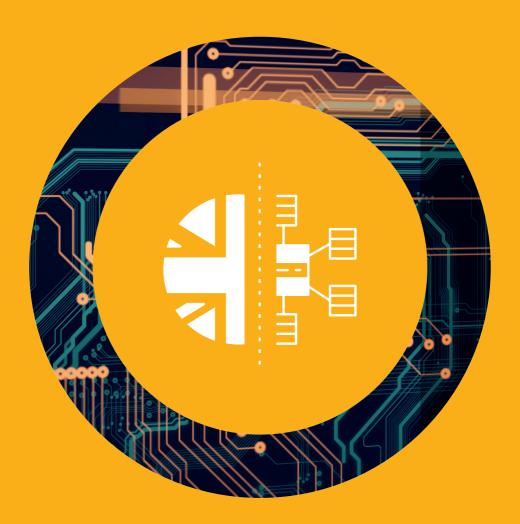






HSE and University of London Double Degree Programme

DATA SCIENCE AND BUSINESS ANALYTICS





HSE and University of London Double Degree Programme

Data Science and Business Analytics

Faculty of Computer Science

Bachelor's programme

The applicant must take two exams:

Address: 109028, Moscow,

Tel.: +7 (495) 772 9590 *27343

E-mail: computerscience@hse.ru

11 Pokrovskiy Boulvar

www.hse.ru/admissions/undergraduate-apply

Mathematics English	
(8)	Tuition fee: 10 200 USD per year
\bigcirc	Study duration: 4 years
	Full-time programme
= 0	Degrees:
	Bachelor of Science in Applied Mathematics and Information Science, HSE
	Bachelor of Science in Data Science and Business Analytics, University of London
	Language of instruction: English

Programme manager:

E-mail: tpak@hse.ru

www.hse.ru/en/ba/data/

Tatiana Pak



Programme Academic Supervisor

Tamara Voznesenskaya

About the Programme

The programme is aimed at educating well-versed analysts and data scientists to have knowledge in applied economics, specifically the financial industry. The main goal is to equip students with solid applied skills enabling them to solve tasks creatively and efficiently.

Major goals of the programme:

- To provide rigorous training in mathematics as a foundation for traditionally high-quality education in Russia.
- To build competences in various domains of programming and modern information science, such as data analysis, machine learning, software design and development.
- To develop technical skills in working with big data and building analytical models for business and different economic sectors.
- To immerse students in an English-speaking environment that will help students adapt to the international higher education.





Since 2016, HSE University has been included in **QS – World** University Rankings by Subject for Mathematics and Computer Science & Information Systems. In 2020, HSE placed in 101-150 range Mathematics category and in 151-200 range in Computer Science & Information Systems category.

How to apply

The application process for international students (who have not taken the Russian Unified State Exam (EGE)) consists of two stages:

- Online registration. The application period: November 1, 2020 – August 15, 2021.
- Examination stage (online or in Moscow)It is possible to take exams online or on-site or participate in International Youth Olympiad.
- If you have an international certificate in English and/or Mathematics, the results of these examinations can be recognized by HSE and used instead of HSE internal examinations.

More:

- www.hse.ru/admissions/ undergraduate-apply
- www.hse.ru/en/ba/data/apply

Advantages of the programme

Studying at the faculty established by HSE University and Yandex

In 2014, HSE University and Yandex, a leading Russian IT company, established the Faculty of Computer Science where the intersection

of academic science and handson experience is key to preparing specialists who are qualified enough to tackle a wide range of IT challenges immediately upon graduation.

UK university partner with a prominent and established reputation

The London School of Economics and Political Science designed and supervises 'the British part' of the programme. LSE is one of the world's leading universities, ranked #49 in the QS World Universities ranking. It places within the top 150 universities offering education and research in Computer Sciences and ranks 7th in Economics.

High-quality Teaching

Professional teaching staff with experience in leading IT companies, research, consulting and finance.

Obtaining professional competences for a specific industry

The programme offers a cluster of financial and economic disciplines and applied courses that introduce students to the typical economic and financial problems and their efficient solutions.



Since 2018, HSE has been included in the **THE**World University Rankings by Subject for Computer
Science, placing in 401-500 range in 2020.

