

Computational Linguistics

National Research University – Higher School of Economics

Degree or qualification is awarded: **Master degree in Linguistics**

Language of study: **Russian**

Mode of study: **full-time**

Duration: **2 years**

Availability of free education: **yes**

Price: **320 000 RUB per year**

Programme webpage at the university website: <https://www.hse.ru/en/ma/ling/>

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This programme offers training for language experts who are able to work with language data, build models and process them as part of contemporary linguistic theories, as well as solve various problems in applied linguistics.

The programme involves two tracks. Linguistic Theory offers students in-depth knowledge of linguistic typology and sociolinguistics, opportunities to study the processes taking place in the Russian language today, and the skills needed to solve problems in applied linguistics.

Computational Linguistics teaches students to master technologies used in automated processing of natural language, and offers studies in software development and mathematical methods.

Students in the programme participate in academic research and projects carried out by the School of Linguistics, expeditions and internships at international universities, and practical training in companies involved in computer linguistics.

The Master's Programme in Linguistic Theory and Computational Linguistics is focused on training a new generation of specialists who have a solid knowledge of the techniques and methods of automatic data processing and can participate in innovative projects related to language technologies as well as suggest algorithms for problem-solving.

What do we teach?

To all students:

- The basics of theoretical linguistics;
- How to work with linguistic data and tools for their statistical analysis, as well as R language that allows for both calculation and visualization of results.

To students of the Linguistic Theory track:

Typology, sociolinguistics, theoretical Russian philology, comparative studies, work with corpuses, modern methods of language data analysis and representation, grammar of rare languages, and a foreign language from scratch.

To students of Computational Linguistics track:

Software development, mathematics, modern technologies of language data mining and analysis from various types of sources, creating e-corpora of various languages, and 'digital humanities'.

Graduates of the Programme will acquire the following skills:

- Good background in theoretical linguistics, and mathematical methods of data processing;
- Understanding of the way modern electronic language works, and capacity to find, form, and formalize new project tasks;

- Skills to work with data, to analyze, which data are required for completing a task, and where to find the information;
- Understanding of linguistic and extra-linguistic text characteristics, used for completing a task;
- Skills to programme prototypes and solution models;
- Skills to prepare required linguistic resources;
- Skills to project the chain of linguistic data processing;
- Skills to interpret the results of automatic data processing;
- Skills to estimate solution complexity, and thresholds of admissible mistakes;
- Skills to find an optimal testing methodology.

Computational linguistics specialists have good career opportunities and can work in major companies engaged in automatic text processing such as Yandex, ABBYY, Aviacomp, Epam, Mail.ru, and others. They can also work in companies involved in text content management such as Integrum, Public.ru, RIA News, or analysis of non-structured data such as broker companies, headhunters, law consulting, and many others.

Specializations within this programme