For application deadlines and financial aid information, as well as the MFE application, and detailed admissions instructions, visit mfe.haas.berkeley.edu
The Berkeley Master of Financial Engineering Program provides you with the knowledge and skills to prepare you for a career in the finance industry. In one year, you will be ready to take a leading role in a fast-growing field that demands individuals who can apply their education and skills at the cutting edge of finance in investment banks, commercial banks, and other firms around the world.

Benefits:
A proven track record of successfully launching careers for its students in the world’s top financial centers.
- Benefit from highly personalized career services provided by a program team with the connections, reputation, and knowledge necessary to help secure top jobs at the most selective firms.
- See immediate return on investment: Berkeley MFE graduates received job offers in each of the previous four years at the highest average starting salary of any similar program.

A rigorous one-year curriculum developed by a world-class business school, and taught by some of the most distinguished names in finance.
- Gain an in-depth understanding of the underlying frameworks of financial markets, and benefit from a rigorous application-oriented curriculum that prepares you to work as a financial engineer after graduation, starting on day one.
- Experience firsthand the ideas and practices shaping the financial engineering industry during an intense 12-week internship at a major firm.

A collaborative, team-oriented, and powerful professional and personal network for life.
- Immerse yourself in an intellectually stimulating environment where you not only learn from faculty comprised of some of the best minds in finance, but also from your fellow classmates who represent a wide range of interesting backgrounds and experiences.
- Develop lifelong friendships and powerful, global connections as a member of the Haas School’s vast alumni network.
both sides, which has given me more confidence now with management and econometrics. But at Haas, I discovered asset background in stochastic calculus. Originally, I saw my future in terms of business and personal expertise from true business and personal expertise and translate some of the finance fundamentals for me. That sort of camaraderie is typical of Haas students and alumni. And, before I started my internship, I used the Haas Alumni Network to connect with alumni who are already working at Citigroup. They were very helpful and open with their time and their insights.

Diversity of Ideas
There were at least 15 countries represented in my class, from Korea and China to France, Bulgaria and Colombia. We reflected the global economy that we will be working in during our careers. Because everyone comes to Haas with different backgrounds, needs and goals, you can really tailor the program to fit your needs. I feel that I built a true business and personal expertise at Haas.”

A Balanced Approach
“Originginally, I saw my future in terms of the business side, since I have a strong background in stochastic calculus. But at Haas, I discovered asset management and econometrics, which apply more to the buy side. They are dedicated to finding us internships.”

Leveraging the Network
“Since my background was so much more theoretical, I got in touch with a Berkeley MFE alum that had gone through the French university system, like me. He was able to explain and translate some of the finance fundamentals for me. That sort of camaraderie is typical of Haas students and alumni. And, before I started my internship, I used the Haas Alumni Network to connect with alumni who are already working at Citigroup. They were very helpful and open with their time and their insights.”

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A Balanced Approach
“Originally, I saw my future in terms of the business side, since I have a strong background in stochastic calculus. But at Haas, I discovered asset management and econometrics, which apply more to the buy side. I am feeling very confident now with both sides, which has given me more choices in my career.”

Your entire Berkeley MFE experience is designed to give you the knowledge, experience, and connections you’ll need to immediately launch a successful career in financial engineering.

The Berkeley MFE Program at the Haas School of Business provides a depth of study in finance that is not available in traditional MBA programs, reaching beyond basic business concepts to teach you how to combine modern portfolio theory with computational methods. It also provides many opportunities to learn firsthand how to apply these theories and methods to real-world situations. You will also benefit from the quality of students, breadth of activities, and network of impressive alumni contacts inherent to a top-ranked business school and a world-class university.

An Unparalleled Career Advantage
Top employers continue to seek out Berkeley MFE graduates who understand complex financial strategies, possess financial modeling ability, and demonstrate computational proficiency. Berkeley MFE graduates have a successful track record of applying the knowledge gained in the program to launch new careers as quantitative finance experts at leading banking institutions, insurance companies, money management firms, hedge funds, treasury departments, diversified financial services companies, asset-management firms, and equity/venture capital firms, as well as other non-financial corporations.

The MFE may also be seen as an attractive alternative to a doctoral program in finance for individuals interested in commercial rather than academic careers, although several MFE students have applied and been admitted to top-tier PhD programs in finance in the US over the last 10 years (Columbia, UC Berkeley, UCLA, etc.).

A Rigorous Curriculum
Designed and tailored exclusively for the MFE students, the 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. A 10-12 week internship midway through the program provides you the opportunity to apply what you have learned in the classroom to real-world situations.

