



## Master of Quantitative Finance

# Advance quantitative methods with cutting-edge finance strategies

The Rutgers Business School STEM-designated **Master** of Quantitative Finance (MQF) program is a unique and exciting degree program designed to develop highly-qualified and passionate students for careers in the interdisciplinary, technologically sophisticated, and specialized field of quantitative finance.

We understand the toolbox required of a young quant—math, statistics, coding, stochastic processes, numerical methods technical writing, data, AI and good communications skills.

Financial managers and related professionals are playing an increasingly important role in mergers, consolidations, global expansion, and financing, where their extensive specialized knowledge helps to reduce risks and maximize profit.

The demand for quants is coming from beyond the banking industry. Asset managers, exchanges, software providers, regulators and others market participants are looking to add to their technical capabilities. The jobs involve skills required to calculate risk in a portfolio, predict commodity prices, price mortgage-backed securities, create algorithmic trading strategies, develop and validate models for risk capital measurement and regulatory compliance.

business.rutgers.edu/quantitative-finance

## Faculty Profile: Yangru Wu



Professor Wu is Professor of Finance and Economics, and the Director of the MQF Program. Professor Wu's main research interests are international finance and empirical asset pricing. He has published

over 60 papers in major journals in finance, economics and statistics, including Journal of Finance, Journal of Financial Economics, Journal of Monetary Economics, International Economic Review, The Economic Journal, and Biometrika. He has been ranked among the most prolific authors in finance and among the top 500 economists worldwide. Professor Wu has done research on financial anomalies, optimal investment strategies, interest rate arbitrage, technical trading rules, financial bubbles, currency forecast, data snooping and reality check.





Classes will be held at 1 Washington Park on our Newark Campus, 30 minutes to NYC.

## Curriculum

The program consists of 45 credits (30 core and 15 elective) and can be taken on either a full-time basis to be completed in three semesters (not including summer sessions) or a part-time basis to be completed in three years (not including summer sessions). All students must also take the non-credit "Introduction to Finance" course offered during the orientation week, and all full-time students must take the non-credit "Fundamentals of Career Planning" course.



# Sampling of Courses

#### Core:

- Analysis of Fixed Income
- Econometrics
- Financial Institutions & Markets
- Financial Modeling I
- Financial Modeling II
- Contemporary Topics in Finance
- · Numerical Analysis
- Object Oriented Programming in Finance I
- Object Oriented Programming in Finance II
- Derivatives
- Stochastic Calculus for Finance

#### **Electives:**

- · Econometrics Time Series
- · Advanced Financial Management
- Applied Portfolio Management
- Credit Risk Modeling
- Data Mining
- Decoding of Corporate Financial Statements
- Financial Statement Analysis
- Financial Time Series
- Hedge Fund
- Introduction to Probability
- Investment Analysis & Management
- Optimization Models in Finance
- TPC Applied Portfolio Management
- Risk Management
- Stochastic Processes
- Internship/Research
- Indexing & ETFs
- Quantitative Equity Trading Strategies

## **Program Quick Facts**

Program: Full-time | Part-time

Format: In-person Credits: 45 credits

For current application deadlines and tuition information, please visit our website:

business.rutgers.edu/quantitative-finance

## **How to Apply**

### Apply online:

business.rutgers.edu/quantitative-finance/admissions

Please visit business.rutgers.edu to learn about upcoming information sessions and open houses.

## **Contact**

Phone: 973-353-1234

Email: admit@business.rutgers.edu

"I chose the masters in quantitative finance program because of its strong quantitative training and good reputation on Wall Street. One of the greatest strengths of the program is its faculty, who present fundamental financial concepts precisely and clearly."

> - Tony Zhang Vice President, HSBC

## **Career Outcomes**

Rutgers students have begun careers with leading corporations around the world, including Morgan Stanley, Bank of America, J.P Morgan, Citigroup, HSBC, UBS, Bloomberg, Barclays Capital, Federal Reserve Bank of New York, Standard & Poor's, Moody's, State Street, and CITIC Securities, to name a few.



Prepare for employment in this interdisciplinary, technologically sophisticated field.



