

# Practical Data Analysis

## Ural Federal University named after the first President of Russia B.N. Yeltsin

Degree or qualification is awarded: **Master's Degree**

Language of study: **English**

Mode of study: **full-time**

Duration: **2 years**

Availability of free education: **yes**

Price: **255 100 per year; 247 200 as discounts apply.**

Programme webpage at the university website:

<https://urfu.ru/en/international/programs-and-courses/master-programs-in-english/practical-data-analysis/>

Programme curator:

Tel.:

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# Practical Data Analysis

The program is offered by UrFU in collaboration with NPO Automatics, Vector Manufacturing Enterprise, Kalinin Machine-Building Plant, SKB Kontur, Yandex, and Octonica

Duration of study: 2 years

Direction: Informatics and Computer Technologies

Subject: Information systems and technologies

Code: 09.04.02

Credits: 120 ECTS

Language of instruction: English

Head of the program: Prof. Sergey Porshnev, Doctor of Technical Sciences, Professor at the Department of Information Technologies

Entry requirements: 4-year Bachelor's degree (or equivalent)

Program goal: The main distinguishing feature of the program is stressed interdisciplinary direction to computer sciences, information technologies, applied mathematics. Also applied aspects of adaptive data analysis is a complex field of science at the intersection of mathematics, computer sciences and various directions of professional human businesses (science, education, industry, government management, economics, medicine and etc.). The aim of the program is highly qualified and globally competitive professionals training. After the course finishing the specialists will be competent not only in the theory of adaptive data analysis, but also able to apply these methods in various fields of professional human businesses and data extraction from the corresponded systems that produces these data.

Curriculum:

- Logic and methodology of scientific research
- Introduction to data analysis methods and information retrieval
- Mathematical methods in data analysis
- Modern problems in adaptive data analysis
- Time series data analysis and forecast methods
- Image analysis and image processing methods
- Data access and information retrieval methods
- Data processing algorithms on external storages
- Toolkits for time series analysis and forecast
- Toolkits for image analysis and image processing
- Toolkits for data analysis and data visualization
- Toolkits and technologies for information retrieval

Final examination: Oral examination and Master's thesis defense

Program highlights: Graduates of the master's program "Adaptive data analysis" ready for professional work in the analysis of data of different nature and purpose, including field related to science, industry, education, governance, medicine, etc. Other potential employers include international organizations, sustainability departments, consulting companies, insurance companies, universities and research centers. This offers excellent opportunities for international students from developing countries with associated demands on knowhow. An active community and network of graduates is planned to facilitate intellectual and personal exchange of international specialists.

Career opportunities:

This program graduates will be qualified for careers in the fields of Adaptive Data Analysis and Big Data in different industries, areas and forms of ownership, institutions and organizations, including financial, credit and insurance institutions, municipal authorities and the government, academic and institutional research organizations.

Contacts:

Student Recruitment and Admission Managers  
[admission@urfu.ru](mailto:admission@urfu.ru)

## **Specializations within this programme**