What are the elements of a successful CMP project?

Successful projects are fuelled by a good match between the mathematicians' expectations and the project requirements. The project description should highlight the main purpose of the project and what key skills might be required (e.g. coding/data science). When presenting their project to students in the seminar series, hosts should not try to cram in too much background information but focus on what the mathematician will actually do day to day as well as how supervision will work. This is particularly important this year, as we expect that projects will be run remotely. Hosts should consider how best to get the mathematician up to speed in their research field at the start of the project and plan for some flexibility in the project which allows for adaptations depending on the skills, ingenuity and interests of the mathematician. A realistic project plan is important - if things go well the outcomes will then exceed the expectations of both parties.

Should I plan for my project to take place remotely?

Yes. Due to the challenges posed by COVID-19, we expect that research projects in summer 2021 will be carried out remotely. Hosts should plan for a remote project, and may choose to build in flexibility for an in-person component or experience should circumstances allow.

How should I plan for a remote project?

In addition to the logistical considerations relating to the student not being physically present in the host’s space, the ideal situation will limit the possibility of intellectual isolation. Our concern is that students are more likely to feel isolated due to the remote format. Strategies that have worked to prevent this in analogous contexts are having weekly coffee breaks, inviting to the student to research presentations that may be related to their work, and organising regular meetings between the student and the host or active members of the host’s group. We envision that this may be especially important in the early phase of the project, when the student is getting up to speed with the background material.

I am a PhD student/junior member of staff. Can I have a CMP student working with me?

Yes. We will need a statement from your PhD supervisor or PI to the effect that she or he is happy to support the student working with you (i.e. to arrange whatever access requirements need to be made) and that she or he is happy for you to spend time working with the student.

I am a member of staff. Can I have a CMP student working with me without a more junior scientist as host partner for the CMP student?

Yes, but be aware that particularly in the early weeks the CMP student will require a lot of your time. If you are applying for bursary funds, be aware that we do take into consideration the support of the CMP student within the research environment of the project.

Who decides which student we get if more than one student shows an interest in our project?

You do. The process is that students will approach you if they are interested in your project. How you decide between them, whether you interview, and whether you post a deadline for expressions of interest is up to you. We very strongly advise that you interview students before confirming a project. If you can use two students, you may take two, although we may prefer to give others the chance of having a student before enabling you to take two.
How are students paid?

Changes to University policy mean we can no longer provide direct bursaries, and that CMP students will be employed by either the host department or the Faculty of Mathematics. CMP can facilitate this process, but the projected cost of placements has gone up significantly, to between £2200 and £3000 depending on project length. Due to this increase, we ask that academic hosts (especially returning ones) make an extra effort to find funds within their department to help cover project costs.

Is financial support available, and what does it cover?

We have a small fund to support academic projects, but we ask all students and all host labs and departments to do their utmost to find complementary funds from their own sources. As a rough guide, we hope that departments and labs that have had CMP students in the past and are familiar with the programme will contribute at least half of the student’s living expenses. We ask students to ask colleges for grants and subsidised accommodation.

If support is required, students should fill in the bursary application form (available from mid-January) and submit it by 19 March 2021. The application will require statements from both the student and their supervisor. First round decisions will be made by early May. Some funds will be reserved for a second round, for which bursary applications should be made by 11 May 2021, with decisions announced by the beginning of June. More details can be found on the CMP webpages.

If a financial support is not required, when will decisions be made?

If you have taken advantage of the chance to present your project in the seminar series, we ask that you delay requiring an answer from your student until 12 March 2021, to allow others presenting their projects at a later date an equal chance to interest students. If you have recruited your students through other means, you are free to run your recruitment process as you please.

Still have questions?

Write to us at CMP@maths.cam.ac.uk

To learn more about the programme, view past project proposals, and submit a project for this year, visit: http://www.maths.cam.ac.uk/opportunities/careers-for-mathematicians/summer-research-mathematics

Many thanks for considering the CMP programme. We look forward to receiving your projects.