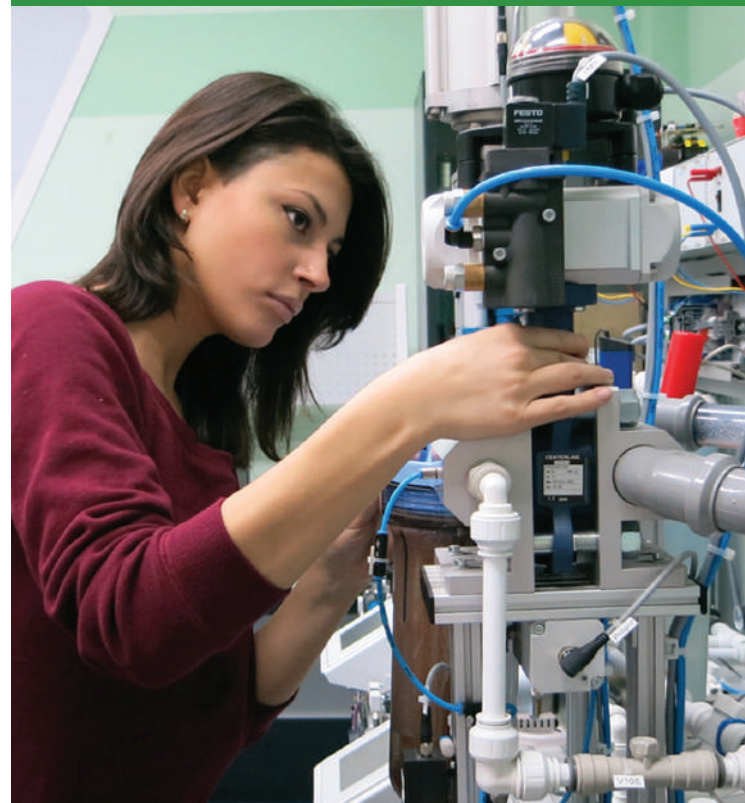




## INTELLIGENT SYSTEMS IN THE FRAMEWORK OF BRIDGE PROJECT

International Master's Degree Program in English  
with **Double Degree option**

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



[www.eng.spbstu.ru](http://www.eng.spbstu.ru)

## Why Master's Degree Program in Information Science and Computer Engineering at Peter the Great St. Petersburg Polytechnic University?

- The program provides a unique experience in the information technology in the best traditions of the Russian and Britain scientific schools.
- Graduates of this program have great opportunities of to be employed in Russian and international engineering and automation companies as well as to continue their education in international PhD programs.
- The program is aimed to prepare new generation of the specialist possessing the deep theoretical knowledge and skills in the field of computers and information engineering, competitive on Russian and European labor market.



### 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.

Institute of Computer Science and Control Systems offers multilevel education in field of computer technologies development and control systems. Educational process is based on advanced fundamental training in fields of informatics and programming, microelectronics, information security, automatic control systems, system analysis and control, distributed computing and computer networks, information measuring systems, ecological monitoring systems, computational mathematics and modeling.

### KEY FACTS

▶ Admission requirements	Candidates are required to hold a Bachelor's, Specialist's or Master's degree in fields of computer science or related ares. English language proficiency at B+ level.
▶ Admission tests	Examination in the field of information science and computer engineering and interview in English language with program coordinator.
▶ Admission procedure	Written on-line application. Application deadline – June, 30. Applicants may find additional information concerning admission at the official web-sites of SPbPU <a href="http://www.spbstu.ru">www.spbstu.ru</a> and <a href="http://www.eng.spbstu.ru">www.eng.spbstu.ru</a> .
▶ Program starts	Autumn semester — September, 1
▶ Duration of program	2 years
▶ Degrees awarded	Master of science (MSc)
▶ Tuition fee	1st year: for Russian students — 190 000 RUB for foreign students — 260 000 RUB 2nd year: £ 5 000