A Diverse, Talented Community
The Berkeley MFE Program has a history of attracting exceptionally talented and innovative students who have high levels of intellectual curiosity, strong interests in finance, and strong analytical skills. With only 60 students per class, you benefit from the bonds formed with your diverse, tight-knit classmates and peers. And as a member of the vast Haas Alumni Network, you will have life-long access to a wealth of career resources, online communities, and local alumni chapters and clubs.
When you join the Berkeley MFE Program, you are one year away from turning your specialized training in trading, risk management, derivatives, and commodities investments into a successful career in finance, strategy, or risk assessment. Haas has an unrivaled history of helping students secure top jobs—Berkeley MFE alumni are well established members of premier firms in the world's top financial markets, such as New York, London, and Tokyo. The Haas School's resources, its deep ties to global firms, and its highly personalized services will provide you with the tools and connections you need to launch the next stage of your career. Employers seek out Berkeley MFE students because they demonstrate not only a mastery of powerful financial engineering tools, but also a solid understanding of the best practices for the changing technological, global, and human dimensions of finance.

**Krishan Rattan, MFE 03 (left)**
Internship: Morgan Stanley, New York, New York

"The fact that Haas was one of the first MFE programs attests to the innovation at Berkeley. There was a tremendous intellectual energy that breeds new ideas.

"Since I didn't know just where my career would take me, I chose electives that were intellectually interesting. The balance of theoretical and market-facing coursework offered at Haas has served me well."

**Delphine Bouyssarie, MFE 08 (center left)**
Internship: Goldman Sachs, New York, New York

"Because the Berkeley MFE is housed in the business school, it was better situated to give me the real-world, financial industry perspective I wanted.

"I came to Haas looking for a more practical, hands-on education to complement my background in theoretical, financial math. The MFE program helped me understand how financial math works in the real world."

**Luca Barone, MFE 05 (center right)**
Current Position: Partner, Sator SPA, Rome
Internship: Goldman Sachs, London, U.K.

"The brightest people at Berkeley teach in the Berkeley MFE program. It means so much to listen to the people who wrote the textbooks, to hear the authors explain their work to you.

"When I started my internship, I felt my Haas courses had prepared me to start contributing from day one."

**Thomas LaRowe, MFE 04 (right)**
Internship: Electrabel, Brussels, Belgium

"The Berkeley MFE program exposes you to every aspect of the financial industry. It's an unrivaled opportunity to explore and decide what interests you most.

"The return on investment on my degree was everything I could have hoped for, intellectually and practically."
A highlight of the Berkeley MFE experience is your 12-week internship. This gives you hands-on experience and ongoing connections with practitioners at firms such as Citigroup, BlackRock, Goldman Sachs, and Morgan Stanley. These connections have often led to careers at these firms. Your internship gives you immediate opportunities to refine your skills and marketability and helps you build your professional network.

**The Internship Advantage**

Beginning during orientation, the program office helps to focus you on the internship phase of the program. Staff members work directly with you to uncover and secure your placement at a top finance firm.

To prepare you for your internship search, an on-site consultant provides large and small group sessions covering topics such as interview and résumé writing skills. Both the consultant and program staff are continually available for one-on-one appointments to help you address the career challenges specific to needs. The program director also frequently addresses the class to give updates on the internship and job search processes.

Early in the program, you will have the opportunity to take advantage of “Super Saturday,” a full day of mock interviews with alumni and field professionals aimed at preparing you for your internship interviews. Actual interviews with corporate representatives are held by appointment at Haas, as well as via telephone or video conferencing.

Finance in the Family

Brothers Thomas and Matthieu Brunet

Thomas Brunet
MFE 06
FX Structurer, Fixed Income Sales and Trading
BNP Paribas, London

Internship:
Deutsche Bank, New York, New York

“All my life I had heard of Wall Street. Now, thanks to my Berkeley MFE, I am working here and it is exhilarating.

“My internship and my final class project formed a perfect circle—each informing the other and increasing their value. Better yet, the work produced a trading strategy that we are still using in my group.”

Matthieu Brunet
MFE 09
Associate, FX Structurer
FX Structuring & Corporate Solutions
Citigroup, London

Previous degrees:
Math and Physics
Lycée Champollion
Grenoble, France
MS, Computer Science
EISTI, Paris, France

Internship:
Citigroup, New York, New York

“My internship with the foreign exchange structuring desk at Citigroup was a 100 percent fit with my career goals. The Berkeley MFE Program office practically offered it to me on a silver platter. They are fantastic and relentless in securing internships. I was subsequently offered a full-time position within Citi right after my internship.

