

M.Sc. Language Technology

The Inter-Institutional Postgraduate Program (M.Sc.) in Language Technology was established and is operated by the Department of Informatics and Telecommunications of the National and Kapodistrian University of Athens (NKUA) and the Institute for Language and Speech Processing of the Athena Research Center.

Curriculum

There are core (mandatory) courses and elective courses, each worth 6 ECTS.

To be awarded the M.Sc., students must accumulate 120 Credit Units (ECTS), with 90 coming from courses (15 courses of 6 Credit Units each) and the remaining 30 from the completion of a thesis. Eight out of the 15 courses (i.e., 48 out of the 90 Credit Units of courses) must be from the core courses. The remaining 42 Credit Units (7 courses) can be chosen from the full range of courses offered by the M.Sc. program.

The thesis is conducted in the 4th semester (spring semester of the 2nd year) and carries thirty (30) Credit Units (ECTS).

Each academic year is divided into two study semesters: the winter and the spring semester. The M.Sc. program begins in the winter semester of each academic year. Lectures are delivered in Greek on a weekly basis. However, some courses may be taught in English. If a lecture cannot be given, it will be rescheduled. The date and time of the rescheduled class will be posted on the M.Sc. program's website and/or the course's website.

The minimum teaching hours per lecture are three (3) per week. Lectures are given in person and through distance learning methods. In any case, the portion of courses delivered through distance learning methods will not exceed thirty-five percent (35%) of the program's course load.

Each course spans 13 weeks and does not extend into the examination period or into the next academic semester. The workload for a 6 ECTS course corresponds to 150 hours per student. The progress of courses is evaluated during the middle of each academic semester and not during the final weeks.

Courses from both the winter and spring semesters can be examined in September. In cases where the assessment of a course does not include a written or oral examination, students have the option to submit their assignments during the September examination period, but in this case, a reduced grading weight applies.

When assigning courseworks, instructors are advised to consider the workload calendar of the students.

The minimum number of students required for an elective course to be taught is five (5). In any case, at least three (3) elective courses will be offered in the 2nd (spring) semester and at least six (6) elective courses in the 3rd (winter) semester. An informal declaration will be made before the start of the semester to determine which courses will be taught.

The Degree grade is calculated based on the ECTS using the following formula:

$$M.Sc. Grade = \frac{\sum_{i=1}^n M_i \times B_i}{\sum_{i=1}^n M_i}$$

Where: n=16 is the total number of courses considered for obtaining the degree (including the thesis), M_i is the ECTS credits awarded for the respective course (in the academic year when students successfully complete it), B_i is the transferable grade received by the student in the respective course (including the thesis).

The M.Sc. program of the Department of Informatics and Telecommunications applies a Quality Policy that fully aligns with the Quality Policy of the NKUA (National and Kapodistrian University of Athens).

Courses & Exams

Courses

1st Year: Winter Semester

Core Courses:

- M901 Programming for Language Technology I
- M902 Basic Mathematical Concepts in Language Technology
- M903 Basic Principles of Linguistic Analysis
- M116 Human-Computer Interaction with Speech
- M904 Introduction to Phonology and Digital Signal Processing

1st Year: Spring Semester

Core Courses:

- M906 Programming for Language Technology II
- M916 (M124) Machine Learning
- M908 Computational Linguistics, Natural Language Processing and Resource Management

Elective Courses:

- M905 Quantitative Analysis of Linguistic Data
- M907 Speech Synthesis and Recognition Systems
- M164β Knowledge Technologies
- M126 Data Visualization
- M151 Systems and Applications on the World Wide Web
- M925 Special Topics in Language Technology I

2nd Year: Winter Semester

Elective Courses:

- M909 Deep Learning with Applications in Linguistic Data
- M911 Linguistic Processing
- M913 Dialogue Systems and Voice Assistants
- M111 Big Data Management
- M914 Machine Translation
- M915 Text Understanding and Generation Systems
- M164α Knowledge Technologies
- M930 Special Topics in Language Technology II: Language and Cognitive Robotics

- M931 Special Topics in Language Technology II: Deep Learning for Natural Language Processing
- M910 Textual Understanding Modeling
- M912 Text Retrieval and Information Extraction Systems
- M110 Interactive Systems
- M140 Computer and Web Accessibility / Human-Machine Multimodal Interaction
- M147 Contemporary Technologies for Cultural Applications
- M156 Design & Implementation of Digital Educational Applications
- M161 High-Scale Data Analysis Techniques

Each course is worth 6 ECTS credits.

