

# Rady | UC San Diego School of Management



Wednesday, November 29<sup>th</sup>, 2017

Graduate Programs in Finance and Business Analytics

# Why consider a master's degree?

- Develop advanced qualifications/skillsets in area of expertise
- Gain professional skills, personal development, and valuable connections with fellow students, academics, and industry experts
- Pursue academic interests in more depth
- Greater employment opportunities – some career sectors require or prefer master level applicants
- Promotion, increase in salary, or job transition
- Sense of accomplishment



# Graduate Schools vs. Professional Schools

- Graduate school programs: offers more advanced course of study in an academic discipline (such as math, engineering, writing, etc.)
  - Can be on it's own or as a step towards a PhD
  - I.e. completing a Master's or PhD in Mathematics in order to do research or teach
- Professional school programs: prepare students for careers in specific fields (such as medicine, law, business, etc.)
  - May be required before working in a particular occupation (such a social work or medicine)
  - Good option for those who want to use an academic skillset in a real-world setting, i.e. completing a Masters in Finance or MS in Business Analytics in order to use mathematic skillset in real world situations.



# Applying to graduate/professional schools

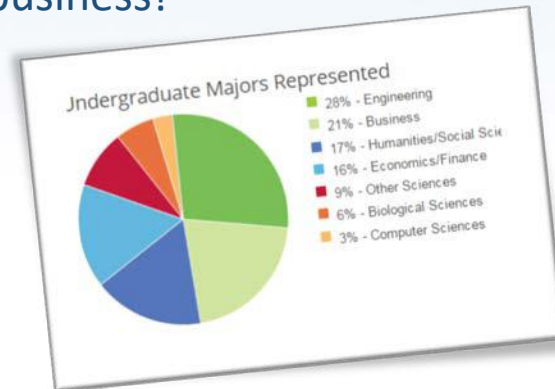
- Tests: GRE, GMAT/LSAT/MCAT
  - What are competitive scores for the school or program?
  - Will I want to retake the test? Can I submit multiple test scores?
  - How much should I study before? How much does the test cost? Where do I take it?
- Transcripts
  - Official or unofficial?
- Letters of recommendation
  - How many? From who?
  - Build and maintain connections now
- Internship or work experience (is it required or not?)
- Essays/Personal Statement
- Resume or CV



# Why consider graduate business school?

- Use skillset in real-world settings

...but I have never studied business!



# Why Rady?



#RADYMADE

- Founded in 2003, the Rady School is one of the youngest and fastest growing business schools
- Deeply rooted in the innovative and entrepreneurial spirit of California
- Founded by San Diego and Southern California business leaders
- Specialized Quantitative Master's Programs in **Finance** and **Business Analytics**

## 5 things you didn't know about the Rady School

1. Youngest school to ever get AACSB accreditation
2. Received \$100 million commitment from Rady Foundation
3. Ranked #1 for Intellectual Capital by BusinessWeek
4. More than 150 companies have been founded by graduates
5. Provides a small business school environment with the benefits of a large university



# Application Checklist

Online Application: [apply.grad.ucsd.edu](http://apply.grad.ucsd.edu)

## Requirements:

- Copy of all transcripts (unofficial, electronic copies)
- Statement of Purpose: Rady School of Management develops ethical and **entrepreneurial** leaders who make a positive impact in the world through **innovation, collaboration** and **knowledge**
- Letters of recommendations (2), current resume or CV
- GMAT or GRE (both valid for five years)
- English proficiency testing, if required (valid two years)

## Applications reviewed on a rolling basis

- Interview by invitation only
- Upcoming deadlines: Dec 1, Feb 1, April 1\*, June 1
- Applications for fall 2018 are now being accepted



# SPECIALIZED QUANTITATIVE MASTER'S PROGRAMS



**Rady** | UC San Diego  
School of Management



# Master of Science in Business Analytics

Data Driven · Empirical · Collaborative · Knowledge  
1 year analytics program

- Developed by Rady faculty in response to the increasing demand for qualified business analysts
- Students will:
  - Receive rigorous, hands-on training to develop models and analyze data
  - Use statistics and machine learning to solve business problems
  - Gain both quantitative skills to create better decision tools and the ability to manage analytics teams and projects
- Focus on predictive analytics and optimization for data driven decision-making
- Use of statistical and optimization tools (e.g. R, Shiny, Radiant)
- Strong foundation in probability and statistics, programming, statistical applications preferred



# MS in Business Analytics Program

Program has an August start

Full-time program: 50 units completed over 12 months

1 year program – required Orientation beginning Summer quarter, Core (16 units) & Electives (28 units) through Fall, Winter & Spring quarters, complete Capstone Project (4 units) in last two quarters



# M. Melvin background: academic and practitioner

- Managing Director at BlackRock
  - Manage money for our clients
    - pension funds, foundations, governments, central banks, & individuals (iShares & mutual funds)