“The professors at Haas are all so passionate about their work and about passing their knowledge and enthusiasm on to us. They also made themselves very available to us, in class and outside. When Professor O’Brien taught his Innovation class, his passion for the subject was apparent. We explored not just the newest ideas, but where new ideas come from, what makes them succeed or fail.”

A Premier Internship Program

**2011 Internship Statistics**

Exceptional Placement Results

- 66 of 67 students sought MFE internships
- 100% of students seeking internships received offers

Average Monthly Compensation: $7,737

Median Monthly Compensation: $8,000

Top Internship Recruiters

- JPMorgan
- BlackRock
- BNP Paribas
- Bank of America
- Morgan Stanley
- Societe Generale
- Standard & Poor’s

Other 2011 Internship Companies

- AllianceBernstein
- Barclays Capital
- Corpbanca
- Credit Suisse
- DnA Chemical
- Ernst & Young
- GMO
- Kellner DiLeo
- McKinsey & Co
- Mellon Capital Management
- Moody’s KMV
- Moody’s Analytics
- Overland Advisors
- PIMCO
- RBC Capital Markets
- SPG Capital Markets
- Sun Trading, LLC
- The Global Emerging Market Group
- Thompson Reuters
- Tudor Investment Corporation
- USBS
- CalPERS
- Wells Fargo
A Clear Path to Your Ideal Job

The Berkeley MFE Program’s highly regarded reputation in the finance community and its well-established relationships with managers and executives at the most prestigious firms provide you with an ideal gateway to the job you want after graduation.

A Proven Track Record

Throughout the year, the MFE program staff is working hard behind the scenes to uncover job opportunities at dozens of leading firms, and to work with these companies and with you to determine the best possible career fit. The Berkeley MFE Program is distinguished by its ability to help students garner job offers from the most desirable companies. Despite the ever-changing economic environment, the Haas School’s record is impeccable—Berkeley MFE graduates received job offers in each of the previous four years at the highest average starting salary of any similar program.

Continuous Personalized Career Services

From your first day as a Berkeley MFE student, the program office works to prepare you to achieve your career goals. Orientation week gives you an initial overview of job opportunities, market trends, and skill sets. Real-world interaction with industry-leading companies starts immediately with a trading-game simulation conducted with representatives from Wells Fargo. Other introductory sessions cover various topics in depth, such as résumé, ethics, and internship preparation.

The program offers a wide range of continuous personalized services, including help with individual career planning, résumé writing, and interview preparation. Group workshops, panels, networking events, and receptions offer valuable information specific to all phases of the career search. The Haas School also hosts two career fairs specifically for MFE students. The October career fair in New York, co-hosted by the International Association of Financial Engineers and New York University, typically draws more than two dozen top financial firms. A second fair, held in San Francisco, draws more than 40 organizations.

Your Worldwide Network

Career support does not end after graduation. From your first day as a Berkeley MFE student, you have access to one of the best professional networks on the planet. More than 32,000 business school graduates are connected by the robust Haas Alumni Network, with alumni chapters in major cities around the globe. The Haas online alumni community, Haaslink, the focal point for alumni connections and services, facilitates keeping up with friends from school and developing professional networks. The online community offers Haas students and alumni a searchable alumni directory, online job postings, lifelong e-mail forwarding options, and various career resources.

A Record of Success

2010 Full-time Employment Statistics

<table>
<thead>
<tr>
<th>Industry-Leading Results</th>
<th>Total Offers</th>
<th>88</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Students with Offers</td>
<td>58</td>
<td></td>
</tr>
<tr>
<td>% of Students with Offers:</td>
<td>96.7%</td>
<td></td>
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<tr>
<td>(All of 58 looking for full-time employment)</td>
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</table>

2010 Full-Time Companies

<table>
<thead>
<tr>
<th>Bank Of America</th>
<th>Barclays Capital</th>
<th>BNP Paribas</th>
<th>Capco</th>
<th>Citigroup</th>
<th>Credit Suisse</th>
<th>Diversified Credit Investments</th>
<th>Ernst &amp; Young</th>
<th>First Quadrant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goldman Sachs</td>
<td>Hyundai Securities</td>
<td>Institute For Financial Markets</td>
<td>Pacific Gas &amp; Electric Company</td>
<td>Refinit Energy Advisors</td>
<td>Standard &amp; Poor’s</td>
<td>Strategic Global Advisors</td>
<td>Sun Trading</td>
<td>Wellington Management</td>
</tr>
</tbody>
</table>

Job Functions

- Structured Products/ Derivatives 19%
- Research 12%
- Portfolio Management 12%
- Consulting 9%
- Risk Management 7%
- Asset Management 7%
- Consulting/ Investment Research 11%
- Energy 5%
- Hedge Fund 4%
- Trading 4%
- Investment Banking 44%
Preparing You to Make an Immediate Impact

The Berkeley MFE Program is a professional degree program with a curriculum intended to prepare you to work as a financial engineer immediately after graduating. Anchored in the latest theories and best practices in quantitative finance, 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.

