Master of Business Administration

MBA Concentration Summary

You have the option of picking a concentration but it is not a requirement to have a concentration. A concentration consists of 4 courses (12 credits). Concentration courses are offered in fall and spring terms annually. Suggested MBA Concentration options include:

- Business Analytics
- Finance
- Management Information Systems
- Marketing — New Product Development
- Supply Chain Management
- Technological Entrepreneurship

Business Analytics

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The business analytics concentration, like a major, focuses on using information to develop business insights and influence decision-making in organizations. This provides a strong foundation in analytical modeling and statistical methods as well as skills in data management. It provides hands-on experience through industry projects in applying these skills in data and model driven decision-making in domains such as marketing, supply chain management, healthcare, and finance.

All students in the business analytics concentration should take:
MGMT 6560 Introduction to Machine Learning Applications (F, S)
Choose three (3) from an evolving list of related electives, as approved by the adviser. Sample courses include:

- ARTS 4870 Creative Data Design (not offered in Fall 2019)
- MGMT 6570 Advanced Data Resource Management (F, S)
- MGMT 6460 Modeling & Optimization (F, S)
- ISYE 6961 – Data Analytics Research Lab (F)
- CSCI 6100 – Machine & Computational Learning (F)
- CSCI 6390 – Data Mining (F)
- MGMT 6962 – Marketing Analytics (S)
- MGMT 6720 – Internet Marketing (S)
- MGMT 6160 – Applied Analytics and Predictive Modeling (S)
- ITWS 6600 – Data Analytics (S)
- COMM 6880 – Interactive Data Visualization (U-Summer)
The finance elective set prepares students for a career path in corporate finance and for careers in financial services. The special finance challenges in high-tech industries are explored as well as the impact of technology on financial markets and the financial manager in modern corporations. Students following the finance concentration may elect two paths: investments or corporate finance. The investments option focuses on financial markets and securities, including stocks, bonds, and derivatives. Students taking this option learn about decision-making such as portfolio choices, making markets in securities, and analyzing non-standard forms of investments. The corporate finance option should be pursued by students who are interested in working and making decisions within firms. This option deals with financing and investment (real and financial) decisions within business entities such as corporations, sole proprietorship, partnerships or a limited liability corporation.

**All students in the finance concentration should take:**

MGMT 6430 – Financial Statement Analysis (S)

Students can elect one of two concentration options: Investments or Corporate Finance. All students must take MGMT 6430 and then select three courses from one of the options below.

**Investments Option**

MGMT 6240 – Financial Trading and Investing (F)

MGMT 6370 – Options, Futures and Derivatives Markets (F)

MGMT 6410 – Quantitative Asset Management (S)

MGMT 6961 – Student Managed Investment Fund (S)

**Corporate Finance Option**

MGMT 6380 – Advanced Corporate Finance (F)

MGMT 6370 – Options, Futures and Derivatives Markets (F)

MGMT 6410 – Quantitative Asset Management (S)

MGMT 6250 – Fixed Income Securities (S)

ECON 6340 – Behavioral Financial Economics (F)
Management Information System

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The MIS concentration, like a major, focuses on the use of information technology for value creation in new and established firms. This concentration equips students with the perspectives and skills to understand the role of IT in organizations, to identify opportunities for IT-enabled business innovations, and to design, develop, and deliver the technology infrastructures that enable firms to effectively use IT for value creation.

The MIS concentration courses adopt an interdisciplinary approach that integrates technical concepts with business concepts to enable students to develop the knowledge, perspectives and skills needed for a career in information systems. Students develop the capability to understand business requirements and translate them into technology needs and the skills to design and implement application systems, databases and web based systems. They also develop critical proficiency in areas such as project management and team-based development.

MGMT 4150 – IT Project Management (4 credits) (S)
MGMT 6090 – Enterprise IT Integration (F) Not offered in Fall 2020
MGMT 6570 – Advanced Data Resource Management (F,S)
MGMT 6080 – Networks, Innovation and Value Creation (F)
MGMT 6720 – Internet Marketing (S)

Marketing – New Product Development

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This elective set is available to students interested in a career path in new product development or in marketing and product management, and is geared toward the special challenges associated with developing and marketing high-tech products. Students focus their attention on understanding the links between a product’s design, and the manufacturing and selling/marketing efforts necessary for achieving successful product/market development, commercialization, and management throughout the life cycle.

MGMT 6800 – Consumer Behavior and Product Design (F)
MGMT 6530 – Making Business Happen (F)
MGMT 6540 – Marketing Communications and Branding Strategy (S)
MGMT 6550 – Marketing Research (F)
MGMT 6720 – Internet Marketing (S)
MGMT 6690 – Negotiation (S)
Supply Chain Management

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The supply chain management concentration, like a major, focuses on the design and management of supply chains in manufacturing and service industries. This concentration equips students with the perspectives and skills to design supply chains, develop strategies to optimize supply chain operations, and identify opportunities for deploying IT to create effective demand fulfillment capabilities in firms.

ISYE 4220 – Optimization Algorithms and Applications (S)
ISYE 6600 – Design of Manufacturing System Supply Chains (F/S)
MGMT 6460 – Modeling and Optimization (F)
MGMT 6090 – Enterprise IT Integration (F) Not Offered in Fall 2020
MGMT 6080 – Networks, Innovation, and Value Creation (F)
MGMT 6490 – Competitive Advantage and Operations Strategy (F)

Technological Entrepreneurship

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The technological entrepreneurship concentration has been developed for students who have an interest in new venture creation by starting their own company. Students following the technological entrepreneurship concentration may elect to take courses focused on entrepreneurship and related topics. These courses cover subjects associated with founding a new business entity, often referred to as a start-up. Students may elect to draw from a number of electives that best suits their academic and career objectives.

Students choosing this option must take:
MGMT 6620 – Introduction to Principles of Technological Entrepreneurship (S)

And three from the following list:

MGMT 6640 – Invention, Innovation and Entrepreneurship (F)
MGMT 6690 – Negotiation (S)
MGMT 6260 - Entrepreneurial Finance (S)
MGMT 6530 – Making Business Happen (S)
MGMT 6630 - Starting Up A New Venture (S)
MGMT 6670 - Practicum in Technological Entrepreneurship (S) Not offered in Spring 2021