

# Software Engineering (Master)

Saint Petersburg Electrotechnical University "LETI"

Degree or qualification is awarded: **Master**

Language of study: **Russian**

Mode of study: **full-time**

Duration: **2 years**

Availability of free education: **yes**

Price: **208 000 rubles per year**

Programme webpage at the university website: <https://etu.ru/en/study/masters-degree/software-engineering>

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The area of graduates' professional activity is industrial production of software for information and computing systems for various purposes. The program corresponding to the general international trend and reflects the evolution of programming from craft to science and industry, based on the traditional triad - methods, tools, technologies. The master program is based on the latest international standards in software development (such as IEEE SWEBOK and others).

## Master's program

The 09.04.04 Software Engineering provides the programs "Development of Distributed Software Systems".

## Key points

As a modern scientific and technical field:

- Software engineering is different from other engineering disciplines in the fundamental intangibility of software and the discrete nature of its operation;
- To achieve the required results, software engineering should strive to integrate the principles of mathematics and computer science with engineering approaches developed for the production of tangible material artifacts;
- Based on mathematics and information technology (computing), software engineering develops systematic models and reliable methods for producing high-quality software;
- These principles apply to all levels, from theory and methodology to the actual practice of creating software.

## Main disciplines

- Analysis, Modeling and Optimization of Systems;
- Distributed Systems and Network Operating Systems;

- Development of Language Processors;
- Data Processing Methods and Time Series;
- Object-oriented Software Development Technology;
- Verification and Certification of Software;
- Computer 3D Graphics;
- Multithreaded and Distributed Programming;
- Linux Based Real-time Systems;
- Object-Oriented Software Development;
- Development of Distributed Software.

## **Skills acquired**

The objects of graduates' professional activity are:

- Software project (software product development project);
- Software product (created software);
- Software product life cycle processes;
- Methods and software development tools;
- Personnel involved in the life cycle of a software product.

## **Specializations within this programme**

### **Your future career**

- Programmer;
- Software Design Engineer;
- Software Systems Engineer;
- Software Testing Specialist;
- Specialist in the Development of Software and Information Systems;
- Software Engineering Specialist;
- Software Project Management Specialist;

- System Administration Specialist;
- System Architect;
- System Programmer;
- Systems Analyst.