Structured for Success

The MFE requires only one year of study, which makes it attractive to students with strong quantitative skills and focused career interests. 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.

MFE students must successfully complete 28 units of coursework plus an internship or on-site project. 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 more than 95 percent of students each year.

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-unit project or three-unit project. Each year, the $5,000 Gifford Fong Award is given to the best three-unit project.

Benefit from Industry Expertise

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 Program 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.
The Berkeley MFE Curriculum Overview

**Curriculum Overview**

<table>
<thead>
<tr>
<th>Spring (8 weeks)</th>
<th>Summer (8 weeks)</th>
<th>Fall (8 weeks)</th>
<th>Winter (8 weeks)</th>
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</thead>
<tbody>
<tr>
<td><strong>Fundamentals of Financial Economics</strong>&lt;br&gt;MFE 230A (2 units)&lt;br&gt;Covers the basic theories of asset pricing, from standard discounted cash flow analysis to No Arbitrage Pricing technique for security valuation. Applications include fixed-income securities, derivatives, and contingent claims.</td>
<td><strong>Derivatives: Economic Concepts</strong>&lt;br&gt;MFE 230C (2 units)&lt;br&gt;Introduces the uses and pricing of derivatives. Topics include basic features of futures and options, binomial and trinomial option pricing, the Black-Scholes formula, volatility measurement, dynamic trading strategies, and exotic options. Course emphasis is on economic intuition rather than detailed quantitative analysis, with techniques and arguments developed using the simplest possible mathematics.</td>
<td><strong>Required Course:</strong>&lt;br&gt;<strong>Risk Management and Financial Engineering</strong>&lt;br&gt;MFE 230K (2 units)&lt;br&gt;Examines financial risk management and measurement, including stress testing and the role of risk, credit risk, liquidity risk, risk retention, model risk, and stress testing. Electives (choose 5 units):</td>
<td><strong>Required Courses:</strong>&lt;br&gt;<strong>Applied Finance Project (move this entry and description to top)</strong>&lt;br&gt;<strong>Asset-backed Security Markets</strong>&lt;br&gt;MFE 230M (2 units)&lt;br&gt;Explores advanced topics in mortgage and other asset-backed securities. Students apply the latest tools in fixed-income analysis and classic economic and financial models to evaluate securitized bond markets.</td>
</tr>
<tr>
<td><strong>Empirical Methods in Finance</strong>&lt;br&gt;MFE 230E (2 units)&lt;br&gt;Introduction to Stochastic Calculus&lt;br&gt;MFE 230D (2 units)&lt;br&gt;Focuses on the techniques currently used to model credit risk. Topics covered include default probabilities, loss given default, correlation, credit portfolio analytics, bond valuation, loan valuation, and credit derivative valuation.</td>
<td><strong>Credit Risk: Economic Concepts</strong>&lt;br&gt;MFE 230G (1 unit)&lt;br&gt;Provides an overview of the techniques currently used to model credit risk. Topics covered include default probabilities, loss given default, correlation, credit portfolio analytics, bond valuation, loan valuation, and credit derivative valuation.</td>
<td><strong>Advanced Computational Finance</strong>&lt;br&gt;MFE 230B (2 units)&lt;br&gt;Focuses on the techniques currently used to model credit risk. Topics covered include default probabilities, loss given default, correlation, credit portfolio analytics, bond valuation, loan valuation, and credit derivative valuation.</td>
<td><strong>Dynamic Global Asset Management</strong>&lt;br&gt;MFE 230K (2 units)&lt;br&gt;Covers the strategies for achieving various investment objectives for portfolios and risk management. Students apply the latest tools in fixed-income analysis and classic economic and financial models to evaluate securitized bond markets.</td>
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<tr>
<td><strong>Credit Risk: Quantitative Modeling</strong>&lt;br&gt;MFE 230F (1 unit)&lt;br&gt;Focuses on the techniques currently used to model credit risk. Topics covered include default probabilities, loss given default, correlation, credit portfolio analytics, bond valuation, loan valuation, and credit derivative valuation.</td>