2nd year: Spring Semester

Dissertation (30 ECTS)

Examinations and Evaluation of Postgraduate Students

To obtain the master's degree (M.Sc.), every postgraduate student must:

1. Successfully complete all the courses they have chosen, accumulating a total of ninety (90) ECTS credits.
2. Have their Master's thesis approved by the Examination Committee.

The assessment of postgraduate students and their performance in courses is conducted at the end of each semester through written or oral examinations or by completing assignments throughout the semester. The assessment method is determined by the instructor of each course.

Grading is done on a scale of 1-10, and a course is considered passed if the grade is equal to or greater than 5. Course grades are submitted to the Secretariat of the MSc program within 30 days after the end of the examination period. Courses from both the winter and spring semesters are re-evaluated during the September period. When a course assessment does not include a written or oral examination, students have the option to submit assignments during the September re-evaluation period, but in this case, a reduced weighting coefficient is applied to their grades. The examination period (winter or spring semester or re-evaluation) lasts for three weeks.

If a postgraduate student fails an examination for one or more courses, to the extent that, according to the regulations of the MSc program, they are deemed not to have successfully completed the program, they can be re-evaluated, upon their request, by a three-member committee consisting of academic staff members of the School who have the same or related subject matter expertise as the course being re-evaluated. This committee is appointed by the Special Inter-Institutional Committee. The responsible instructor for the examination is excluded from this committee (Article 34, Law 4485/2017)

Dissertation (Thesis)

The Coordination Committee (CC) of the MSc. Program, following a request by the student which is submitted before the end of the 3rd semester and in which the proposed title of the thesis, the proposed supervisor, and a summary of the proposed work are mentioned, appoints the supervisor of the thesis and nominates a three-member examination committee for the approval of the work. One of the members of this committee is the supervisor. The members of the three-member examination committee can be faculty of the MSc. Program or other faculty members or researchers

with a PhD from the Department of Informatics and Telecommunications of the National and Kapodistrian University of Athens (NKUA) or from the "Athena" Research Center.

The supervisor is responsible for defining the boundaries of the thesis content, guiding the student in the development and writing of it, and deciding on its completion and examination period. The members of the examination committee are required to participate in the examination of the thesis up to 20 days after the end of the examination period.

The language of the postgraduate thesis can be either Greek or English. In the case of choosing English, the consent of the supervisor is required, which is submitted to the CC.

The writing of the thesis must strictly follow the relevant guidelines and the respective template found on the right side of this webpage. Before posting the thesis, the Secretariat of the PPP checks whether the text strictly follows the guidelines and the template.

For the thesis to be approved, the student must defend it in front of the examination committee in a public presentation. For the grading of the thesis, the examination committee takes into account the text written by the student and its defense (presentation and answers to the questions of the examination committee). The grading of the thesis by the examination committee is on a scale of 1-10 and is the average grade of the three members of the examination committee. The thesis is approved if its grade is equal to or greater than 5. Once approved by the examination committee, postgraduate theses are mandatorily posted on the website of the Department of Informatics and Telecommunications via the Institutional Repository and Digital Library "PERGAMOS" of the NKUA. The graduation of the postgraduate students is directly connected to this process and is mandatory for the submission of the graduation request.

Duration of Studies

The duration of studies in the Postgraduate Program of Linguistic Technology leading to a Postgraduate Diploma (M.Sc.) is set at four (4) academic semesters, which includes the time for the preparation of a thesis.

The maximum allowed duration of studies is set at six (6) academic semesters.

Postgraduate students can request a justified suspension of studies, which cannot exceed two (2) consecutive semesters. The semesters of suspension do not count towards the maximum allowed duration of studies.

The Special Inter-Institutional Committee, following a recommendation from the Coordination Committee (CC), decides on the approval or not of each extension or suspension request.

Student Obligations

1. Postgraduate students have all the rights and provisions provided for undergraduate students, except for the right to receive free textbooks. The National and Kapodistrian University of Athens (NKUA) ensures accessibility to the proposed textbooks and teaching for students with disabilities or special educational needs through the Accessibility Unit for Students with Disabilities.
2. Once a student enrolls in the Postgraduate Program in Linguistic Technology, they must obtain access to the "KEY" services by acquiring a NKUA email (instructions and verification are provided by the Secretariat) and inform the Secretariat immediately. Without acquiring a NKUA email, the student cannot access any University services (such as eclass, evaluation questionnaires, the PERGAMOS repository, and thus the possibility of graduation).