BlackRock has offices in 24 countries and more than 60 cities



### North America

- Atlanta
- Bloomfield Hills
- Boston
- Charlotte
- Chicago
- Cincinnati
- Dallas
- Durham
- Houston
- Jacksonville
- La Jolla
- Los Angeles
- Miami
- Montreal
- New York
- Newport Beach
- Northern New Jersey
- Palm Beach
- Philadelphia
- Phoenix
- Pittsburgh
- Princeton
- San Francisco
- Seattle
- Stamford
- St. Louis
- St. Petersburg
- Toronto
- Washington DC
- Wilmington

### Latin America

- Mexico City
- Santiago
- São Paulo

### UK, Continental Europe & Middle East

- Amsterdam
- Brussels
- Dubai
- Frankfurt
- Geneva
- Luxembourg
- Madrid
- Milan
- Munich
- Paris
- Stockholm
- United Kingdom
- Edinburgh
- Isle of Man
- Jersey
- London
- Peterborough
- Vienna
- Warsaw
- Zurich

### Asia

- Beijing
- Hong Kong
- Mumbai
- Seoul
- Shanghai
- Singapore
- Taipei
- Tokyo

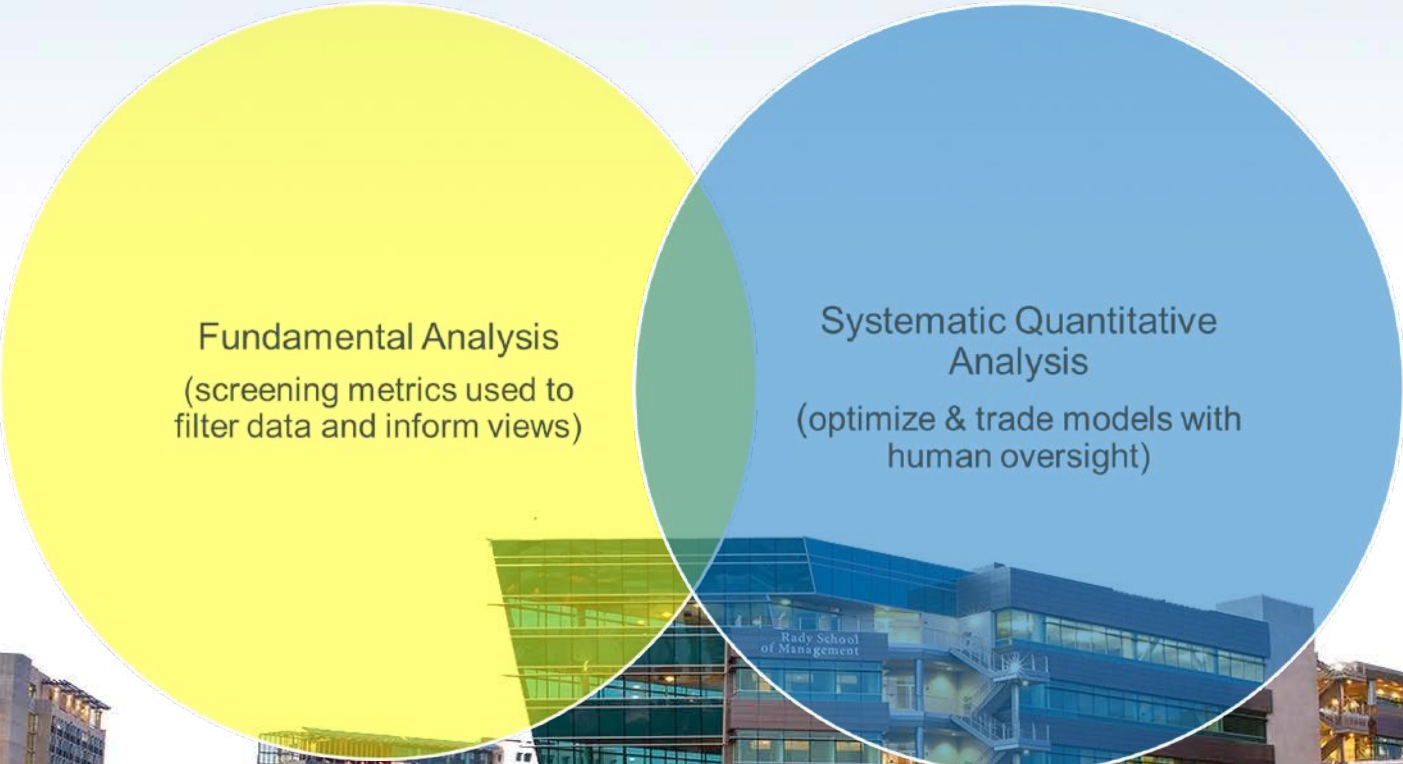
### Australia

- Brisbane
- Melbourne
- Perth
- Sydney



# The Finance Industry

- “Buy side” vs. “Sell side”
- “fundamental” vs. “quant” investors



Fundamental Analysis  
(screening metrics used to filter data and inform views)

