

Math (all required)

- Calculus (UCB Equivalent: [Math 1A](#), [Math 1B](#), [Math 53](#))
- Linear Algebra (UCB Equivalent: [Math 54](#))
- Partial Differential Equations (UCB Equivalent: [Math 126](#))
- Statistics (2 upper-division level courses - UCB Equivalent: [Econ 140, 141](#) -please scroll down for course descriptions; Statistics [101, 102, 134, 135](#))
- Numerical Analysis (UCB Equivalent: [Math 128A](#))

Programming (all required)

- C++/C
- Python (advanced level)
- Machine Learning (advanced level)

Finance (2-3 courses required)

- Macroeconomics [ECON 101B](#)
- Corporate Finance
- CFA level 1 (<https://www.cfainstitute.org>, recommended)

Communications Skills (required to demonstrate strong skills; examples below)

- Business Writing/Communications Coursework
- [Toastmasters – not required but can be a great way to improve public speaking skill.](#)

Work Experience/Finance Internship (recommended, but not required)

MFE Pre-Program Courses

- Math
- Statistics
- Python

Exams

- GRE or GMAT (More information here: <https://mfe.haas.berkeley.edu/admissions/requirements>)

- TOEFL/IELTS (Required for international students. More information here: <https://mfe.haas.berkeley.edu/admissions/requirements>)

Books (strongly recommended for all candidates)

- [Heard on the Street: Quantitative Questions from Wall Street Job Interviews](#) by Timothy Crack
- [A Practical Guide to Quantitative Finance Interviews](#) by Xinfeng Zhou
- [Cracking the Finance Quant Interview: 51 Interview Questions and Solutions](#) by Jean Peyre
- [Vault Guide to Advanced Finance & Quantitative Interviews](#)
- [Quant Job Interview Questions and Answers](#)
- [Frequently Asked Questions in Quantitative Finance](#)
- [Options, Futures, and Other Derivatives](#) by John Hull
- [Principles of Corporate Finance](#) by Brealey, Myers, and Allen
- [The Wall Street Journal](#), the [Financial Times](#), and the [Economist](#)
- [Macroeconomics](#) by Charles Jones

Places to find courses-

- UC Berkeley Extension- extension.berkeley.edu
- NetMath at UIUC- netmath.illinois.edu
- Columbia Video Network- www.cvn.columbia.edu/
- Stanford SCPD- scpdweb.stanford.edu
- Harvard Extension- extension.harvard.edu
- Applied Math Online at UW- amathonline.uw.edu
- University of Athabasca- <http://www.athabascau.ca/syllabi/math/math476.php> (achieve 80% or better)
- Coursera*
- edX/Other MOOC courses*