

# DURATION OF STUDIES 2 years (4 semesters)

LANGUAGES OF INSTRUCTION French, English

CONDITIONS OF REGISTRATION www.unige.ch/conditions/MA

#### ADMISSION CONDITIONS

A Bachelor in Mathematics, Computer Science, and Numerical Sciences, in Mathematics, in Computer Science or a degree deemed equivalent upon review of the application. For certain degrees, prerequisites can be required.

#### Master's Programme

### THE MASTER IN MATHEMATICS, COMPUTER SCIENCE AND DIGITAL SCIENCES

takes an in-depth look at the various fields of mathematics, integrating a sizeable component on programming and new computer technologies. The programme establishes tangible connections between the various theories and methodologies unique to mathematics and computer science. Students are introduced to topics such as modelling, simulation, information management, database design and multimedia security.

For information, the Master in Mathematics and the Master in Mathematics and Computer Sciences have been reformed and become, starting September 2021, 120-credit Masters, with 4 semesters of studies (two years).



FACULTY OF SCIENCE

#### STUDY PROGRAMME

4 semesters (max. 8 semesters) | 120 ECTS credits

#### **Required courses and electives**

84 credits

Students must take 14 semester-long courses to be chosen from courses offered by the Mathematics Section and the Computer Science Department, including at least 5 in mathematics and 5 in computer science. Some examples:

- Geometric Integration
- The Ising Model
- Number Theory
- Knot Theory
- Lie Algebras
- Probabilistic Algorithms
- Parallel Algorithms
- Bioinformatics
- Data Mining
- Artificial intelligence
- Multimedia Security, etc.

#### Dissertation

36 credits

#### ACADEMIC CALENDAR

www.unige.ch/calendar

#### LEVEL OF FRENCH REQUIRED BY UNIGE

No French proficiency test required for non-Francophones. A good knowledge of French and English is nevertheless recommended.

#### MOBILITY

Students may earn up to 40 credits while on exchange. They may also conduct research outside the university, under the supervision of a faculty member, or do a work placement at a leading external laboratory in order to complete their Master?s degree.

www.unige.ch/exchange

#### **PROFESSIONAL PROSPECTS**

The Master of Science in Mathematics, Computer Science and Digital Sciences leads to a number of opportunities both in Switzerland and abroad, including:

- · Applied research in the private sector
- Telecommunications
- Insurance
- Banks and financial institutions
- Pharmaceutical companies and industry
- Consulting
- Academic research (doctoral, post-doctoral)
- Teaching, etc.

#### UNIVERSITY TAXES

500 CHF / semester

#### REGISTRATION

Deadline for Fall Semester for candidates that hold a foreign bachelor's degree: 28 February 2024 (30 April 2024 for candidates that hold a Swiss bachelor's degree at the start of the next academic year AND, according to their nationality, are not subject to a visa for entry into Switzerland for more than 90 days, according to Swiss government requirements and regardless of their current place of residence, or for candidates holding a Swiss residence permit that is valid beyond 30 April.)

## Deadline for Spring Semester: to be checked on the website of the Admissions Office

www.unige.ch/enrolment

#### **CONTACTS FOR STUDIES**

FACULTY OF SCIENCE Sciences II 30 quai Ernest-Ansermet 1211 Genève 4

#### STUDENT AFFAIRS

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#### ACADEMIC ADVISOR

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#### COURSE IN MATHEMATICS, COMPUTER SCIENCE AND DIGITAL

#### SCIENCES COMMITTEE

conseil-etu-mathinfo@unige.ch www.unige.ch/mathinfo

www.unige.ch/sciences