<td><strong>Accounting and Taxation of Derivatives</strong>&lt;br&gt;MFE 230J (2 units)&lt;br&gt;Introduction to Stochastic Calculus&lt;br&gt;MFE 230D (2 units)&lt;br&gt;Focuses on the techniques currently used to model credit risk. Topics covered include default probabilities, loss given default, correlation, credit portfolio analytics, bond valuation, loan valuation, and credit derivative valuation.</td>
<td><strong>Topics in Behavioral Finance</strong>&lt;br&gt;MFE 230K (1 unit)&lt;br&gt;This course covers various behavioral finance topics, including prospect theory and its implications for financial markets. Focus is on the psychological processes by which people make judgments and decisions, and the biases and heuristics associated with these decisions.</td>
<td><strong>Topics in Socially Responsible Investments</strong>&lt;br&gt;MFE230T (1 unit)&lt;br&gt;This course covers various behavioral finance topics, including prospect theory and its implications for financial markets. Focus is on the psychological processes by which people make judgments and decisions, and the biases and heuristics associated with these decisions.</td>
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<td><strong>Empirical Methods in Finance</strong>&lt;br&gt;MFE 230E (2 units)&lt;br&gt;Employs advanced topics in mortgage and other asset-backed securities. Students apply the latest tools in fixed-income analysis and classic economic and financial models to evaluate securitized bond markets.</td>
<td><strong>Risk Management and Financial Engineering</strong>&lt;br&gt;MFE 230K (2 units)&lt;br&gt;Examines financial risk management and measurement, including stress testing and the role of risk, credit risk, liquidity risk, risk retention, model risk, and stress testing. Electives (choose 5 units):</td>
<td><strong>Topics in High-Frequency Finance</strong>&lt;br&gt;MFE230O (1 unit)&lt;br&gt;This course covers various behavioral finance topics, including prospect theory and its implications for financial markets. Focus is on the psychological processes by which people make judgments and decisions, and the biases and heuristics associated with these decisions.</td>
<td><strong>Independent Study</strong>&lt;br&gt;Independent Study (1-3 units)</td>
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<td><strong>Emerging Markets</strong>&lt;br&gt;MFE 230Q (2 units)&lt;br&gt;Introduces the uses and pricing of derivatives. Topics include basic features of futures and options, binomial and trinomial option pricing, the Black-Scholes formula, volatility measurement, dynamic trading strategies, and exotic options. Course emphasis is on economic intuition rather than detailed quantitative analysis, with techniques and arguments developed using the simplest possible mathematics.</td>
<td><strong>Fixed Income Markets</strong>&lt;br&gt;MFE 230H (2 units)&lt;br&gt;Introduces the uses and pricing of derivatives. Topics include basic features of futures and options, binomial and trinomial option pricing, the Black-Scholes formula, volatility measurement, dynamic trading strategies, and exotic options. Course emphasis is on economic intuition rather than detailed quantitative analysis, with techniques and arguments developed using the simplest possible mathematics.</td>
<td><strong>Advanced Computational Finance</strong>&lt;br&gt;MFE 230B (2 units)&lt;br&gt;Focuses on the techniques currently used to model credit risk. Topics covered include default probabilities, loss given default, correlation, credit portfolio analytics, bond valuation, loan valuation, and credit derivative valuation.</td>
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<td><strong>Independent Study</strong>&lt;br&gt;Independent Study (1-3 units)</td>
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*Curriculum subject to change. Not all electives are offered each term.*
Berkeley MFE faculty members are renowned groundbreakers and thought leaders in the field of quantitative finance. In addition to undertaking preeminent research that feeds directly into the curriculum, many of these scholars also have practical experience in the creation of financial instruments and software, as well as the implementation of innovative financial strategies.

