

Financial Engineering

Haas School of Business (<http://haas.berkeley.edu>)

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Program Website: Master of Financial Engineering Program (<http://mfe.berkeley.edu>)

Overview

The UC Berkeley Master's of Financial Engineering (MFE) curriculum prepares you to work as a financial engineer immediately after graduating. MFE courses are designed exclusively for MFE students, and are seamlessly integrated with one another.

This cooperation between course material allows the mathematical, statistical, and computer science methods to be integrated with the theoretical framework and institutional settings in which they are applied. For example, macroeconomics is taught in relevant context in the fixed income markets course, during the discussion of term structure, and during the equity and currency markets course, in the context of exchange rate determination. Similarly, insurance concepts are introduced in the advanced derivatives courses where students can easily understand their relation to similar products.

The MFE requires only one year of study, which is ideal for motivated students with strong quantitative skills and focused career interests.

Degree Requirements

MFE students must successfully complete 28 units of coursework plus an internship or on-site project. The 10-week internship project is a required condition for graduation. Because of the school's reputation and close ties to the best firms, Haas has an exceptional record of helping students secure internships, consistently placing nearly 100 percent of students each year.

The Master of Financial Engineering degree is awarded to MFE students who have maintained a minimum cumulative grade point average of 3.0 (B) and completed:

- New Student Orientation (required)
- Required courses (16 units*)
 - Courses vary by semester and are listed on the program website (<http://mfe.berkeley.edu/academics/curriculum.html>) .
- Elective courses (9-11 units)
 - Courses vary by semester and are listed on the program website (<http://mfe.berkeley.edu/academics/curriculum.html>) .
- The Morgan Stanley Applied Finance Project (1-3 units; required)
- Internship (10-12 weeks; required)
- A total of 28 units of coursework (1 unit = 15 class hours)

*The number of required courses or units is subject to change.

New Student Orientation

The program kicks off with an informative and social week-long orientation. During the week-long introduction to the program, you'll get

to know other new students and gain a sense of what the classroom experience will hold. The orientation features team-building exercises and lectures, and workshops on special topics, including a thorough overview of the job market and career resources.

Course Curriculum

Designed by a world-class business school, the MFE Program's curriculum challenges you to think of innovative ways to integrate quantitative methods with the theoretical framework and institutional settings in which they are applied. Taught by a renowned faculty comprised of prominent scholars and industry luminaries, MFE courses are anchored in cutting-edge research and best practices in financial engineering.

The Berkeley MFE Program is a one-year program beginning in March, with an internship period from October to January, and graduation the following March.

Industry Leaders in the Classroom

The curriculum also includes weekly Financial Practice Seminars featuring a diverse slate of finance practitioners. In the first term, speakers discuss jobs available to graduates of the MFE and the skills needed to contribute to a firm's mission. In the second term, speakers provide insights into the way the financial world is changing: new products and needs; evolving data and information systems; and similar topics. Over the past two years, more than 50 industry leaders have shared their expertise as part of the Financial Practice Seminars series. Recent speakers have included Jean-Marc Orlando, head of E-commerce trading at BNP Paribas; Arnold Miyamoto, managing director of Citigroup; and Joseph Langsam, managing director of Morgan Stanley.

The Morgan Stanley Applied Finance Project

In addition to the internship, MFE students are required to complete an applied finance project that develops or uses quantitative finance tools and techniques learned in the program or internship. Students have the option of completing a one-credit project or three-credit project. The \$5,000 Morgan Stanley Applied Finance Project Award is given to the best three-credit project.

Internship Period

The Internship/Special Topics in Finance project is a required condition for graduation. The internship or approved, on-site project takes place from mid-October to mid-January. Students must enroll in MFE230N, the Internship/Special Topics in Finance course for the fall term.

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For more information and semester specific course listings, please visit the Masters of Financial Engineering Program website (<http://mfe.berkeley.edu>) .