Master Programme in Language Technology
2017/2018

The Master Programme in Language Technology is intended for you who are interested in working with computer systems possessing an ability to process human language in intelligent ways. You are welcome to the programme also with a purely humanistic background in linguistics or a language studies. The education provides professionally relevant training in the design, development, and assessment of language technology services and software.

ABOUT THE PROGRAMME

Applications involving language technology are more or less defining of our contemporary way of life. They include user profiling, document search and filtering, business intelligence, automatic translation, and writers’ aids. This requires methods for automatically analysing texts with a sensitivity for their linguistic structure and content. The challenges you will find here lie in the richness, unpredictability, and creativity of human communication, not least in the new modes of personal expression encouraged by social media. The programme will also give you advanced insights in more theoretical computational linguistics. The aim of the programme is to prepare you for a career in the commercial language technology field, as well as for a future in the academic world, for instance, as a PhD student.

The Master Programme in Language Technology is given by the Department of Linguistics and Philology in the Faculty of Languages. Apart from being the home of language technology (computational linguistics), the department also hosts research and education in general linguistics, classical, and Asian languages. Other departments also participate in the programme, in particular in connection with elective courses. Courses from other universities can be included in the degree, and the University will encourage you as far as practically manageable, if you wish to spend a semester in another university.

As the computational linguistics group at Uppsala University is an internationally prominent one, the layout of the programme and the content of the courses benefit from being designed by leading researchers in the field. The students are invited to take an active role in the development of the programme.

DEGREE

The programme leads to a Master of Arts (120 credits) with Language Technology as the main field of study.

INSTRUCTION
During your studies on the programme you will meet the full range of teaching and assessment methods typical of university education. However, there is an emphasis on assignments where practical computational work is the main component. As a student at the programme you are encouraged to take an independent and experimental approach to different methods and to different kinds of data (e.g. different languages). Several courses involve larger project-size assignments, culminating in the Master’s thesis project.

**CONTENT**

The first semester of the two-year programme provides a starting point for further studies. Courses in programming and mathematics give you the skills necessary for performing quantitative analysis of linguistic phenomena and for working with large-scale automatic processing of linguistic data. The semester also includes an overview of the various issues and methods typical of language technology.

The second semester provides further depth in programming and in key language technology areas, with an emphasis on statistical methods. There is also room for elective courses, allowing you to tailor your studies to your own interests and career plans.

The course *Language Technology: Research and Development* in the third semester focuses on project work and research methodology, spurring you to think critically, independently, and creatively when approaching language technology tasks. Further elective courses will highlight key language technology areas or other relevant fields.

The fourth and final semester is dedicated to work on a Master’s thesis, where you make an independent and in-depth study of some approach to a language technology problem.

**COURSES WITHIN THE PROGRAMME**

*First semester*
- Programming for Language Technologists I
- Mathematics for Language Technologists
- Natural Language Processing

*Second semester*
- Advanced Programming for Language Technologists
- Elective courses, including:
  - Machine Translation (advanced level)
  - Information Retrieval (advanced level)

*Third semester*
- Language Technology: Research and Development
- Elective courses

*Fourth semester*
- Master’s thesis in Language Technology

The degree requirements allow changes in the selection of courses and the university will encourage the inclusion of other courses motivated by, for instance, your previous background, special interests, or studies at another university.

**CAREER**

With a Master’s degree in Language Technology you will, depending on your interests and profile, be attractive for different positions in the language technology business. You might work as a system developer, with language or customer adaptation, in support, and in marketing. Important sectors are machine translation and tools for translators, as well as other kinds of authoring support systems. Other examples are systems for document retrieval and classification.

Information extraction from natural language text is a core component of business intelligence services. Another important branch is speech technology, where systems producing and recognising speech are developed. Language technologists also work with research and education in the academic world.

The language technology field is characterised by close interaction between university groups and commercial companies. This kind of competence also opens doors to related fields, e.g. where other human behavioural data are analysed by computational methods.
MASTER PROGRAMME IN LANGUAGE TECHNOLOGY

120 credits

Autumn 2017 100% Campus

Location: Uppsala

Application Deadline: 2017-01-15

Enrolment Code: UU-M5206

Language of Instruction: English

Requirements:

Academic requirements
A Bachelor’s degree, equivalent to a Swedish Kandidatexamen, from an internationally recognised university.
Also required is 60 credits in language technology, computational linguistics, computer science, linguistics or a language subject.

Language requirements
All applicants need to verify English language proficiency. This is normally attested by an internationally recognised test such as TOEFL or IELTS with the following minimum scores:

- IELTS: an overall mark of 6.5 and no section below 5.5
- TOEFL: Paper-based: Score of 4.5 (scale 1–6) in written test and a total score of 575. Internet-based: Score of 20 (scale 0–30) in written test and a total score of 90
- Cambridge: CAE, CPE

Exemptions for students from certain countries.

Selection: Students are selected based on:

- a total appraisal of quantity and quality of previous university studies; and
- a statement of purpose (1 page).

Fees: If you are not a citizen of a European Union (EU) or European Economic Area (EEA) country, or Switzerland, you are required to pay application and tuition fees. Read more about fees.

Application Fee: SEK 900
Tuition fee, first semester: SEK 60000
Tuition fee, total: SEK 240000

CONTACT & MORE INFO

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For general information about Master’s studies at Uppsala University, please send an email to: masterprogrammes@uu.se