



## MBA Concentration in Analytics and Information Management

### Develop skills you need for a career in management information systems

The **Analytics and Information Management MBA** at Rutgers Business School provides the skills to prepare students for careers in the major technical areas of Management Information Systems. Our courses—ranging from database systems to internet security to software engineering and high-level statistical analysis—give students an in-depth understanding of database technology and design and its application in managing data resources. You'll get hands-on instruction with the latest software while learning to take an analytical approach to decision-making.

This concentration is administered by the Management Science and Information Systems Department, but technology related courses in other departments can be used for the concentration.

The concentration introduces statistics as applied to managerial problems, emphasizing conceptual understanding as well as conducting statistical analyses. Students learn the limitations and potential of statistics, gain hands-on experience using Excel, as well as comprehensive packages, such as R or SAS. Students are encouraged to take an analytic view of decision making by formalizing trade-offs, specifying constraints, providing for uncertainty, and performing sensitivity analyses.

### Curriculum

This concentration is comprised of 5 courses (15 credits). Students must take the required course, then from one of the two elective areas, choose three courses and select their remaining course from the other elective area. Foundation Course Requirement: Data Analysis and Decision Making (22:960:575; 3 credits) is part of the MBA Curriculum and is a required prerequisite for all students who choose this concentration. Our analytics curriculum provides students with an understanding of database technology and its application in managing data resources. Students analyze the conceptual, logical, and physical design of databases.

### Career Advantages

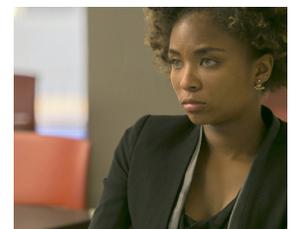
Companies are investing heavily in analytics:

- Analytics is the #1 top technology priority for both CIOs and CFOs, according to Gartner
- Nucleus Research recently released a report showing that organizations get \$10.66 of value for every \$1 invested in analytics
- International Data Corporation (IDC) increased growth forecasts for business analytics at companies. "After three decades, the business analytics market is finally reaching the mainstream," said IDC analyst Dan Vesset. "There are few growth inhibitors in the foreseeable future."
- At a recent BI Gartner Summit in London, Gartner announced a 10%+ growth in analytics the last three years, outpacing general IT growth



*This program is offered in Newark and New Brunswick*

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## Sampling of Courses

### Required Course

- Business Data Management

### Elective Area 1: Information Technology

- Computers and Information Systems
- Information Security
- Machine Learning
- Business Analytics Programming
- Into to Software Development

### Elective Area 2: Analytics

- Analytics for Business Intelligence
- Business Forecasting
- Data Analysis & Visualization
- Data Mining for Finance
- Interpretation of Data



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### Faculty Spotlights:



**Michael Katehakis**, a professor in the Department of Management Science and Information Systems, is known for major methodological contributions in several areas of operations research and management sciences.

Professor Katehakis recently received a \$150,000, two-year award from the National Science Foundation, Operations Research program, through the Early-Concept Grants for Exploratory Research – (EAGER) mechanism, which supports “high-risk, exploratory and potentially transformative research.”

**Andrzej Ruszczyński**, a distinguished professor in the Department of Management Science and Information Systems, is considered a pioneer in the area of stochastic optimization.



The National Science Foundation awarded Professor Ruszczyński a \$240,000 grant for his research on a complex mathematical model for projecting risk in a variety of decision-making processes.

### Contact

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The Analytics and Information Management (AIM) MBA concentration at Rutgers Business School is designed to provide you with the necessary skills needed for a career in any of the major technical areas of management information systems.

