

International Polytechnic Summer School "Plasma Physics and Controlled Fusion"

Peter the Great St. Petersburg Polytechnic University

Degree or qualification is awarded:

Internationally Recognized SPbPU Certificate with list of completed courses, grades and ECTS

Language of study: **English**

Mode of study: **full-time, distance learning**

Duration: **2 weeks**

Availability of free education: **no**

Price: **510-540 euro**

Programme webpage at the university website:

https://summerschool.spbstu.ru/programs/plasma_physics_controlled_fusion/

Programme curator: **Department of International Educational Programs**

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July 5 - July 16, 2021

This is a joint program developed in cooperation with School of Physical Sciences of SOKENDAI (the Graduate University for Advanced Studies, Japan).

The course is suitable as the first plasma physics course or an add-on course for senior undergraduate students and graduate students.

The primary objective of the course is to present the fundamentals of plasma physics particularly highlighting high-temperature plasma physics and its applications to controlled fusion. The course begins with an overview of plasma phenomena and their applications. The lectures cover Coulomb collisions, single particle motion in magnetic field, magnetic traps, principles of controlled fusion, plasma heating and diagnostics. The program also includes study visits to a tokamak laboratory and a laboratory for plasma technologies.

Duration: 2 weeks

ECTS credits: 4.0

Participation fee:

- Early bird registration fee: 510 euro
- Regular registration fee: 540 euro

Participation fee includes tuition fee, study materials, visits to companies and cultural program.

Cultural program

The cultural program includes:

- Boat city tour for students to get acquainted with the beauty of the city.
- Excursion to the Hermitage, one of the world's largest and oldest museums of fine art.
- Pub Quiz in the city center of St. Petersburg.

- Visit to the “Baltika” Brewery/"Coca-Cola" factory where students can learn about the construction and logistic peculiarities of the plant.
- Picnic at the seashore of the Gulf of Finland where students can enjoy Russian style barbecue (optional, for extra price).
- Excursion to Pushkin, former tzar summer residence famous for its palace and park ensemble. Students will visit the outstanding Catherine Palace with glorious Amber room (optional, for extra price).
- Excursion to Peterhof palace-ensemble with picturesque gardens, a countless number of fountains and giant golden statues (optional, for extra price).


Deadline for registration:

Early bird deadline: March 25, 2019

Regular deadline:

- for non-EU citizens: April 22, 2019
- for EU and visa-free countries' citizens: June 17, 2019 (applicable for Iranian and Indian citizens as well)

Program partners:

-  SOKENDAI: The Graduate University for Advanced Studies (Japan)
- A.F. Ioffe Physico-Technical Institute and Institute of Electrophysics and Electric Power of Russian Academy of Sciences

Specializations within this programme