



Polytechnic Winter School of Nuclear Engineering

January, 25 – February, 06 2016

Peter the Great Saint-Petersburg Polytechnic University on behalf of the Institute of Energy and Transport System presents its new Polytechnic Winter School of Nuclear Engineering.

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.

All studies are developed accordingly to the European requirements and can be recognized as a period abroad.

Upon successful completion of the course students are awarded with 5 ECTS credits.

Target audience

The School is opened for Russian and foreign students with specialized background in Nuclear Engineering.

Course fee

380 Euro

Accommodation

Accommodation: not provided.

Can be booked at the university campus if free places are available, or found by participant independently.

Deadline for applications:

- December 20 (for foreign students)
- January 17 (for Russian students or students which don't need Russian visa)

Schedule of the Winter School is presented in the table below

Jan.	Time	Course	Person in charge
25	09:00-13:00	Introduction to Nuclear Engineering. Physical basis of nuclear energy. Nuclear fuel.	Prof. Paramonova (Peter the Great St. Petersburg Polytechnic University)
	13:00-14:00	Lunch	
	14:00-18:00	Construction of nuclear reactor. Technological schemes of nuclear power plants with various types of reactors. Modeling of Vaporization Processes	Prof. Agafonova (Peter the Great St. Petersburg Polytechnic University)
26	09:00-12:00	Nuclear Fusion Reactors	Prof. Zanino (Politecnico di Torino)
	12:00-13:00	Lunch	
	13:00-17:00	Nuclear Fusion Reactors	Prof. Zanino (Politecnico di Torino)
27	09:00-12:00	Superconducting Magnets and Cryogenics for Nuclear Fusion Reactors	Prof. Savoldi (Politecnico di Torino)
	12:00-13:00	Lunch	
	13:00-17:00	Superconducting Magnets and Cryogenics for Nuclear Fusion Reactors	Prof. Savoldi (Politecnico di Torino)
28	09:00-12:00	Economics of Nuclear Power	Prof. Skoda (Czech Technical University)
	12:00-13:00	Lunch	
	13:00-17:00	Economics of Nuclear Power	Prof. Skoda (Czech Technical University)
29		Excursion to the Leningradskaya NPP (Group 1)* / The development of Russia's nuclear industry	

Feb.	Time	Course	Person in charge
1	09:00-13:00	Turbines on the NPP	Prof. Backman (Lappeenranta University of Technology)
	13:00-14:00	Lunch	
	14:00-17:00	Nuclear Safety	Prof. Dostal (Czech Technical University)
2	09:00-13:00	Nuclear engineering for energy production - Generation III and Small Modular Reactor technologies	Prof. Ricotti (Politecnico di Milano)
	13:00-14:00	Lunch	
	14:00-18:00	Nuclear engineering for energy production - Generation IV reactor technologies	Prof. Cammi (Politecnico di Milano)
3	09:00-12:00	Neutron Transport Methods for Nuclear Reactor Core Design	Prof. Ravetto (Politecnico di Torino)
	12:00-13:00	Lunch	
	13:00-17:00	Neutron Transport Methods for Nuclear Reactor Core Design	Prof. Ravetto (Politecnico di Torino)
4	09:00-13:00	CFD Modeling in Nuclear Applications	Prof. Zacha (Czech Technical University)
	13:00-14:00	Lunch	
	14:00-17:00	Probabilistic Safety Assessment	Prof. Dostal (Czech Technical University)
5		Excursion to the Leningradskaya NPP (Group 2)* / The development of Russia's nuclear industry	
6	09:00-12:00	Theoretical Nuclear Thermal Hydraulics Part 1	Prof. Hyvärinen (Lappeenranta University of Technology)
	12:00-13:00	Lunch	
	13:00-15:00	Theoretical Nuclear Thermal Hydraulics Part 2	Prof. Hyvärinen (Lappeenranta University of Technology)
	15:00-17:00	Test Wrap up	

* - for participants, who applied and provided passport scan before 15th of November