Pioneers of Financial Engineering

Many Haas School faculty members have long stood at the forefront of the quantitative finance industry. For example, Professor Mark Rubinstein is renowned for his work on the binomial options pricing model (also known as the Cox-Ross-Rubinstein model), as well as his early work on asset pricing. He is currently an associate editor of eight journals in these areas. In 1993, he served as President of the American Finance Association. Many of Rubinstein’s papers are frequently reprinted in survey publications, and his work has won numerous prizes and awards for his research and writing on derivatives including International Financial Engineer of the Year for 1995. Like Rubinstein, Professor John O’Brien was an early innovator in the investment consulting space. Before joining Haas, O’Brien served as Chairman of the Capital Market Fund, and the S&P 500 SuperTrust, the first exchange-traded fund. He later co-developed the O’Brien 5000 common stock index, later renamed the Wilshire 5000 index, currently the nation’s broadest-based index, considered by many to be the most accurate reflection of the overall market. In 1987, O’Brien was named one of Fortune Magazine’s Men of the Year. Many Haas School faculty members have long stood at the forefront of the quantitative finance industry. For example, Professor Mark Rubinstein is renowned for his work on the binomial options pricing model (also known as the Cox-Ross-Rubinstein model), as well as his early work on asset pricing. He is currently an associate editor of eight journals in these areas. In 1993, he served as President of the American Finance Association. Many of Rubinstein’s papers are frequently reprinted in survey publications, and his work has won numerous prizes and awards for his research and writing on derivatives including International Financial Engineer of the Year for 1995. Like Rubinstein, Professor John O’Brien was an early innovator in the investment consulting space. Before joining Haas, O’Brien served as Chairman of the Capital Market Fund, and the S&P 500 SuperTrust, the first exchange-traded fund. He later co-developed the O’Brien 5000 common stock index, later renamed the Wilshire 5000 index, currently the nation’s broadest-based index, considered by many to be the most accurate reflection of the overall market. In 1987, O’Brien was named one of Fortune Magazine’s Men of the Year.

Professional Faculty Drawn From Business

In addition to having early innovators and scholars, the Berkeley MFE faculty also draws from some of the most successful minds in today’s business community, including Lecturer Ammon Levy, head of portfolio research at Moody’s Analytics, and Jing Zhang, global head of Moody’s KMV Research. The faculty also includes BlackRock executives Ronald Kahn, managing director and head of equity research, and Michael Melvin, managing director and head of currency research. In the past, these projects have tackled a wide range of interesting areas, from traffic flow issues to energy efficiency and environmental challenges.

Berkeley MFE faculty have also played important roles in the national and international business communities, serving as consultants, board members, and speakers at major business conferences and seminars. Professor Dwight M. Jaffee has been an advisor to the World Bank, the Federal Reserve System, the Office of Federal Housing Enterprise Oversight, and the US Department of Housing and Urban Development.

Thought Leaders, Innovators, and Practitioners

Despite today’s volatility, Wallace believes the Berkeley MFE curriculum is successful because it is the most balanced quantitative finance program of any university. “Haas offers the best mix of technology taught in the context of its business and economic applications,” she says. “We’re training people to sit in a back room and crunch numbers—Haas develops highly sophisticated problem-solvers who become managers of firms and leaders of industries.” Despite today’s volatility, Wallace believes the Berkeley MFE curriculum is successful because it is the most balanced quantitative finance program of any university. “Haas offers the best mix of technology taught in the context of its business and economic applications,” she says. “We’re training people to sit in a back room and crunch numbers—Haas develops highly sophisticated problem-solvers who become managers of firms and leaders of industries.”

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PhD, University of Michigan

Long before the meltdown of the subprime mortgage market and subsequent collapse of staple investment banks, Professor Nancy Wallace’s research determined that Wall Street banks and bond-rating agencies were underestimating the risk of many new mortgage- and asset-backed securities.

MFE students benefit from Wallace’s experience and insight as they examine and evaluate the structure and operation of the securitized bond markets in her Asset-backed Security Markets course. A central project has them work together to invent structures for new securities. In the past, these projects have tackled a wide range of interesting areas, from traffic flow issues to energy efficiency and environmental challenges.

“We have had wonderful success with these projects because the students are amazingly creative and innovative,” says Wallace. “It’s exciting to see what they come up with.” Wallace believes the Berkeley MFE curriculum is successful because it is the most balanced quantitative finance program of any university. “Haas offers the best mix of technology taught in the context of its business and economic applications,” she says. “We’re training people to sit in a back room and crunch numbers—Haas develops highly sophisticated problem-solvers who become managers of firms and leaders of industries.”

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Berkeley MFE Faculty

Passionate Scholars and Teachers

The cornerstone of the entire Berkeley MFE program is its distinguished faculty and the high quality of their courses. At Haas, effective teaching is the top priority. MFE faculty members have regularly earned a median score of “Club 6” in their student evaluations—that is, their median ratings are 6 or higher on a 7-point scale.

In the Berkeley MFE classroom, faculty members emphasize both theory and practice by using a variety of teaching methods. Case studies, seminars, simulations, guest speakers, and group projects all facilitate the learning process. Classroom learning is enhanced by numerous opportunities to apply the lessons to real-world situations.

Professors regularly integrate their research findings into new course offerings and reassess the MFE curriculum to ensure its relevance in presenting current issues. In their courses, students benefit by being among the first to learn of faculty discoveries and by studying directly with the inventors of yesterday’s and tomorrow’s innovative theories and principles.

