



KEY FACTS

► Admission requirements	Candidates are required to have a Bachelor, Specialist or Master degree specific 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 programme coordinator (option - via Skype).
► Admission procedure	Deadline for application – July 30 Applicants may find additional information concerning admission at the official web-sites of SPbSPU www.spbstu-eng.ru , www.spbstu.ru
► Starting date	Fall term – 1st of September
► Duration of programme	2 years
► Degrees awarded	Master of Science in Civil Engineering (MSc)
► Tuition fees	150 000 RUR per year

FOR FURTHER INFORMATION PLEASE CONTACT:

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Civil Engineering Institute
Construction of Unique Buildings and Structures Department
Polytechnicheskaya, 29, Hydro-technical Building,
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www.imop-spbspu.ru
www.spbstu-eng.ru
www.cef.spbstu.ru

MASTER OF SCIENCE IN CIVIL ENGINEERING

ENERGY EFFICIENT AND SUSTAINABLE BUILDINGS

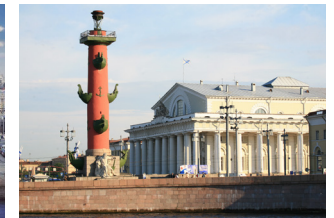
INTERNATIONAL MASTER DEGREE PROGRAMME IN ENGLISH LANGUAGE

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



www.spbstu-eng.ru

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



St. Petersburg State Polytechnical University

In 2010 SPbSPU 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 well known leader of technical education in Russia.

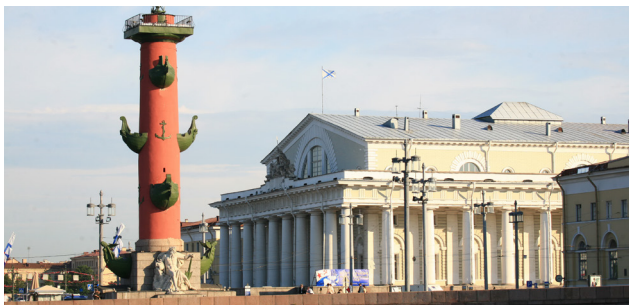
Curriculum

1st SEMESTER (30 credits)	
► Compulsory Courses	<ul style="list-style-type: none"> Philosophical Problems of Science and Technology Economics and management of construction objects Information Technologies in Civil Engineering Methods of Solving Sci-Tech Settings Inspection of Buildings and Construction
► Elective Courses(one discipline should be chosen from each group)	Group C <ul style="list-style-type: none"> Fluid Mechanics for Engineering Heat and Mass Transfer Theory Group D <ul style="list-style-type: none"> English for Technical Communication Russian Language

2nd SEMESTER (30 credits)	
► Compulsory Courses	<ul style="list-style-type: none"> Math Modelling Energy Audit of Buildings and Constructions Energy Efficient Buildings and Structures Foreign Language Pedagogics and Androgogics Energy-Efficient HVAC system

3rd AND 4th SEMESTERS (60 credits)	
► Compulsory Courses	<ul style="list-style-type: none"> Special Parts of Mathematics Research Methodology Energy-Efficient Heating System Scientific and Research Work Master's Thesis Completion
► Elective Courses(one discipline should be chosen from each group)	Group A <ul style="list-style-type: none"> Modes of Renewable Energy Using Energy Efficiency and Conservation in Industry Group B <ul style="list-style-type: none"> Construction Ecology Water Facilities

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



MSc in Civil Engineering

The programme is realized by key professors of SPBSPU's Institute and lecturers of leading European Institutes. Programme 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 programme

The objective of the programme is to obtain Masters of Science in Civil Engineering knowledge at a high-standard in the field of energy efficiency and sustainability in building and construction sphere. The programme 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 the knowledge and skills needed for a future successful career in civil and industrial engineering.



KEY ADVANTAGES

- The programme provides our students:
 - individual work with each Master, 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 programme offers a unique opportunity to take an internship in European partner universities.
- We offer each student which studies in programme "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 credits

TEACHING METHODS

The main target of the programme 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 in one of the European partner universities.

PROGRAMME PARTNERS

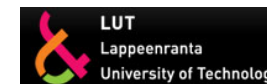
1. Helsinki Metropolia University of Applied Sciences (Finland) —



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 degree programme «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 degree programme «Energy Technology»

3. Riga Technical University (Latvia) —



is an accredited internationally recognised 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 degree programme «Civil Engineering».