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
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
C++

Exams

GRE or GMAT (required for all candidates who will not hold a Ph.D. before the start of the program; no preference on which exam to take)

TOEFL/IELTS (required for international students)- Minimum score of 90 on iBT

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*

*Please note that courses taken through a MOOC platform should be taken for the certificate option.