

## Life Sciences Programs in English at Eötvös Loránd University (ELTE), Budapest



### Undergraduate, graduate and post-graduate programs

Broad-based general studies for Bachelor of Science (B.Sc.) degree, and specialization in molecular biology, biotechnology, ecology genetics, microbiology, developmental biology, physiology, neurobiology, plant biology, zoology, human biology for Master of Science (M.Sc.) and Doctor of Philosophy (Ph.D.) degrees.

Graduates can apply for positions according to their degrees and specialization in research and development related to the biotechnological, pharmaceutical, agricultural and environmental, clinical diagnostic and food industries. Their knowledge can serve as a basis and is very welcome in further studies of other life sciences such as medicine, dentistry, and veterinary.

### ELTE is the oldest university in Hungary

It was founded in 1635. Also dated from this time are the great educational traditions of Hungary, which have given 14 Nobel-prize winners to the world. Many outstanding scientists, including four

Nobel laureates, are among the teachers and alumni of the University. In the biology programs, six teachers are academy members, 30 are professors and 31 are associate professors. The yearly support of research activity is about four million Euros and the number of scientific publication in international journals is almost 200 by the 28 science schools in the 12 departments.

The diplomas issued by Eötvös Loránd University are acknowledged worldwide, and the credits of its courses are transferable in all Countries of the European Union.

### Pre-university program

This program is **recommended for** future students who want to build a firm basis for their further studies in the B.Sc. and M.Sc. programs of Eötvös Loránd University. The successfully completed preparatory program is acknowledged by a certificate and automatically **ensures admission to the B.Sc. program**.

The program is organized in either a **two- or a one- semester form**, and includes courses in biology, chemistry, physics and mathematics. The applicants may ask for a language course according to their needs to improve their English but the tuition fee of the Pre-University Program does not cover the costs of this.

**Criterion of application** is a completed secondary school education (equivalent of a General Certificate of Education [UK] or a high school diploma [US]), or at least three years in the usual four years of secondary school education (aged 17) in countries where the last year of secondary education is a pre-university program.

### B.Sc. program

In this **six-semester** program, students participate in **intensive basic and advanced level courses** to gain an essential theoretical knowledge **in the different fields of biology**, and to become familiar with the most important methods. The **B.Sc. graduates will be able to** do routine tasks in research and development as well as clinical diagnostic laboratories or in agencies or offices for the management of environment. Their knowledge serves as an excellent **basis for the continuation of studies in a M.Sc. program**. To obtain B.Sc. degree, candidates have to write and orally present a "B.Sc. Thesis".

**Criteria of application** are: 17 years of age; a graduation from a high school or a senior secondary school (with graduation equivalent to the General Certificate of Education [UK] or high school diploma [US]), finishing at least three completed years in a four-year secondary school where the last year is a pre-university program, containing studies in biology, chemistry, mathematics and physics; a good command of English.

### M.Sc. program

Students participate in intensive **advanced and high-level courses** in the different fields of biology, which are the most relevant for their specialization, to make them informed about the recent developments and frontline problems. Some **60 % of time is practical hours** ensuring knowledge of state of the art methods. For preparing their **thesis work**, students join to and actively participate in the work of a research group. This program is **four semesters**, however, according to our experience, six semesters are

normally needed. **M.Sc. graduates will be able to** participate creatively in research and development projects in biotechnology, innovative medicine, agriculture and conservation. Their knowledge forms **an excellent basis that is necessary for studies in a Ph.D. program.**

**Criteria of application** are: a B.Sc. degree in Biology and a good command of English. The applicants are interviewed to elucidate the level of prior knowledge and to decide about the possible Program Specialization.

### Ph.D. programs

This minimally **six semesters** (three years) program is practice oriented: **90% of time is laboratory/field research**, while 10% is special, one-semester courses and seminar series on current scientific problems to deepen students' knowledge on the theoretical background of their research project and the methods that they are using. Emphasis is also put on developing skills in publication, in preparing grant application and in project management. Thus Ph.D. documents that **graduates are able to** pursue their own research project independently and to organize and supervise their own research group. Important criteria of obtaining a Ph.D. degree are: authorship in two scientific papers, written from candidate's work and published in international journals, writing and presentation of Ph.D. Thesis and a successful passing of a "Ph.D. procedure".

The following **ten Ph.D. programs** are available:

- **Theoretical Biology and Ecology**
- **Ethology**
- **Immunology**
- **Experimental Plant Biology**

- **Classical, Molecular and Evolutionary genetics**
- **Molecular Cell and Neurobiology**
- **Neuroscience and Human Biology**
- **Structural Biochemistry**
- **Zoo taxonomy, Animal Ecology and Hydrobiology**
- **Evolutionary Genetics, Evolutionary Ecology and Conservation Biology**

**Criterion of application:** a M.Sc. (in biology or chemistry), M.D., D.D. or D.V. degree and a good command of English. On an interview, the applicant will be asked about her/his prior studies, M.Sc. thesis work, motivation, theoretical knowledge, and practical-methodological experience, which is followed by an assembly of a curriculum and research project for the student.

### Fees and costs

	EUR/semester
<b>Preparatory program</b> (1 or 2 semester)	<b>2500 or 1600</b>
<b>B.Sc. program</b> (6 semesters)	<b>2900</b>
<b>M.Sc. program</b> (6 semesters)	<b>3500-4500</b>
<b>Ph.D. program</b> (min. 6 semesters)	<b>4000-5000</b>

We offer **20 % fee reduction to the best** B.Sc., M.Sc. and Ph.D. students from their second year, according to their performance in the previous year.

- **Registration fee** : in the first semester it is included in the tuition fee, while it is **60 EUR** for the further semesters
- **Costs** : **500-900 EUR/month** (including rent, utilities, health insurance), **400-800 EUR/year** for books.

### Further information

For the details and curriculum of programs, the application and admission procedure, starting a student life and living in Budapest and Hungary **see the website:**

<http://bio.elte.hu/engedu/>



**Buildings of the Faculty of Natural Science on the new campus of ELTE**

### Statement of Non-Discrimination

Eötvös Loránd University does not discriminate on the basis of race, color, national or ethnic origin, religion, gender, marital status or handicap.