



Why Master's Degree Program in Civil Engineering at Peter the Great St. Petersburg Polytechnic University?

KEY FACTS

► Admission requirements	Candidates are required to have a Bachelor's, Specialist's or Master's degree in the related subject area. All applicants must demonstrate English language proficiency at B+ level.
► Admission tests	Examination in the field of civil and industrial engineering. An interview in English language with a program coordinator (option - via Skype).
► Admission procedure	Deadline for application – June, 30. Applicants may find additional information concerning admission at the official web-sites of SPbPU – www.eng.spbstu.ru , www.spbstu.ru
► Program starts	Autumn semester – September, 1
► Program duration	2 years
► Degrees awarded	Master of Science in Civil Engineering (MSc)
► Tuition fee	for Russian students — 150 000 RUB / year for foreign students — 210 000 RUB / year

CONTACT INFORMATION

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MASTER OF SCIENCE IN CIVIL ENGINEERING

ENERGY EFFICIENT AND SUSTAINABLE BUILDINGS

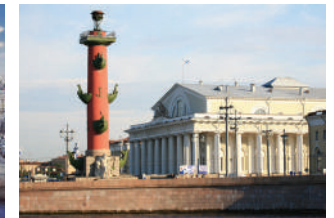
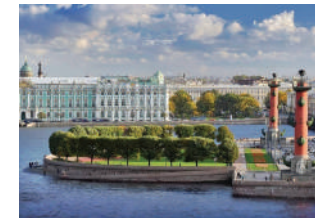
International Master's Degree program in English

Key information about the study program in Saint-Petersburg, Russia



www.eng.spbstu.ru

- Master's Degree program «Energy Efficient and Sustainable Buildings» is fully delivered in English.
- World-class professors from SPbPU and leading European universities.
- Unique opportunities for international mobility. Taking semester abroad at academic partners of SPbPU.
- Selection of elective courses for building individual track based on personal interests.



Peter the Great St. Petersburg Polytechnic University

In 2010 SPbPU became a «National Research University», also known as Polytech — a recognized Russian leader in the field of higher engineering and economic education. Nobel Prize winners P.L. Kapitsa, N.N. Semenov, Zh. I. Alferov — are just a few names among hundreds of talented scientists whose activities are connected with Polytech.

The Institute of Civil Engineering has been operating since 1907 (former name of Civil Engineering Department). Since that time it aims to prepare specialists in sphere of civil engineering, hydraulic engineering construction and engineering protection of environment. The Institute established partnership with a number of universities in Europe and today it is a well known leader of technical education in Russia.

Curriculum

1st SEMESTER (30 ECTS)	
► Compulsory courses	<ul style="list-style-type: none"> Fluid Mechanics for Engineering Building Information Modeling (BIM) Business Planning in Construction Economics and Management of Construction Inspection of Buildings and Construction Scientific and Research Work
► Elective courses (one discipline should be chosen from each group)	Group A <ul style="list-style-type: none"> Information Technologies for Civil Engineering GIS-Technologies for Civil Engineering Group B <ul style="list-style-type: none"> English for Technical Communication Russian Language
2nd SEMESTER (30 ECTS)	
► Compulsory courses	<ul style="list-style-type: none"> Energy Efficient Buildings and Structures Energy Audit of Buildings and Constructions Energy-Efficient HVAC System Math Modelling in Civil Engineering International Communication in Construction Business Teamwork and Self-Management Scientific and Research Work
3rd and 4th SEMESTERS (60 ECTS)	
► Compulsory courses	<ul style="list-style-type: none"> Heat and Mass Transfer Theory Energy-Efficient Building Materials Energy-Efficient Heating System Research Methodology Scientific and Research Work Master's Thesis Completion
► Elective courses (one discipline should be chosen from each group)	Group C <ul style="list-style-type: none"> Energy Efficiency and Conservation in Industry Modes of Renewable Energy Using Group D <ul style="list-style-type: none"> Construction Ecology Water Facilities
FINAL EXAM	

Master thesis has to be defended in front of committee consisting of professors and corporate representatives



MSc in Civil Engineering

The program is realized by key professors of SPbPU's Institute and lecturers of leading European Institutes. Program participants are required to have a Bachelor's degree in Civil Engineering or an equivalent degree according to the educational system of the country which they represent. They should possess fluent English as a foreign language. All lecturers and examinations are in English.

Objective of the program

The objective of the program is to obtain Masters of Science in Civil Engineering knowledge at high standard in the field of energy efficiency and sustainability in building and construction sphere. The program is focused on training complex concepts for energy improving in civil and industrial engineering of the following stages such as: technical inspection, designing, construction, renovation and meeting the requirements in compliance with International Auditing Standards. While studying process you will obtain skills and knowledge needed for a future successful career in civil and industrial engineering.



KEY ADVANTAGES

- The program provides our students:
 - individual work with each student, includes active scientific research and experience of teaching activities;
 - regular participation at seminars, conferences, scientific forums;
 - active engagement of teachers and students during a joint project and research activities;
 - using modern computer technology in construction;
 - communication with representatives of the leading construction and engineering companies;
 - online learning on the basis of remote system Moodle (www.dl.spbstu.ru).
- The program offers a unique opportunity to take an internship in European partner universities.
- We offer each student which studies in program "Energy Efficient and Sustainable Buildings" to take a semester abroad in English language in one of the European partner universities.

Duration and format

Two years (4 semesters)

Total workload

120 ECTS

TEACHING METHODS

The main target of the program is developing practical skills of:

- inspection methods in respect of building structures and construction facilities;
- implementation and submission results of energy auditing reports;
- development of energy efficient technologies and solutions in the construction field;
- methods of analysis, design and improving of energy-efficiency building systems and structures;
- scientific research work and publishing.

Every student may take one semester abroad at one of the European partner universities.

PROGRAM PARTNERS

1. Helsinki Metropolia University of Applied Sciences (Finland) —



Finland's largest university of applied sciences, educates the professionals of tomorrow in the fields of culture, business, health care and social services, and technology.

Master's Degree program «Construction and Real Estate Management», «Civil Engineering: Sustainable Building Engineering».

2. Lappeenranta University of Technology (Finland) —



strategic focus areas of this university are green energy, technology and sustainable value creation, and the international role as a hub of Russian relations.

Master's Degree program «Energy Technology»

3. Riga Technical University (Latvia) —



is an accredited internationally recognized European university that consists of 8 faculties and 35 institutes. It is the second largest

university in Latvia by number of students, and it has the greatest number of state funded students.

Master 's Degree program «Civil Engineering».