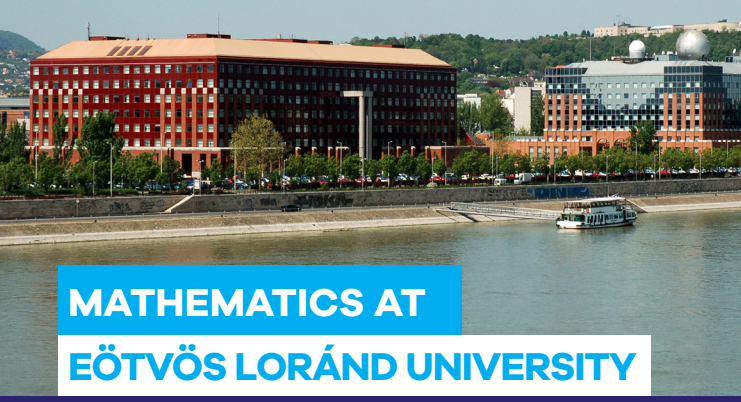


MATHEMATICS AT EÖTVÖS LORÁND UNIVERSITY IN BUDAPEST, HUNGARY

Did you know that the **mathematician's job** was rated as the second on the list of 200 jobs in 2018, according to **Careercast**?

Have you ever considered studying mathematics in the country where **Paul Erdős, Frigyes Riesz**, **Pál Turán Alfréd Rényi**, **Endre Szemerédi,** and **László Lovász were born**?

Have you ever considered studying in Budapest (also known as the "*Pearl of the Danube*") which has been selected as the best place to visit in Europe in 2019 by the **European Best Destinations**?

Have you ever considered spending time in a country where you can encounter a mixture of tradition and high-tech, world-class cultural and sports events, thermal baths, as well as natural water surfaces?

Let us show you how you can earn a **master's or Ph.D. degree in pure or applied mathematics** at Eötvös Loránd University, and become an expert in graph theory, topology, number theory, analysis, optimization, or financial mathematics...

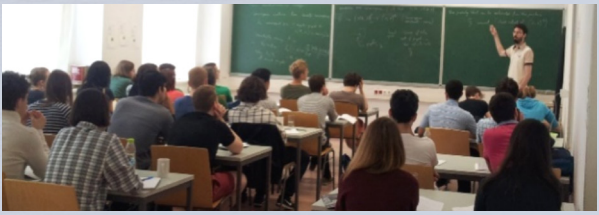
EÖTVÖS LORÁND UNIVERSITY | ELTE

INSTITUTE OF MATHEMATICS IN NUMBERS

- Each year over **200 freshmen** start their studies in **mathematics** at Eötvös Loránd University. Approximately half of them will become teachers, and the other half aims at a B.Sc. degree in pure or applied mathematics.
- More than **40 students** enrol to a master's programme, and about **20 students** start their Ph.D. studies every autumn.
- There are regular visiting students from over **20 Erasmus partner institutions** of various European countries.
- About **20 regular international students** from four different continents work towards their M.Sc. and Ph.D. degrees.
- Altogether more than **600 students** can choose from nearly **200 different courses** at various levels from basic algebra, calculus, and basic probability theory to high-level research courses in pure and applied mathematics.
- The courses are offered by over **80 faculty members, all of** whom hold a doctorate.
- There are several computer labs with general, mathematical, and statistical packages.
- The library offers access to most of the major journals and textbooks.

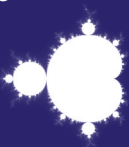
MASTER'S PROGRAMME IN PURE MATHEMATICS

- A two-year programme in both **Hungarian** and **English**
- **120 credits** (94 credits for approximately 16 courses, 6 credits for research, and 20 credits for a thesis)
- Free selection from over **100 courses** in the following main subject areas:
  - **algebra** (groups, rings, commutative algebra, and general algebraic systems)
  - **analysis** (real, complex, functional, and numerical)
  - **combinatorics** (graph theory, algorithms, computer science, and cryptography)
  - **differential equations** (ordinary and partial differential equations, dynamical systems)
  - **geometry and topology** (convex, differential, and discrete geometry; algebraic and differential topology)
  - **number theory** (algebraic, additive, analytic, combinatorial, and multiplicative)
  - **operations research, optimization**
  - **set theory** and **mathematical logic**
  - **probability theory and statistics** (data analysis and financial mathematics)
- Most of the graduates will continue their studies at a **Ph.D. level,** but they can also get a job in the field of **industry** or at **financial institutions.**



MASTER'S PROGRAMME IN APPLIED MATHEMATICS

- A two-year programme with courses in **Hungarian** and **English** (full programme in both languages)
- **120 credits** (90 credits for approximately 15 courses, 10 credits for project work, and 20 credits for a thesis)
- Selection from over **35 courses** in applied mathematics:
  - **algorithms** and **computer science**
  - **applied analysis**
  - **computer geometry**
  - **operations research**
  - **stochastics** and **financial mathematics**



- **Project work** is done in close cooperation with high-tech industrial partners or financial institutions, and supervised by faculty members.
- The programme is accepted by ECMI (European Consortium for Mathematics in Industry) as an official **ECMI teaching centre**.

Students graduating from the programme can apply for Ph.D. studies, but they also have good prospects of finding jobs in **high-tech industry**, at **insurance companies,** or other **financial institutions.**

PH.D. IN PURE AND APPLIED MATHEMATICS

- A four-year programme
- Courses in both **Hungarian** and **English**
- **240 credits** for courses, teaching, research, publications, and conferences
- Complex exam after two years
- Ph.D. candidates are supervised by leading experts in practically any major field of pure and applied mathematics: **algebra, algorithms, analysis, combinatorics, computer science, cryptography, differential equations, dynamical systems, financial mathematics, geometry, graph theory, number theory, numerical analysis, operations research, probability theory, set theory, statistics,** and **topology**
- Research starts already in the first year.
- Collaboration with other universities and research institutes
- Attendance at conferences and scientific meetings is encouraged.
- Career opportunities after obtaining a degree:
  - universities
  - research institutes
  - industrial research
  - financial institutions

FEES, DEADLINES, FURTHER INFORMATION

- **Tuition fee (for one term):**

	Non-EU countries	EU countries
M.Sc.	EUR 4200	EUR 2100
Ph.D.	EUR 3000	EUR 1910

- **Deadline for applications:**

31st May (for September intake)

- State-sponsored **scholarships** are offered by the **Stipendium Hungaricum programme** to students from eligible countries.
  - http://studyinhungary.hu/study-in-hungary/menu/stipendium-hungaricum-scholarship-programme

- **Web pages** with more information:
  - http://www.math.elte.hu/en/studies/
  - https://www.elte.hu/en/mathematics-msc
  - https://www.elte.hu/en/applied-mathematics-msc
  - https://www.elte.hu/en/doctoral-school-of-mathematics