



4EU+ Bachelor in Mathematics Students' Tasks

Call for applications for students enrolled at the University of Milan in the BA programme in Mathematics

We group bachelor students from the <u>Universities of the 4EU+ Alliance</u> to work on joint projects!

Each group of students is composed of one student per university. Each group of students has one mentor. Each mentor is responsible for his/her own students and for his/her group. For Milan students, this should take the form of an *Essay Written under the Direction of a Staff Member* and students will be awarded 3 ECTS upon successful completion.

The participating universities (and corresponding topics) are as follow:

- <u>University of Copenhagen</u> *p*-adic numbers and applications
- <u>University of Geneva</u> Data-driven behavioural modeling for digital twins
- <u>Heidelberg University</u> The congruent number problem and the arithmetic of elliptic curves
- <u>University of Milan</u> Modular arithmetic and public key cryptography
- <u>Université Paris-Panthéon-Assas</u> Mathematics at the interface with the humanities and social sciences
- Sorbonne Université (Paris) Expander graphs
- Charles University (Prague) -Brunn-Minkowski inequality
- <u>University of Warsaw</u> Gaussian chaos

For the University of Milan, the mobility grant is provided as a lump sum according to the following rates:

- Return travel to and from Geneva or Heidelberg: 180 euros; to-from all other Universities: 275 euros.
- Accommodation allowance per night: 79 euros.

Who can apply

Applicants must be regularly enrolled in the BA Mathematics Programme at the University of Milan until the end of the educational activity (April 2026).

In order to receive the 4EU+ travel and accommodation allowance, they cannot be a recipient of any other EU grant for stays abroad that overlap, even partially, with the physical mobility period.

Study Content

The programme lasts one term (February to April) and is structured as follows:





- Starting date: February 2, 2026. For seven weeks each group will meet online on a convenient schedule to discuss the topic with the group mentor.
- Final eighth week: between April 4 and April 20, depending on time constraints, each group will meet at the mentor's university for at least three days. Students will be expected to finalise their work during this week and make a public presentation.

Application

Please apply by **15/01/2026** using the form you will find here https://forms.cloud.microsoft/e/rD8UVsSCUj

In the form you will have to insert a motivation statement, choose which Universities you are interested in, and attach a transcript of records.

Selection process

Up to 5 students from the University of Milan can be selected for the 2025/2026 edition of the Programme.

Candidates will be evaluated on the following criteria:

Letter of motivation: up to 5 points

- Transcript: up to 10 points

The selection will be carried out by prof. Ottavio Rizzo (UM) and prof. Fabien Pazuk (UCPH).

Selected candidates will be informed by email by the coordinator of the 4EU+ Joint educational activity at the University of Milan (Prof. Ottavio Rizzo) by 22/01/2026. The selection outcome will be posted to https://www.unimi.it/en/international/study-abroad/international- opportunities.

Personal data processing

Pursuant to EU Regulation 2016/679 ("General Data Protection Regulation - GDPR") and Legislative Decree no. 196/2003, as amended and supplemented, the University undertakes to keep the information provided by the applicant confidential. All data will be processed only for the purposes of participation in the programme. Information on the enforcement of the GDPR is available on the University website at http://www.unimi.it/ateneo/73613.htm - pathway: www.unimi.it > University > Privacy.

Signed

La RETTRICE (Marina Brambilla) f.to Marina Brambilla

Prot. 0050530/25

P. Ass. 5318170 del 22/12/2025

Rep. 5785/2025