Finance Professor Hayme Leland

Mukesh Bajaj, Managing Director of Finance and Damages Practice and Board of Directors, LECO, LLC (finance), University of California, Berkeley. Corporate finance and financial strategy, dividend policy and corporate finance, determinants of stock returns, design and pricing of securities.


Nicola Särkänsuu, Assistant Professor, PhD (finance), Stanford University. Liquidity and risk management, valuation, debt covenants, and securities.


Laurent El Ghaoui, Professor, Electrical Engineering and Computer Sciences, and Industrial Engineering and Operations Research, PhD (aeronautics and astronautics), Stanford University. Optimization and control, statistics and machine learning. Applications in finance, bio-informatics and text mining.

Wright M. Jaffee, Willis H. Booth Professor of Business and Finance, PhD (economics), Massachusetts Institute of Technology. Faculty Director, Master of Science in Engineering Management. Loan activities of financial institutions, commercial and mortgage markets, credit rationing, asset-backed security markets, catastrophe insurance financing. Board of Directors Barr Rosenberg Mutual Funds, Visiting Scholar, Federal Reserve Bank of San Francisco.

Ronald N. Kahn, Managing Director and Global Head of Equity Research, BlackRock. PhD (physical), Harvard University. Portfolio management, risk modeling, and quantitative analysis. Author (with Richard Grinold), Active Portfolio Management. Quantitative Theory and Applications.

Gregory LeBlanc, Lecturer in Finance, Strategy, and Law. BA (history, philosophy, and economics), University of Pennsylvania. BS (economics), Wharton School. JD (corporate and securities law) George Mason University, LLM program, UC Berkeley.

The Center for Teaching Excellence

The Center for Teaching Excellence (CTE) promotes best practices in teaching and learning inside and outside the classroom. Leveraging the experience and insights of veteran instructors, as well as a wide variety of instructional tools and training resources, the CTE manages a broad and continuous spectrum of activities and services to continually improve the way education is delivered throughout the Haas School.


Terrance Odean, Willis H. Booth Chair in Banking and Finance, PhD (finance), University of California, Berkeley. Behavioral finance.

Eric S. Reiner, Managing Director, Group Risk Control, USBS AG, New York and Zurich. PhD (chemical engineering), University of California, Berkeley. Fuel cell reformation.


Jeff (Yiping) Shen, Managing Director, Head of Asia Equity, BlackRock. PhD (finance), Stern School of Business, NYU. Risk management, credit risk modeling, valuation, and risk management.

Domingo Tavella, Principal of Octanti Associates, Inc. PhD (engineering), Stanford University. Computational methods in financial pricing, stochastic simulation in finance and insurance, financial software development strategies and methods, risk management strategies in finance and insurance, hybrid insurance structures.

Axel Tichy, Assistant Professor of Finance and Real Estate, PhD (business), Stanford. M.S. (applied mathematics and physics), Moscow Institute of Physics and Technology. Financial innovations, mortgages, mortgage-backed securities, moral hazard, contact theory.

Suneel Uppal, Lecturer, PhD (accounting), Washington University. St. Louis. Evaluating 401(k) and reducing costs through outsourcing.

Rosen Volatanes, Assistant Professor, PhD (economics), Princeton University. Empirical asset pricing, econometrics, macroeconomics, term structure modeling, properties of long-horizon returns.

Johan Walden, Assistant Professor. PhD (financial economics), Yale University. PhD (applied mathematics), Uppsala University. Credit markets, corporate bonds, credit risk modeling, valuation, and services to continually improve the way education is delivered throughout the Haas School.

Jing Zhang, Managing Director, Global Head of Moody’s Analytics. PhD (business), the Wharton School, University of Pennsylvania. Credit market, credit risk modeling, valuation, and financial risk management.
As a student in the MFE program, you join a small, tight-knit community of peers. Teamwork and collaboration are staples of the program, and with only about 65 students in each entering class, you will form close bonds with your fellow classmates as you work together on class projects and activities.

You will also benefit from the larger Haas School community, which is distinguished by a unique and engaged student population that is actively involved in planning world-class events, conferences, and networking functions. While Haas students represent a broad spectrum of programs, backgrounds, and experiences, they all possess the confidence without attitude that Berkeley graduates are known for.

A Wealth of Diversity
Resourceful, intelligent, energetic, and, above all, highly motivated: all of these are hallmarks of Berkeley MFE students. Many students have already achieved significant success in their careers, as well as in their prior academic lives—over half have already earned post-graduate and doctoral degrees in other, related areas of expertise. Most MFE students have backgrounds in quantitative disciplines upon entering the program.

