



MS PROGRAM IN FINANCIAL ENGINEERING BARUCH COLLEGE, CITY UNIVERSITY OF NEW YORK

Program Overview

National School of Development

Peking University, Beijing, China

November 2019

BARUCH MFE: The Winning Team

- **Job Placement, 2017-2019**
 - 96% placement rate at graduation, 99% placement three months after graduation
 - 99% summer internship placement rate
 - First Year Base Salary and Sign-on Bonus:
High: \$210,000; Low: \$85,000; Median: \$127,500; Average: \$128,750
 - Similar numbers for international students

- **QuantNetwork Ranking of MFE Programs: #2 in 2019, #1 in 2018 and 2017**

- **Risk Quant Finance Master Programs Worldwide Ranking: #3 in 2019**

- **Rotman International Trading Competition: #1 in 2017, 2016, 2012**

- **International Association for Quantitative Finance Competition: #1 in 2017, 2016, 2015**

BARUCH MFE Early Admission Winners: RITC results



**RITC 2017: Zhaoyue Wei – NSD 2016,
Baruch MFE 2017 (second from the right)**



**RITC 2016: Mingda Ke – NSD 2015,
Baruch MFE 2016 (second from the left)**

BARUCH MFE Early Admission Winners: IAQF results



IAQF 2017:

Zhihao Chen – NSD 2016, Baruch MFE 2017
(bottom right)

Jiaxi Wang – Tsinghua 2016, Baruch MFE
2017 (middle top row; early admission 2016)

IAQF 2016:

Meng Wang – NSD 2015, Baruch MFE 2016
(bottom left)

Biya Wu – NSD 2015, Baruch MFE 2016 (top left)

2019 QuantNet Ranking of Best Financial Engineering Programs

Ranked by QuantNet in Dec 2018. The most comprehensive 2019 ranking of best Financial Engineering (MFE), Mathematical Finance programs in the continental USA.



The 2019 QuantNet ranking of Financial Engineering, Quantitative Finance masters programs in the US provides detailed information on placement and admission statistics from top programs the region, making it uniquely valuable to the quant finance community at large.

The 2019 QuantNet rankings are best positioned to help prospective applicants decide where to apply and enroll in those master quantitative programs.

2019 Rankings Methodology

[Join discussion](#)

Rank	Program	Total score	Peer assessment	Employment rate at graduation	Employment rate three months after graduation	Average starting base salary (excluding bonus)	Average GRE Quant of admitted FT students	Tuition	Class Size
1	Princeton University Master in Finance Princeton, NJ	100	3.9	100%	100%	\$120,000	169	\$102,500 (2 years)	25FT
2	Baruch College, City University of New York Financial Engineering New York, NY	99	4.0	97%	97%	\$109,339	169.5	\$42,395 (non-resident), \$28,670 (resident)	35FT, 5PT
2	University of California, Berkeley Financial Engineering Berkeley, CA	99	4.2	80%	94%	\$118,322	168	\$70,796	79FT
4	Carnegie Mellon University Computational Finance Pittsburgh, PA	98	4.4	71%	90%	\$106,222	169	\$86,339	97FT
4	Columbia University Financial Engineering New York, NY	98	3.9	83%	100%	\$104,656	169.3	\$72,648	120FT
4	New York University Mathematics in Finance New York, NY	98	4.0	86%	100%	\$99,000	169	\$72,000	39FT, 13PT

Top 15 quant finance master's programmes

Rank	University/institution	No. of students	Accept. rate	Students accepting offers	Employ. rate in finance	Total citations, top five lecturers	Salary (\$)
1	Princeton University	25	5%	79%	100%	50,836	120,000
2	University of California, Berkeley (Haas School of Business)	67	17%	79%	99%	30,526	118,530
3	Baruch College, City University of New York	40	8%	83%	100%	4,133	115,000
4	New York University (Courant Institute of Mathematical Sciences)	110	12%	31%	100%	21,155	110,000
5	Columbia University	101	15%	50%	95%	20,674	102,300
6	ETH Zurich/University of Zurich	22	17%	n/a	100%	28,174	83,455
7	EISTI	19	20%	73%	100%	n/a	47,865
8	Carnegie Mellon University	97	13%	67%	94%	18,675	106,222
9	Illinois Institute of Technology	34	12%	60%	100%	2,716	91,000

 Share

Welcome to *Risk.net's* updated guide to the world's leading quantitative finance master's programmes – featuring, for the first time, a ranking of the top 15 courses, the first global ranking of its kind.