Peter the Great St. Petersburg Polytechnic University  
Institute of Computer Science and Control Systems  
Department of Control Systems and Technology  
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[www.eng.spbstu.ru](http://www.eng.spbstu.ru), [cst.icc.spbstu.ru](http://cst.icc.spbstu.ru)

## Curriculum

### COMPULSORY COURSES

- Intelligent Systems
- Methods of Optimization
- Knowledge Management and Knowledge Engineering
- Software Development Technology
- Modern Problems of Computers and Information Science
- Mathematical Modeling and Simulation
- Computing Systems
- History and Methodology of Informatics and Computer Science
- Neuroinformatics and Neurotechnologies
- Digital Signal Processing\*

### SCIENTIFIC AND RESEARCH WORK

- Scientific and Research Work in Term
- Research Seminars
- Research Practice

### ELECTIVE COURSES: ONE DISCIPLINE SHOULD BE CHOSEN FROM EACH GROUP:

- Group A
- Intelligent Computing
  - Distributed Databases
- Group B
- Cognitive Multiagent Systems
  - Intelligent Control Systems
- Group C \*
- Cryprography and Coding
  - Digital Image Processing
- Group D
- Signals and Information Theory\*
  - Modern Operating Systems Concepts

### THE FINAL CERTIFYING EXAMINATION

The Final Certifying Examination includes final interdisciplinary examination, Master thesis preparation and its presentation.

All disciplines marked by \* are necessary for obtaining the degree of Master of Science in Computer and Information Engineering (City University London).

## MSc in Information Science and Computer Engineering

The program was developed under support of British Council and it is accredited by Quality Assurance Agency of Great Britain. The first graduation of the students, successfully completed the program, took place in 2009.

The program is realized with the participation of key professors of Peter the Great St. Petersburg Polytechnic University (SPbPU) and City University London.

### Objective of the program

The objective of the program is to prepare high qualified specialists that possess knowledge of state-of-art and new trends of intelligent systems, information processing technologies and control systems and skills of their development and using in applied fields of research and in industry.

### KEY ADVANTAGES

1. Upon successful completion of the course according to this program, students have opportunity to get two diplomas of a Master's degree:
  - Master's degree in Information Science and Computer Engineering (from the SPbPU) and
  - Master of Science degree in Computers and Information Engineering (from City University London).
2. Unique opportunities for international mobility – students spend one year in St. Petersburg (Russia) and second year in London (Great Britain).
3. Practical training, laboratory works and research work are conducted in laboratories equipped with modern facilities provided by companies Siemens AG, Festo Didactic, Oracle and etc.
4. The program is realized in cooperation with leading Russian and international companies (Siemens, SAP, General Motors, State Unitary Enterprise "Vodokanal of St. Petersburg", LLC "KINEF") and branches of the Russian Academy of Sciences in organizing internships, project activities and employment assistance in laboratories equipped with modern facilities provided by companies Siemens AG, Festo Didactic, Oracle and etc.

### Duration and format

Two years (4 semesters). This program allows realizing the model "two diplomas in two years". First and second semesters take place in SPbPU, third and fourth semesters take place City University London.

### Total workload

120 credits at the minimum.

### TEACHING METHODS

Lectures and seminars, case studies, practical studies connected with the subject of lectures, an applied research project. Language of instruction is English.

### PARTNERS AND ORGANIZATIONAL PRACTICE



**CITY UNIVERSITY  
LONDON**

City University London is a public research university located in London, United Kingdom. It was founded in 1894. University is organised into seven Schools, within which there are around 40 academic departments and centres. City University London is a leading international University and the only university in London to be both committed to academic excellence and focused on business and the professions.

## SIEMENS

Siemens AG is a German multinational engineering and electronics conglomerate company headquartered in Munich, Germany. It is the largest Europe-based electronics and electrical engineering company.



SAP AG is a German multinational software corporation that makes enterprise software to manage business operations and customer relations. Headquartered in Germany, with regional offices around the world, SAP is the market leader in enterprise applications in terms of software and software-related service.



Russian Academy of Sciences