

What Can Math Majors Accomplish in the Financial World

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Which path? Banking

Directions

Banking: private equity, investment banking, sales and trade, research, quants

Firms: Bulge Bracket, Boutique banks

Business Advisory / Consulting

Firms: Mckinsey, EY, Deloitte

Hedge funds, mutual funds

Who are your competitors?

- Business majors: accounting, finance, etc.
- Other liberal arts majors
- Ivy Leaguers
- MBA graduates

What are the skills you need?

- Understanding of numbers
- Business acumen
- Ability to read financial reports
- Excel, Powerpoint
- Interpersonal skills
- Networking skills

What are recruiters looking for

- High GPA
- Leadership skills
- Charisma
- Passion
- Quick thinker (give me an example...)
- Logical reasoning (case study)
- Remain good relationship

Graduate school or not?

- Working experience is essential
- MBA program
- If you want to go front office, it's not necessary to go to grad school for financial engineering/financial mathematics

Recommended courses

- MAT 221/222 – Statistics
- MAT requirements
- Economics: 203
- Finance: 301
- Accounting: 151, 201, 252
- GET 236, 336

Which path? Quants

Directions

Front office quants

On the trading floor with traders and brokers, high stress, higher salary

Back office quants

Risk management, back ended research, less stressful

Who are your competitors?

- PhD in math, physics, computer science, engineering...
- Financial engineers/mathematicians

The skill set you need

- Very strong math background
- Very strong modeling skills
- Coding: C++, Java, ...
- Understanding of Economics and Finance

What are recruiters looking for

- Problem solving skills
- High GPA won't cut it anymore
- No high requirement for interpersonal skills
- Strong math background

Graduate school or not?

Definitely! Either financial engineering or financial mathematics.

We have some alumni who are pursuing these programs and they can be very good resources.

Recommended courses

- MAT 526
- Game theory, graph theory
- ECN 521 or MAT 521
- ECN 522, ECN 505
- Computer Science
- Other upper level math/economics classes

The mutual skills

- Resume and LinkedIn
- Solid foundation of math / understanding of numbers
- Ability to use math skills in financial settings
- Presentation skills
- Example: [My LinkedIn Profile](#)

Resources recommended to everyone

- Animal Spirit (Bob Shiller)
- The Intelligent Investor (Graham)
- Have your own profile
- WSJ, NYT deal book
- Career Service: seminars, immersion programs
- Harvard 2+2, FM or FE programs