Employment Outlook – New York Financial Industry

- Top hedge funds (AQR, Citadel, Cubist/Point72, Schonfeld Group) and all major US banks (Bank of America Merrill Lynch, Goldman Sachs, JPMorgan, Morgan Stanley) continue to sponsor H1B visas without any issues for Baruch MFE students
- Baruch MFE students are highly successful this season on summer internships:
 - Of the 8 Baruch MFE students who were admitted through the early admission process in Fall 2018, 6 received summer internship offers already and 2 have upcoming super days
- Recruiting from the Baruch MFE Program moved toward top hedge funds (AQR, Citadel, Cubist/Point72, Schonfeld Group), with top quant programs in major banks also recruiting heavily, and only a small fraction going to FinTech

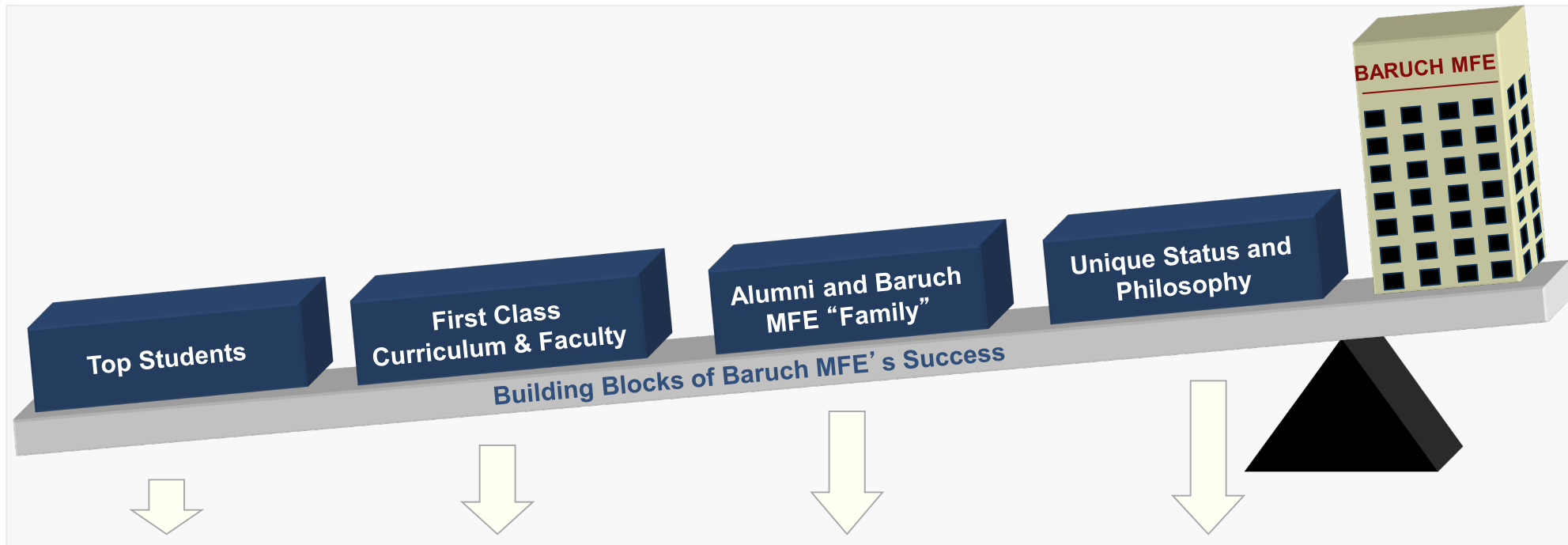
	Banks	Hedge Funds	FinTech	Consulting
December 19	30%	59%	11%	0%
Dec18 – May 19	44%	44%	12%	0%
Dec17 – May18	59%	31%	3%	6%
Dec16 – May17	60%	23%	9%	9%

Employment Status – October 31, 2019

- 24 of 31 December graduates placed – New York (92%), Chicago (8%)
- First Year Guaranteed Compensation
High: 235K; Low: 110K; Average: 146K; **Median: 145K**
- Employers: AQR, Bank of America, Barclays, Citadel, Credit Suisse, Cubist, Goldman Sachs, IMC Trading, Millennium, Morgan Stanley, Point72, Quantitative Brokers, quantPORT, Societe Generale, Amazon

- **17 of 29 students received summer internships offers**
- Employers: Alphadyne, Arrowstreet Capital. Bank of America, Citigroup, Credit Suisse, Goldman Sachs, IMC Trading, Millennium, quantPORT, RBC

BARUCH MFE: The Secret of Our Success



- No admission quota
- 9% admission rate (44 of 506)
- 68% enrollment yield (30 of 44)
- 96% placement rate at graduation

- Cutting-edge curriculum
- World-class faculty
- Developing Outstanding Interview Skills Program
- Tools for Clear Speech
- Careers in Finance Workshops

- Lifetime career support
- One-on-one alumni-student mentoring
- Mock interviews with alumni
- 30% of all-time alumni Baruch MFE 15th Anniversary & Jim's Birthday Celebration

- Public program, “not-for-profit” philosophy
- Lowest cost in New York
- Emphasis on student collaboration rather than competition
- Strongest student and alumni community

BARUCH MFE: Curriculum & Faculty

Cutting Edge Curriculum – 24 new courses since 2010, including:

- Fundamentals of Trading
- Asset Allocation and Portfolio Management
- Volatility Filtering and Estimation
- Modeling and Market Making in Foreign Exchange
- The Volatility Surface
- Interest Rate and Credit Models
- Market Microstructure Models
- Emerging Markets and Inflation Modeling
- Blockchain Technologies in Finance
- Time Series Analysis
- Systematic Trading
- Data Science I: Big Data in Finance
- Data Science II: Machine Learning
- Natural Language Processing

Well-known mathematicians and practitioners on the faculty

- Jim Gatheral
- Andrew Lesniewski
- Dan Stefanica
- Tai-Ho Wang
- Ken Abbott
- Yury Blyakman
- Mark Higgins
- Dmitry Rakhlin
- Gordon Ritter

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Sorry, Harvard and Yale, the Trading Whiz Kids Are at Baruch College

The students who dominated trading competitions recently go to public college in New York

BY AKANE OTANI

The college students who dominated trading competitions around North America this school year aren't finance majors at Harvard, the University of Pennsylvania or the Massachusetts Institute of Technology.

They're students at Baruch College.

Students in the Baruch Traders Club crushed rivals at several competitions this year, claiming first, second and third place at MIT's ninth annual trading face-off in the fall—an unprecedented feat—and beating Columbia University and Carnegie Mellon to rank first at the Rotman International Trading Competition in February.

At a typical competition, undergraduate students are given a limited amount of time to maximize profits in trading simulations that might focus on stocks, commodities, volatility instruments or other areas of the markets.

Most students in the Baruch Traders Club join without having ever held an internship in the financial-services industry. Baruch, a public college in the City University of New York system, isn't usually thought of as a feeder school for Wall Street jobs: The University of Pennsylvania, Harvard and Columbia sent the most graduates into asset management, data provider eVestment found in a 2015 study.

"In theory, you think Baruch College students have some kind of inferiority complex regarding Harvard. We don't. Here, you don't have to convince the students that [the trading club] is something they want to do," said Dan Stefanica, a Baruch College professor who helped coach the Traders Club.

The only work experience Baruch senior Bell Chen had before he became a member of the club in August 2015 was tutoring peers at Baruch's Student Academic Consulting Center. He claimed first place in the options market-making division at the University of Chicago's algorithmic trading competition in April 2016 and took first place at MIT's trading competition in November.

Members of the Baruch Traders Club, which has about 50 students, attribute their success to practicing simulated trading ahead of competitions—combined with a steady stream of classes in subjects like multivariable calculus, options pricing, corporate finance and linear algebra.

At MIT, that preparation paid off when one of the winning Baruch teams watched profits in the foreign-exchange algorithmic trading round plunge from \$200,000 to \$100,000—a drop that might have spooked other teams into deploying new code and switching strategies. Instead, members of the team held their course, knowing from the simulations they ran before the competition that their portfolio usually rebounded quickly from such drops if they stuck to the same strategy.



Baruch College students Yifan Hu, Jaime Abbarioo, Bell Chen and Dmitriy Treyger face off against other teams at the UChicago Midwest Trading Competition in April. Photo: Jarrod Pickens, Baruch College

The club's faculty adviser is also enthusiastic in motivating the students, said Rajeev Parvathala, an MIT junior and co-president of the Traders@MIT Club, which lends the club "a big advantage."

Baruch senior and Traders Club member Dmitriy Treyger said he spent many late nights at the library crunching numbers and reworking his trading models, only to return to campus at around 6 a.m. He also kept up on the latest in financial markets by reading articles from publications including the New York Times, The Wall Street Journal and Bloomberg.

"The nice thing is that finding a job, working on these competitions and studying for math classes all really go hand in hand—so when you're working on one, you're developing your skills in the other two," said Mr. Treyger, who believes his performance in the MIT competition helped him secure an interview—and ultimately, a summer internship for after graduation—with Chicago-based Wolverine Trading LLC.

Some college trading clubs go beyond running simulated portfolios to manage real money, like Lafayette College's Investment Club, which says it is the country's oldest student-run investment club, and the University of Delaware's Blue Hen Investment Club.

What sets Baruch's club apart from its peers, Mr. Stefanica said, is the opportunity it has given students who might otherwise not have pursued a career in finance. The club was launched in April 2015, supported by alumni who volunteered to help prepare its members for competitions.

"Someone whose only experience was at a bubble-tea shop... apparently him and other people like him end up in a disproportionate amount in the city university system and in particular at Baruch," Mr. Stefanica said. "Now we are doing what we can to tease out this talent and it's not just for the whole goal of winning competitions, but it's truly a transformational career and life-changing experience for the students."

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ASIA EDITION

Unlikely Pool of Trading Whiz Kids

In competitions, Harvard, MIT teams take back seat to public Baruch College

BY AKANE OTANI

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