

Semester in English "Unique Building Design"

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**

Duration: **18 weeks**

Availability of free education: **yes**

Price: **1985 euro**

Programme webpage at the university website:

<http://english.spbstu.ru/education/programs/programs-in-english/semesters-english/unique-building-design/>

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If you'd like to enlarge your knowledge in engineering design of unique buildings join this exchange semester!

The main objective of the program is to provide graduates with high-competitive skills and abilities in engineering design of unique buildings and structures. Based on the existing professional accomplishments our students should be able to successfully apply their newly acquired knowledge of structural mechanics, strength of materials, mathematics, computer technologies and engineering to identify and solve complicated tasks when computing and designing unique buildings.

Program Outcomes

Upon completion of the program, students will be able to:

- create building information models;
- make theoretical calculation of unique buildings and structures;
- perform complex calculations of building structures;
- design and analyze complex building structures made of modern building materials;
- predict the life cycle and assess a condition and durability of buildings and structures;
- design real construction projects;

What opportunities will you have?

The program provides students with an opportunity to get knowledge about Russian and worldwide experience related to unique buildings and constructions, to gain useful contacts with representatives of civil engineering business. Moreover the "semester abroad" is a great way to learn culture and education system of another country, to improve foreign language skills, to make new friends and acquire invaluable experience.

Program dates: beginning of February – mid-June

Participants: international and Russian students

Prerequisites: undergraduate students – at least two years of Bachelor level studies, with good command of English

Teachers: Professors from St. Petersburg Universities; visiting Professors from European partner Universities and highly qualified experts of construction companies

Training methods: lectures, case studies, field trips, company visits and group discussions

Credits: 30 ECTS credits per semester

Program Scheme: Compulsory courses + Elective courses + Interdisciplinary project. Compulsory courses and interdisciplinary project are obligatory. Students can also choose elective courses from the list to get 30 ECTS credits.

Program Content:

Compulsory Courses:

- Theoretical Basis of Unique Building Designing - 4 ECTS
- Designing of Unique Building Structures - 4 ECTS
- Building Information Modeling - 4 ECTS
- Reinforced Concrete Structures - 4 ECTS
- Integrated Project - 4 ECTS
- Work Experience, Internship - 4 ECTS

Elective Courses:

- Light Weight Metal Structures - 2 ECTS
- GIS -Technologies for Civil Engineering - 2 ECTS
- Strength and Reliability of Structures - 2 ECTS
- Structural Dynamics - 2 ECTS

Application procedure: application form for the program can be requested at e-mail: dean@cef.spbstu.ru

Specializations within this programme