Systematic Quantitative Analysis  
(optimize & trade models with human oversight)

# Roles in investment firms

- Researcher
  - Develop ideas into trading signals
  - Monitor market for out-of-model risks and opportunities
- Portfolio manager
  - Oversee daily optimization or daily portfolio decisions
  - Interface with trading desk
  - Monitor market for out-of-model risks and opportunities
- Strategist
  - Represent portfolios and approach to clients
- Risk manager
  - Monitor all portfolios and stress test for performance in different scenarios



# Other roles in finance include...

- Actuary
  - Evaluate the likelihood of future events & manage risk
- Private equity investor
  - Rather than financial assets, invest in real assets like real estate or business firms
- Financial analyst
  - Provide guidance to firms in their investment decisions
- Governments and multinational organizations
  - Analysts, researchers, managers



# Master of Finance

Data Driven · Empirical · Collaborative · Knowledge  
1 year quantitative finance program

- Developed by Rady Faculty in response to the financial crisis of 2007-2008
- The financial industry has a current demand for people who can:
  - Work with and analyze large sets of data
  - Design and implement financial models
  - Produce sound economic forecasts
- Students will learn leading-edge methods for analyzing "big data" for financial decision making and risk management
- The program's emphasis on quantitative models and methods ensures graduates are equipped to develop innovative solutions to the complex problems facing the financial industry





# Master of Finance

## Schedule – 1 year option

Academic Year

### Sample Electives

- Stochastic Calculus and Continuous Time Finance
- Business Forecasting
- Collecting and Analyzing Financial Data
- Valuation in Corporate Finance
- Intermediate Financial Accounting
- Macroeconomics
- Computational Finance Methods
- Behavioral Finance
- New Venture Finance
- Derivatives and Structured Finance
- Money & Banking

PreTerm

### Fall Quarter

- Financial Accounting
- Investment Analysis
- Financial Econometrics & Empirical Methods
- Elective 1

### Winter Quarter

- Advanced Financial Risk Mgmt
- Elective 2
- Elective 3
- Elective 4
- Professional Seminar

### Spring Quarter

- Elective 5
- Elective 6
- Elective 7
- Elective 8
- Professional Seminar

### Summer Quarter

Capstone Project  
(+Internship?)

2018



# Master of Finance Program

## Capstone Applied Finance Project (4 credits)

- Direct, hands-on experience applying concepts, frameworks and tools learned in the classroom to a financial data or risk management project or initiative. Most projects done in collaboration with industry partners
- Completed during the final quarter of the program under faculty supervision – option to do internship in summer and return in Fall to finish capstone

### Sample list of Firms

- BlackRock
- Citibank
- Deutsche Bank
- Dodge & Cox
- First Quadrant
- Integral
- Moody's
- Mulligan Funding
- RealStir
- Research Affiliates
- Schroders
- State Street
- TPG

### Sample list of Projects

- Blending Active & Passive Funds
- International Equity Hedging Strategies
- Evidence of Behavioral Biases in Financial Advisors
- Early warning indicators of “flash crash”
- Regime switching and asset allocation
- Institutional Change in the FX Market & Trading Strategies
- Announcement effects of Chinese debt-equity swaps
- Macro scenario analysis & portfolio stress tests
- Internet finance in China and the Fintech industry



# Building Connections

- PhD Programs

- Rady, Duke, Univ. of Texas, Stanford, Univ. of Chicago

- Employers in San Diego area

- The Retirement Group
- Factor Technologies
- Altegris
- Fortis Advisors
- ZenSun USA
- Acea Biosciences
- Gurtin Muni Bond Mgt
- ClariVest

- Employers Outside San Diego

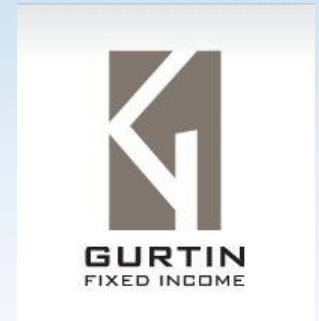
- Bank of China (Chicago & New York)
- Vivo Capital (Bay Area)
- Milken Institute (Israel)
- CTBC Bank (LA)
- Goldman Sachs
- UBS
- Drobny Capital (Santa Monica)
- JP Morgan Chase
- Valiantica, Inc. (Bay Area)
- Integral Development Corp (Bay Area)
- Dimensional Fund Advisors
- CITIC Securities
- Research Affiliates



# RADY FINANCE STUDENTS ARE HEADED TO:



J.P.Morgan



# RADY MSBA STUDENTS ARE GETTING HIRED AT:



# Questions

- [RadyGradAdmissions@ucsd.edu](mailto:RadyGradAdmissions@ucsd.edu)
- Madriqueka Koppe [mkoppe@ucsd.edu](mailto:mkoppe@ucsd.edu)

Join us for class visits, one-on-one advising sessions, and special events.