Because they are diverse and unique as individuals, Berkeley MFE students contribute to the wealth of their classmates’ experience while in school, and add great value to one another as fellow alumni in future endeavors around the world. The relatively small size of the MFE program permits students to get to know most members of their class—strong connections develop between faculty and students, and among students.

A Close-knit Peer Network
As a complement to their coursework, students also have the opportunity to get involved in clubs and extracurricular activities. The student-run Financial Engineering Student Association (FESA) represents student interests to the MFE and Haas administrations and coordinates events specifically tailored to MFE program students. In the past, FESA has sponsored activities as diverse as barbecues, bowling, karaoke, dinners, bar nights, and trips to local attractions such as Napa Valley and Lake Tahoe. Many of the events allow students to bring their families.

Coming to Haas means joining the vibrant, thriving community of a top-ten business school at a premier university. From networking mixers to annual conferences, guest speakers to school-wide events, there’s always something happening at Haas. And, as a member of our highly active student community, you will have the opportunity not only to attend these stimulating and exciting activities, but also to participate in creating and planning them.

Bo Hu
MFE 11
Previous degree:
BS/BA, Electrical Engineering, Physics
Swarthmore College
Swarthmore Pennsylvania
Internship:
Credit Suisse
London, U.K.
Bo Hu brought her experience on the sell-side to her Berkeley MFE studies. But her studies and her experience as a principal in the Haas Social Responsibility Fund opened her eyes to the potential of a career on the buy-side, something she never would have considered before.

An Ideal Location
“Berkeley’s great weather made the MFE Program very attractive. Also, with the Program’s state-of-the-art video conferencing capabilities and extensive contacts, students are exposed to firms all around the world.”

A Powerful Network
“The Haas Alumni Network has a big impact. MFE alums stay in touch with the school and come back to recruit interns. They understand the program, the students and where we are coming from. Alums bring a lot of opportunities.”

A C O L L A B O R A T I V E C O M M U N I T Y

Confidence Without Attitude
Consistently ranked one of the top business schools in the country, the Haas School of Business has a solid reputation for quality and leadership. The business school at The University of California, Berkeley, was founded in 1898, making it the second oldest collegiate business school in the United States, and the first at a public university. Rank, reputation, and experience combine to offer Haas students a rich spectrum of quality resources, noteworthy events, and high-profile speakers.

A University Second to None

In addition to attending a premier business school, Haas students join the larger community at one of the most esteemed universities in the world. The mission of the University of California is to excel in research, teaching, and public service. Over the decades, this mission has developed a culture at UC Berkeley that stimulates greatness.

With the Berkeley MFE program, you earn a degree from a university whose name and reputation open doors around the globe. The proof is in the university’s distinguished record of Nobel-level scholarship, constant innovation, concern for the betterment of our world, and consistently high rankings of its schools and departments.

Since its founding in 1868, UC Berkeley has grown with the rapidly expanding population of California and responded to the educational needs of the developing state. By the 1930’s, research at UC Berkeley burgeoned in nuclear physics, chemistry, and biology, leading to the development of the first cyclotron, the isolation of the human poliovirus, and the discovery of all the artificial elements heavier than uranium, including Berkelium and Californium. Twenty members of the UC Berkeley faculty have been awarded Nobel prizes for these and subsequent achievements in science, literature, and economics. Today, according to the National Research Council, UC Berkeley ranks first nationally in the number of graduate programs in the top ten in their fields. In fact, 97% of the university’s programs made the top-ten list.

The Perfect Location

Additionally, few geographical areas in the world can meet, let alone beat, the university’s location. The San Francisco Bay Area boasts stunning natural beauty, seductively benign weather, an atmosphere charged with a worldly sophistication, and a distinctive openness to new ways of thinking. It is home to an innovation ecosystem unequaled anywhere in the world, with venture capital firms, established technology powerhouses, and thriving biotech and digital media industries. Many of the most dynamic names in business, from Charles Schwab to Google, call the region home. Innovation is a part of the ethos in the area, and you feel it every day at Haas.

The Berkeley-Haas Experience

Consistently ranked one of the top business schools in the country, the Haas School of Business has a solid reputation for quality and leadership. The business school at The University of California, Berkeley, was founded in 1898, making it the second oldest collegiate business school in the United States, and the first at a public university. Rank, reputation, and experience combine to offer Haas students a rich spectrum of quality resources, noteworthy events, and high-profile speakers.

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