



(A) GENERAL DATA

Title	Master's Program in Mathematics
Degree	Mathematician / Master of Science (MSc) in Mathematics
Type	Degree program
Level	Master level
Accreditation number	MAB2011/3/VII/6
Faculty	Faculty of Science
Institute	Institute of Mathematics
Language	English
Duration	4 semesters
ECTS credits	120
Place	ELTE Lágymányos Campus
Minimum number of new students	1
Maximum number of new students	10



(B) PROGRAM CONTENT

Short description:

The aim of master's program in mathematics is to give a comprehensive knowledge of several areas in mathematics and introduce the students into doing research in theoretical and/or applied mathematics. A large number of courses is offered, covering several areas of mathematics. Besides purely theoretical courses many courses are application oriented. Courses are offered in algebra, number theory, real and complex analysis, topology, geometry, probability theory and statistics, discrete mathematics and operations research but also in such interdisciplinary subjects as bioinformatics and theoretical computer science. The students may also choose from high-level application-oriented courses, which present the state of the art of the given area, like complex systems, financial mathematics etc. The program ends with writing a thesis.

Strength of program:

One of the main features of the program is the great variety of courses from which the students can choose. On the other hand the rules will also enforce that students graduating from the program will have a broad knowledge in many areas of mathematics. Besides offering introduction and basic foundation in many areas, some of the subjects lead to up-to-date research results.

Most of the teachers of the program have experience in teaching at foreign universities, including North American institutions; hence they have an adequate command of English. On the other hand young mathematicians, bringing in freshness and new momentum, are also included in the program. Our instructors all have scientific degrees and good research record. Examples show that graduating from our program is a very good starting point for doctoral or (at a later stage) postdoctoral studies.

Of particular interest is the fact that many researchers in the internationally renowned Hungarian school of combinatorics have started their career at our university and many of them still have position in the Institute of Mathematics. For example the Wolf Prize and Kyoto Prize winner Prof. László Lovász is a professor at our university. Recent Abel prize winner, Prof. Endre Szemerédi is also a graduate of our school. But one could also recall the Ostrowski Prize of Prof. Miklós Laczkovich (professor of our university), the Gödel Prize of Prof. László Babai (former professor), the Coxeter Prize of Prof. Balázs Szegedy (a graduate of our university) etc.



(C) STRUCTURE

Students enrolled in the program must obtain at least 120 credits in the following distribution:

- at least 20 credits from so called basic courses;
- at least 30 credits in at least 4 subject groups from so called core courses;
- at least 44 credits in at least 3 subject groups from so called differentiated courses.

On top of these, 6 credits can be chosen freely from the list of all subjects offered to MSc students in mathematics and applied mathematics. Furthermore, a thesis (worth 20 credits) must be written at the end of the studies.

Main subject groups:

Algebra, Analysis, Discrete Mathematics, Geometry, Number Theory, Operations Research, Stochastics

For course list and descriptions visit the following website:

<http://www.cs.elte.hu/MSc-in-Mathematics>



(D) CAREER

Career opportunities:

Anyone finishing the master's program in mathematics will be able to apply for Ph.D. studies either at Eötvös Loránd University or anywhere in the world. Many students will, however continue their career immediately in the industrial research and development (like high tech industries in telecommunication), financial institutions or insurance companies or in software development of such research giants as Google.

Job examples:

- university professor
- research mathematician in a research institute
- system analyst in a financial institution (bank, investment, insurance)
- high tech industry
- teacher of mathematics



(E) ADMISSIONS FOR THE ACADEMIC YEAR 2017/2018

TUITION AND OTHER FEES

	EU/EEA students	non-EU/EEA students
Tuition fee/semester	4190 (EUR)*	4190 (EUR)*
Application fee	160 (EUR)	160 (EUR)
Registration fee	60 (EUR)	60 (EUR)

* It is possible to apply for scholarship to reduce tuition fee.

Offered for the academic year 2017/2018?	YES
Deadline for applications – September intake	31 MAY 2017
Is there a February intake?	YES
Deadline for applications – February intake	31 OCTOBER 2017

Admission requirements – Language requirements:

- BSc degree in mathematics or in a related field (physics, computer science, engineering etc.); in the latter case at least 65 credits in mathematics
- English language proficiency test (almost any test is accepted)

Admission requirements – Documents to submit with application:

- ✓ Bachelor-level degree
- ✓ Transcript of records
- ✓ CV
- ✓ Motivation letter
- ✓ Letter of recommendation
- ✓ Application form
- ✓ Copy of the main pages of the passport (needs to be valid)
- ✓ Passport photo
- ✓ Copy of application fee transfer
- ✓ English language certificate



Application procedure:

Besides filling out the online application form at

<https://registration.elte.hu>,

and the applicant should also send the saved version of the form to

mathinst@cs.elte.hu

together with the following documents:

- (a) degree certificate (BSc), together with English (or Hungarian) translation;
- (b) transcript of records (BSc), together with English (or Hungarian) translation;
- (c) CV, containing data about past professional activities (education, employment history), awards, list of publications etc.;
- (d) motivation letter, describing main lines of interest within mathematics;
- (e) 1 letter of recommendation by a person qualified to judge the applicants professional potentials and/or achievements;
- (f) copy of the main page of the passport, together with a passport photo;
- (g) copy of the transfer of application fee;
- (h) English language certificate, proving reasonable command of the language

Procedure of the entrance examination:

A written test will be sent (via E-mail) to the applicant, covering basic fields of mathematics. In a limited amount of time the applicant will have to send back the solutions. A skype interview may follow. In certain cases the examination may be omitted.



(F) CONTACT

Program leader

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