

EMS Undergraduate Bursary: Pathways to Teaching

This bursary fund, provided by the Edinburgh Mathematical Society (EMS), will launch in 2022. The fund will run initially for two-years before review. The bursary will be available to undergraduate students to support short projects undertaken in primary and secondary schools with a focus on mathematics or statistics.

Aim

This fund aims to support and promote pathways for UG mathematical sciences students into teaching careers, to meet current demands and raise the profile of the profession.

Through completing a project in a school, students will gain direct experience of the teaching environment, and work with school aged pupils in partnership with current teachers.

Bursary Details

The bursary will be for £500 paid to the student directly. Projects will normally take place outwith university examination diets. Student applicants are required to partner with a host school. Host schools must sign off on the project details and safeguarding of the students.

Eligibility

- students will be enrolled on an undergraduate degree in mathematics and/or statistics, or any combination of mathematics and/or statistics with other subjects (joint degree) at a Scottish university
- students will normally be in their penultimate year of study, but applications are invited from students at any stage in their degree
- the school, primary or secondary, will be located in Scotland
- applicants must meet the safeguarding requirements for the school at the project start e.g. successful PVG registration

Selection Criteria

Applications will be assessed by the EMS Education Committee on the below criteria.

- feasibility of the project
- impact on school
- impact on student (for example, how well the proposed project will support the student to develop a realistic view of the demands and rewards of a mathematics teaching career)
- strength of candidate

Deadlines

- applications open from September 2022
- submission deadline: 7 October 2022, 5pm
- decisions announced by 24 October 2022

Reporting

Successful applicants are required to submit a short report (see conditions of award).

Forming Student–School Partnerships

For students with project ideas looking to partner with a school, there may be someone in your university who can help. For example, from a school/department/university-wide Widening Participation team, an outreach committee, or a member of staff with outreach experience. Your school/department office may be able to help you identify this person. Alternatively, please check the list below for named contacts at your university.

- University of Aberdeen: Mark Grant
- University of Dundee: Tara Harper, Eric Hall
- University of Edinburgh: Ruth Forrester
- University of Glasgow: Katarzyna Kowal, Shazia Ahmed
- University of St. Andrews: Nikos Sfakianakis
- University of Stirling: Jozsef Farkas
- University of Strathclyde: Jennifer Pestana
- University of the West of Scotland: Alan Walker

Applications

Applications will be made jointly between an eligible student and school. Details of projects will be agreed and signed off by both by student and school.

Applications made via application form available together with conditions of award from:
www.ems.ac.uk

Application Notes

On proposed activity or project

Applicants are welcome to be creative with what is proposed. However, creativity is not one of the selection criteria; the project could be simply acting as a teaching assistant to gain experience in the classroom.

As a starting point for a project proposal, you might discuss with your school contact strategies that you can implement which could create a more positive perception of mathematics and the mathematical sciences, or a deeper understanding of the subjects. You might alternatively seek to address issues found in the classroom through the design of new activities.

In writing the project summary, pay close attention to the selection criteria. Especially, the impact on you and the school. That is, what benefits will the school enjoy after this project is completed? What benefits will you enjoy?

On safeguarding measures

Note that the school contact is required to confirm that the applicant meets their safeguarding measures, or will at the project start. Note too that enrolling in the STEM ambassador scheme may be a simple way to meet school requirements (for example in PVG registration). Further details available at www.stemambassadors.scot/

On budget

The purpose of the budget is to ensure reasonable expectations on the student. Projects will not normally plan more than 50 hours of student work. Note in all cases successful applicants will be awarded a bursary of £500. The budget will include student contact and preparation time; estimated travel costs; estimated equipment, consumables, or any other costs not met by host school. Below are some exemplar budgets for time, travel and equipment costs.

Exemplar 1

budget of student contact and preparation time

Project planned for 12 weeks, 6 consecutive weeks before winter break and a further 6 consecutive weeks after winter break with:

- *2 hours contact time per week*
- *2 hours preparation time per week*

Total student hours: (2+2)(6+6): 48

Total student support: 48 x £9.50 = £456

estimated travel costs

- *travel costs 24 x single bus tickets (Lothian busses): 24 x £1.80 = £43.20*

estimated equipment, consumables

Met by hosting school.

Exemplar 2

budget of student contact and preparation time

Project planned for 7 consecutive weeks before winter break with:

- *3 hours contact time per week*
- *4 hours preparation time per week*

Total student hours: (3+4)(7): 49

Total student support: 49 x £9.50 = £465.50

estimated travel costs

- *none, walking distance*

estimated equipment, consumables

Met by hosting school.

Exemplar 3

budget of student contact and preparation time

Project planned for 6 consecutive weeks before winter break with:

- *2 hours contact time per week*
- *5 hours preparation time per week*

Total student hours: (2+5)(6): 42

Total student support: 42 x £9.50 = £399

estimated travel costs

- *return train ticket Glasgow-Greenock: 6*£7.90 = £47.40*

estimated equipment, consumables

20 x pair of compasses: 20£1.99 = £39.80, other costs met by hosting school.*