# Study at UNIVERSITY OF ZAGREB FACULTY OF SCIENCE



Come to Zagreb, study Biomedical Mathematics and become one of the leading experts of tomorrow!



https://biomedmath.math.hr/

#### What is BioMedMath?

**BioMedMath** is a new international university graduate study programme in Biomedical Mathematics, conducted in English. It has been developed by the **Department of Mathematics** of the Faculty of Science in collaboration with the **Department of Biology**, **School of Medicine**, and the **Ruđer Bošković Research Institute**.

The curriculum was designed by a team of esteemed university professors, researchers, and medical doctors with decades of professional experience and international recognition.

# Why Biomedical Mathematics?

The remarkable advancement of multidisciplinary research spanning mathematics, biology and medicine over the past few decades, notably the progression of the Genome Project and its ramifications, with the enhanced computational capabilities of modern computers, has significantly influenced the sharp rise in the applications of mathematics in biomedicine.

There is an increasing demand for highly educated STEM experts who can seamlessly integrate into interdisciplinary work environment. At the same time, these individuals must exhibit exceptional mathematical skills. Emerging experts need to be able to transfer biomedical problems into mathematical ones and use or even develop mathematical methods to solve them.

While comparable programmes in the EU and USA are more often organized within biology or sciences, they do not provide such a variety and depth of mathematical courses as our programme does. Our goal is to upbring skilled mathematicians with additional complementary understanding of biology and medicine that will ensure their competency to thrive in contemporary multidisciplinary scientific environments.

### **Programme**

Programme duration	2 years (4 semesters)
Awarded academic degree	Master of Mathematics
English language requirement	Min. B2
Tuition fee per year	7.500,00 EUR

#### **ENTRY REQUIREMENTS:**

- Bachelor degree diploma or equivalent
- English language certificate (B2 level or equivalent)
- Interview

#### **APPLICATION DOCUMENTS:**

- Application form
- Passport
- Degree diploma or equivalent
- Official transcript of records
- English language certificate (B2 level or equivalent)
- CV in English
- Motivational letter
- Proof of Application fee payment (35,00 EUR)

Detailed information on the admission can be found at:

https://biomedmath.math.hr/admission/application-procedure/

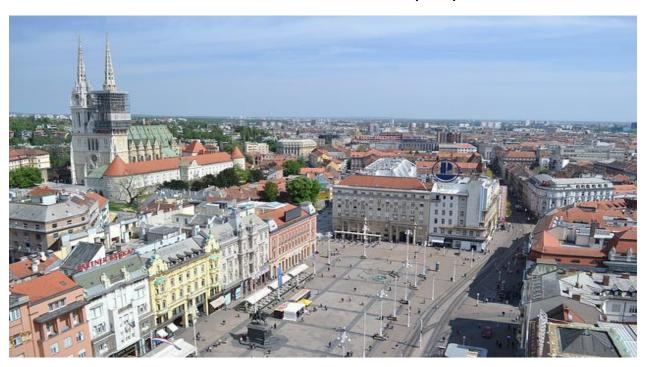
# Some topics of the study programme:

Epidemic and pandemic models; gene sequencing; other genetic related studies; evaluations and analyses; cardiovascular models including blood flow and stent design; developments of new medications and analysis of various processes which are investigated in pharmaceutical studies; various aspects of bioinformatics; big data analysis in biology and medicine, including data mining; modelling human brain processes, including various aspects of cognitive decline (Alzheimer's and Parkinson's diseases, among others); aging processes; evolutionary processes; organ developments and organ growth; various aspects of oncological studies, including models and analysis of tumour growth; enormously broad applications and inventions of new statistical models and tools.

## Where are we?

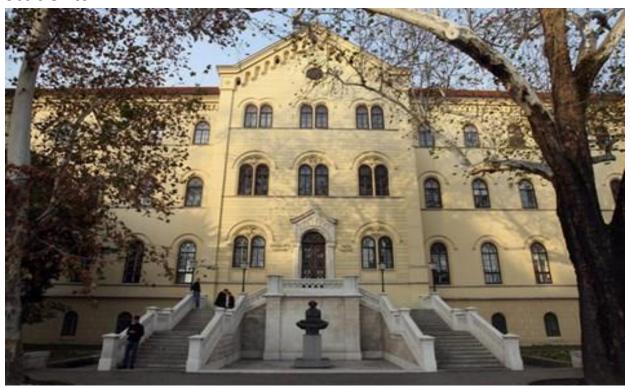
Should you choose to enrol into BioMedMath, you will study at University of Zagreb, Faculty of Science, Department of Mathematics.

**Zagreb** is the capital of **Republic of Croatia** (member of the European Union), small but beautiful middle European Mediterranean country with rich culture and history, packed with beautiful nature and warm and kind people.



- In the European Union
- Safe, clean and welcoming city
- Very affordable living
- Administrative and economical centre of Croatia
- With interesting and beautiful places to see and visit
- Good food, good people, lots of social content
- Close to other popular European capitals

The **University of Zagreb** (Croatian: *Sveučilište u Zagrebu*, Latin: *Universitas Studiorum Zagrabiensis*) is the largest Croatian university and the oldest continuously operating university in the area covering Central Europe south of Vienna and all Southeastern Europe. The University is composed of 29 faculties, 3 art academies and 1 university centre with more than 70,000 students.







http://www.unizg.hr/homepage/

The **Faculty of Science (PMF)** of the University of Zagreb is an institution whose educational and research excellence has been recognised both domestically and internationally. The Faculty designs and conducts relevant university studies and scientific research programmes which are an integral part of the higher education process in the fields of biology, physics, geophysics, geography, geology, chemistry, and mathematics.



The entire scientific, professional, and teaching activity of the Faculty of Science is dedicated to the development of science and technology in the Republic of Croatia while making significant contributions to science and education globally.



https://www.pmf.unizg.hr/en

When it comes to science and teaching, the **Department of** Mathematics of the Faculty of Science is the mathematical centre of the University of Zagreb and the entire Croatian mathematical community. Since the foundation of the Faculty of Science, mathematicians from the Department of Mathematics have played an active role in the global world of mathematics. Research is conducted in all three areas set by the conventional of mathematics into theoretical division and mathematics, and theoretical computing, and there are more and more interdisciplinary links with other natural sciences, especially physics and biology, as well as with other fields such as medicine, economics, and technical sciences.







http://www.pmf.unizg.hr/math/en

# For more information, please visit the official BioMedMath web site:

https://biomedmath.math.hr/



Thank you for attention and we are looking forward to seeing you in Zagreb!



University of Zagreb Faculty of Science

**Department of Mathematics** 

Bijenička cesta 30 10 000 Zagreb

BioMedMath Study Programme

E-mail: <a href="mailto:bmm@math.hr">bmm@math.hr</a>