3. With the commencement of classes each semester, students are required to declare to the Secretariat of the Postgraduate Program the courses they intend to attend during the current semester.
4. During their studies, postgraduate students are obliged to attend and successfully pass postgraduate courses and complete a postgraduate thesis in which they must be successfully examined.
5. Postgraduate students are called to participate and attend lectures or department seminars, bibliography update presentations or discussions, laboratory visits, conferences/seminars with subject matter relevant to the Postgraduate Program, or other scientific events of the Program.
6. Postgraduate students have the opportunity to participate in international student exchange programs, such as the ERASMUS program. In this case, the maximum number of credit units (ECTS) that can be recognized is thirty (30). The Postgraduate Program can also be attended by students from international student exchange programs, such as the ERASMUS program.
7. The Steering Committee (SC) can decide on the dismissal of a postgraduate student in the cases where:
 - a. they have exceeded the maximum duration of study in the Postgraduate Program without having fulfilled the obligations for obtaining the Master's Degree,
 - b. they have violated the existing provisions regarding the handling of disciplinary offenses by the competent disciplinary bodies of the University of Athens (UoA),
 - c. they have voluntarily submitted a relevant request,
 - d. they have committed an offense that falls under intellectual property law (Law 2121/1993), plagiarism, or copying during exams or when writing the required assignments, especially their thesis,
 - e. they have not paid the required tuition fees.
8. At the end of each semester, an evaluation of each course and each instructor of the MSc. Program is conducted by the postgraduate students using the electronic survey system of the UoA [<https://survey.uoa.gr>]. The course evaluation process follows the guidelines of the Quality Assurance Authority for Higher Education (QAAHE). Questionnaires are recommended to be filled out between the 8th and 11th week of course instruction. The results are published after the submission of grades for all courses of the MSc. Program. Members of the Internal Evaluation Group (I.E.G) and course instructors have access to the evaluation results, while students can view the results of the evaluations for the courses of the Postgraduate Program of the Department of Informatics and Telecommunications on e-class at the corresponding address.
9. A Postgraduate Degree is not awarded to a student whose undergraduate degree from a foreign institution has not been recognized by the Inter-Institutional Recognition of Academic Titles and Information (IRATI), according to law 3328/2005 (A' 80).
10. Graduation - valediction takes place within the Assembly of the Department of Informatics and Telecommunications in a department, faculty, or more generally a UoA area in the presence of the Director of the M.Sc. Program or their Deputy, the Head of the Department or their Deputy, and, if possible, a representative of the Rector. An exception from the obligation to attend the graduation ceremony can be granted in only exceptional cases upon a student's request, in which they should state serious reasons that must be fully justified with attached certificates or affirmations from competent services (either for studies or work abroad or for serious health reasons). Additionally, in their request, the interested party must state how they wish their degree to be sent to them. The above must be forwarded for approval by the rector's authorities and must be accompanied by a positive recommendation from the Head of the Department. In the case of a negative recommendation, the request will not be forwarded for approval.

Postgraduate students can request the issuance of a diploma supplement in both Greek and English without any financial burden.

Academic Calendar

Teaching Periods

Fall Semester: **Monday, October 2, 2023 to Friday, January 12, 2024** (13 weeks)

Spring Semester: **Monday, February 19, 2024 to Friday, May 31, 2024** (13 weeks)

Examination Periods

Fall Semester: **Monday, January 22, 2024 to Friday, February 9, 2024** (3 weeks)

Spring Semester: **Monday, June 10, 2024 to Friday, June 28, 2024** (3 weeks)

September Exam Period: **Monday, September 2 to Friday, September 27, 2024** (4 weeks)

Official Holidays

- Saturday, October 28, 2023 (national holiday)
- Friday, November 17, 2023 (Polytechnic Uprising anniversary)
- Monday, December 25, 2023 to Sunday, January 7, 2024 (Christmas break)
- Tuesday, January 30, 2024 (Three Hierarchs, religious-educational holiday. No classes or exams are conducted)
- Wednesday, February 21, 2024 (Educational anniversary of the Law students' uprising in 1973 against the dictatorship. No classes or exams are conducted)
- Monday, March 18, 2024 (Clean Monday)
- Monday, March 25, 2024 (national holiday)
- Monday, April 29 to Sunday, May 12, 2024 (Easter break) Wednesday,
- May 1, 2024 (Labor Day-strike) Day of the Student Elections and the following day (No classes or exams are conducted)
- Monday, June 24, 2024 (Pentecost)