

International Polytechnic Winter School "Big Data: theory and application"

Peter the Great St. Petersburg Polytechnic University

Degree or qualification is awarded: **Certificate**

Language of study: **English**

Mode of study: **distance learning**

Duration: **2 weeks**

Availability of free education: **no**

Price: **270 euro**

Programme webpage at the university website:

<https://english.spbstu.ru/education/programs/short-term-programs/winter-school/big-data-theory-application/>

Programme curator: **Department of International Educational Programs**

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JANUARY 18 — 29, 2021

Introduction to Data science

- Glossary of big data
- Types of data
- Structured data
- Unstructured data
- Data in natural language
- Machine data

Working with big data

- Data collection
- Data preparation
- Data research
- Modeling and building models

A system for collecting, processing and storing big data

- SQL databases
- NoSQL databases
- Tools for working with big data
- Highly loaded systems
- Big data processing in practice

Machine Learning

- Data preprocessing
- Statistical data analysis
- Building models
- Neural networks

Project work: Development of software for working with big data

Duration: 2 weeks

ECTS credits: 4.0

Participation fee: 270 Euro

Cultural program

Socio-cultural program of extracurricular activities and networking events are included*: Online Interactive Campus Tour; Online broadcasting of excursion to the Hermitage museum; Online Pub Quiz.

*All of the listed above activities will take place but in case any of those will have to be cancelled, an alternative event will be offered to participants.

Deadline for registration: January 10, 2021

Specializations within this programme