERATION AND  
ROOT CAUSES OF POWER SYSTEM BLACKOUTS?  
THIS SUMMER COURSE IS FOR YOU!**

**ECTS credits: 4.0**



**POLYTECH**

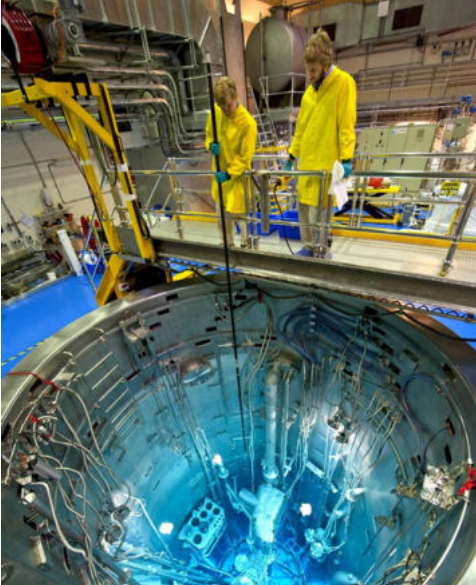
Peter the Great  
St. Petersburg Polytechnic  
University



**POLYTECH**  
Peter the Great  
St.Petersburg Polytechnic  
University



**ALAR**  
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## BRIEF DESCRIPTION

The School provides the unique opportunity to attend intensive academic program, which is composed of different lectures in nuclear engineering with experience from professors of European countries, with different opinions and approach. During two / three weeks students get practical skills in modelling of different modes of nuclear power plant (will be used specialized software); deep knowledge in nuclear engineering, technologies, legislation, and innovations in Russian Federation and abroad.

Content may include but is not limited to:

- Introduction to nuclear power plants
- Neutronic concepts of nuclear reactor
- Thermal-hydraulics of nuclear reactor
- Thermal-hydraulics of nuclear reactor
- Nuclear desalination
- Guest Speakers Day
- Modern situation in Russian / world nuclear sector
- Chernobyl disaster
- Generation IV reactors. Introduction
- Generation III reactors
- Small Modular Reactors
- GenIV reactors: modelling and simulation
- GenIV: Molten Salt Reactor (MSR)
- Economics of Nuclear Power Plants (+ numerical exercise)

Join ON-CAMPUS

Join ON-LINE





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### **Program dates:**

**On-line:** July 17 - 28, 2023

**On-campus:** July 17 - 28, 2023

### **Registration deadline:**

**On-line:** July 5, 2023

**On-campus:** May 31, 2023

### **Cost:**

**On-line:** US\$512

**On-campus:** US\$735

Includes tuition, registration, 4 credits ECTS Certificate, Migration support (for on-campus course), virtual Russian language course by ALAR Training Center (33h) + Certificate

### **Entrance requirements:**

- Fluent English. All classes and extracurricular activities are carried out in English. Knowledge of the Russian language is not required;
- The course is opened for Russian and foreign Bachelor, Master and PhD students with specialized background in Nuclear Engineering or equivalent skills and knowledge.

### **WHY US?**

We never stop developing. It is not our first rodeo! Our team is committed to learn and analyze every possible aspect of our course. Our students are in good hands - we deliver our promises concerning educational programme and many other activities that are created by our amazing staff!

Join ON-CAMPUS

Join ON-LINE