Access to continuing education at top-notch master's programmes in Applied Mathematics, Information Science, and Economics

The programme's graduates are equipped to take the best master's programmes in Applied Mathematics and Computer Science or Economics. In particular, the new Financial Technologies and Data Analysis master's programme, launched in 2017 in collaboration with Sber – Russia's leading bank championing innovative IT transformation – welcomes our graduates.

Rigorous project activities and research

A significant part of the programme consists of hands-on courses which are introduced in the second year when each student carries out a programming project under the supervision of a practising mentor. During their third and fourth years, students can choose to focus on research or continue developing their project skills by working on team projects offered by the Faculty's industry partners. Student projects are mostly be related to the financial industry.

Wide network of partners

The faculty partners with large banks (Sber, Otkritie Bank, Alfa-Bank, Tinkoff Bank), consulting companies

(PwC, McKinsey&Co), financial (Moscow Stock Exchange, Foreksis, Worldquant) and other types of companies that may be considered potential employers (SAS, MTS). The number of partnerships is consistently growing. While some partners' employees consult students and mentor their projects, others teach them to solve real business problems within the courses and research seminar.

Financial support

The Faculty grants Ilya Segalovich Scholarship to the most active and academically successful students. Bachelor students receive 30,000 ₱, master - 35,000 ₱, doctoral students - 40,000 ₱.

More about the Faculty's scholarships at <u>cs.hse.ru/en/stipend</u>

What will I study?

- Mathematical disciplines essential for computer scientists: Discrete Mathematics, Mathematical Analysis, Linear Algebra and Geometry, Differential Equations, Probability Theory and Mathematical Statistics.
- A set of compulsory courses in programming.
- Databases, Information Systems Framework.



Since 2017, HSE University has been included in Shanghai Ranking's Global Ranking of Academic Subjects. In 2020, HSE placed in 101-150 range in Mathematics category.

- Machine Learning and Applications.
- A distinguished set of financial and economic subjects:
 - Introduction to Micro and Macroeconomics;
 - Elements of Econometrics;
 - Statistical Methods in Market Analysis;
 - Business and Management in a Global World.
- A range of elective courses.

Applied economic tasks are a part of project work, bachelor's thesis, coporate courses and research seminar

Career prospects

- Banking, investment and insurance companies (Sber, Alfa-Bank, Tinkoff Bank, WorldQuant, Moscow Stock Exchange).
- Leading Internet companies (Yandex, Mail.ru, Google, Facebook, Rambler).
- Leading software manufacturers (Microsoft, SAP, SAS, Qlik, etc.).
- Consulting (PWC, McKinsey&Co, Accenture, BCG, Glowbyte).
- IT-departments and data analysis departments of large mobile providers (Beeline, MTS, Megafon).

Double-degree programme

- Prospective students follow the general admission process at HSE University More information: www.hse.ru/admissions
- Intense training in English is an integral part of studies during the first year.
- Provided students have passed the exam session successfully under HSE University's regulation on interim assessment, they transfer to the second year of studies at HSE University and enrol in the first year at the University of London programme.
- The student's second, third and fourth years at HSE University are considered the first, second and third year of studies at the University of London, respectively.
- Given that the University of London's programme lasts for three years, students complete the double-degree programme entirely in four years, which corresponds to the length of the bachelor's programme in Russia.
- Degrees are awarded to students upon the successful defence of the bachelor's thesis.



Since 2016, HSE University has been included in **U.S.News** & World Report Best Global Universities by Subject. In 2020, HSE University placed in 101-150 range in **Mathematics** category.

5 Benefits



English as a Medium of Instruction

Our students listen to lectures, participate in seminars and prepare papers in English only. This approach allows mastering both knowledge and language.



Educational and career prospects

The programme opens a broad list of educational and professional opportunities for graduates both in Russia and beyond.



Intensive Research Work

Practical work is up to one-fifth of the curriculum. Students have full access to the resources of HSE University.



Obtaining professional competencies for a specific industry

The programme offers a cluster of financial and economic disciplines and applied courses that introduce students to real-world cases and teach them how value-added can be accumulated.



Wide network of partners

The faculty partners with large banks (Sber, Alfa-Bank, Tinkoff Bank), consulting companies (PwC, McKinsey&Co), financial (Moscow Stock Exchange, Foreksis, Worldquant) and other types of companies that may be considered potential employers (SAS, MTS).

