



Financial Math Project Lab: Guide for Companies

The University of Chicago's Program in Financial Mathematics partners with financial firms in our Project Lab, which runs as a course on a quarterly cycle.

Project Lab course description

Each participating company formulates a research question relevant to the company's business activities, involving financial mathematics/statistics/engineering. In conjunction with University of Chicago faculty, the company sets forth this research question in the form of a project assignment for the Project Lab course.

At the beginning of the academic quarter, each project is assigned to a team of unpaid graduate students in financial math from the University of Chicago. During the quarter, the team investigates the research question, with advice from the faculty member. At the end of the academic quarter the team presents its findings to the company in oral and/or written form.

A company-designated contact person briefs the student team on their assignment at the start of the quarter, receives the final presentation at the end of the quarter, and also participates in at least one "progress" meeting while the work is ongoing.

Questions and answers

Q: What is the company expected to provide?

A: The company is not asked to pay any salary/fees.

The company is asked to provide an assignment and a contact person (see above), and also any inputs (such as data, if not publicly available) needed to complete the project.

Q: Can a company sponsor more than one team?

A: Yes, provided that the company designates contact person(s) who can meet, for each team, the responsibilities outlined in the course description.

Q: Is the company required to give "intern" status to the students doing the project work?

A: Not required. It is the company's choice, whether or not the project work is to be regarded as an "internship."

Q: Is the company required to provide office/desk space, for the work and/or the progress meeting(s)?

A: Not required. Meetings can take place either on campus or on site, at the discretion of the company.

Q: How are students matched with companies?

A: The faculty use a “stable matching” algorithm to assign students to companies, taking into account:

1. Each company’s preferred students.

In formulating a list of preferred students, each company is welcome to use the information in a book of student resumes/profiles which we will provide, and/or to conduct its own screening/interview process with interested students.

2. Each student’s preferred projects.

For instance, a company and a student who mutually prefer each other are sure to be paired by the matching algorithm.

Q: What does the University of Chicago’s financial mathematics program provide?

A: The financial mathematics program provides

1. A team of Master students eager to work on practical problems.

2. Advisory support.

A faculty member or teaching assistant provides advice to the student team as it investigates the company’s research question.

3. A *course* structure.

Our grading of the project work, within a letter-graded course, reinforces the message to the students that, although unpaid, their work will be subject to evaluation.

4. A basis for an ongoing relationship between the financial companies and our program.

The Project Lab provides a channel by which our program stays attuned and responsive to the quantitative issues facing the finance industry.

Q. What about projects of a confidential nature?

A. We will honor requests to make the presentation “private” (attended only by company representatives, and the faculty member). If requested, the faculty member is prepared to sign a non-disclosure agreement, and the students will be informed of which projects require NDAs, and which projects do not. If there are students who would not agree to an NDA, then they will know not to list NDA projects among the list of projects that they would accept.

Q. What is the first step, for a company to participate?

A. Please complete the “Assignment Details” questionnaire on the next two pages.

Email completed form to Emily Backe at ebacke@uchicago.edu

The completed questionnaires will be viewable by the students.



Financial Math Project Lab: Assignment Details

* = required field. Please return completed form to Emily Backe at ebacke@uchicago.edu

Your organization

1. * Company name (and division/department/desk, if applicable):
2. * Physical address of organization:
3. * URL and/or description of organization:

Interaction with the team

4. * How many teams is your organization sponsoring for this project?
5. How many students per team? If blank, we assume 5 students per team.
6. * Name, position, and email address of the contact at your organization for the team
7. Any additional contact information (e.g., information for additional contact persons. Or any background info that you wish to include, e.g. "UC Alum")
8. * Aside from the initial briefing to the team, and the final presentation from the team, how often will the team confer with their contact, to deliver progress reports and receive advice?
9. * Will such discussions be face-to-face, or by some form of teleconferencing? If face-to-face, will the meetings be all on-site, or all on-campus, or some other arrangement?
10. * During the time period when the project work is ongoing, will the student team members have the status of unpaid "interns" at your company?
11. * Will the student team members be required to sign non-disclosure agreements?

Project description

12. * Project title:
13. Background motivation of project:

14. * Skills required (e.g. programming languages / software packages / statistical procedures):

15. * Project objectives or questions to be investigated:

16. Implementation details:

17. Reference materials, if any:

Other

18. Any additional comments: