

## *Master of Science in Management: Fall 2017 and Spring 2018*

### **2 - Required Professional Development & Career Workshops**

MGMT 7770 Prof. Development Workshop 1/Career Workshops (Fall) Wed. 9am, 12pm & 3pm

MGMT 7780 Prof. Development Workshop 2/Career Workshops (Spring) Wed. 9am, 12pm & 3pm

### **6 - Required Business Core:**

MGMT 6040 Talent Management (Fall) Monday. 2-4:50pm

MGMT 6100 Statistics for Managerial Decision Making (Fall) Tues. 6-8:50pm or Fri. 9-11:50am

MGMT 6190 Introduction to Accounting and Financial Management (Fall) Thurs. 6-8:50pm

MGMT 6490 Competitive Advantage & Operations Strategy (Fall) Fri. 12-2:50pm

MGMT 6580 Marketing High-Tech Products (Spring) Wed. 6-8:50pm

MGMT 6140 Information Systems for Management (Spring) Thurs. 6-8:50pm or Fri. 2-4:50pm

### **4 - Electives:**

A concentration consists of 4 courses\* (12 credits). Concentration courses are offered in fall and spring terms annually. See MS Management Concentration Summary for specific courses.

Suggested MS Management Concentration Options include:

- Business Analytics
- Finance
- Management Information Systems
- Marketing - New Product Development
- Supply Chain Management
- Technological Entrepreneurship
- Or explore technical concentrations with coursework from other schools at Rensselaer

\*Students take 1 elective in Fall -2017 and 3 in Spring -2018

## **MBA & MS Management Concentration Summary**

### **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.

MGMT 6560 Technology Fundamentals for Analytics (F) REQUIRED for concentration  
MGMT 6570 Advanced Data Resource Management (F)

ISYE 6961 – Projects in Big Data Analytics (F)  
CSCI 6100 – Machine & Computational Learning (F)  
CSCI 6390 – Database Mining (F)  
CSCI 6962 - Natural Language Processing (F)  
MGMT 6962 – Marketing Analytics (S)  
MGMT 6973 – Supply Chain 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)

ARTS 4870 – Creative Data Design (S)

### **Finance**

**Professor Bill Francis 518.276.3908 [francb@rpi.edu](mailto:francb@rpi.edu) PI 1108**

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.

**Note: MS Management students should: (1) waive MGMT 6190 - Introduction to Accounting and Financial Management and replace it with MGMT 7740 - Accounting for Reporting and Control and (2) incorporate MGMT 6020 - Financial Management I as a required elective.**

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

MGMT 6430 – Financial Statement Analysis (S)

### **Investments Option**

Then students wishing to pursue the investments path can elect 3 courses from the following list:

- MGMT 6240 – Financial Trading and Investing (F, S)
- MGMT 6370 – Options, Futures and Derivatives Markets (F,S)
- MGMT 6410 – Investments I (F,S)
- MGMT 7430 – Investments II (S)

### **Corporate Finance Option**

Students wishing to pursue the corporate finance option can elect 3 courses from the following list:

- MGMT 6030 – Financial Management II (S)
- MGMT 6360 – International Finance (S)
- MGMT 6380 – Advanced Corporate Finance (F)
- MGMT 6370 – Options, Futures and Derivatives Markets (F,S)

### **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 6560 Technology Fundamentals for Analytics (F)
- MGMT 6965 – Enterprise IT Integration (F)
- MGMT 6966 – IT Project Management (F)
- MGMT 6570 - Advanced Data Resource Management (F)
- MGMT 6080 – Networks, Innovation and Value Creation (F)
- MGMT 6170 – Advanced Systems Analysis and Design (S)
- 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 (S) REQUIRED for concentration  
MGMT 6580 – Marketing High-Tech Products (S)  
MGMT 6590 – Commercializing Advanced Technologies (S)  
MGMT 6720 – Internet Marketing (S)  
MGMT 6600 – Research and Development Management (F)  
MGMT 6690 – Negotiations (S)  
MGMT 6230 – Global Sourcing and Procurement (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 6600 – Design of Manufacturing System Supply Chains (S)  
MGMT 6460 – Advanced Quantitative Methods for Business (F)  
MGMT 6965 – Enterprise IT Integration (F)  
MGMT 6080 – Networks, Innovation, and Value Creation (F)  
MGMT 6490 – Competitive Advantage and Operations Strategy (F)  
MGMT 6230 – Global Sourcing and Procurement (S)

## **Technological Entrepreneurship**

**Professor Lois Peters      518.276.2977      [peterl@rpi.edu](mailto:peterl@rpi.edu)      PI 2110**

The Technological Entrepreneurship elective set has been developed for students who have an interest in new venture creation in start-ups and established firms. Students following the technological entrepreneurship concentration may elect two paths: entrepreneurship for start-ups or corporate entrepreneurship. The former focuses on founding a brand new business entity, whereas the latter focuses on creating new growth platforms based on technological innovation within established companies. Both require entrepreneurial behavior.

**All students in the Technological Entrepreneurship concentration should take:**

MGMT 6620 – Introduction to Technological Entrepreneurship (S)  
MGMT 6640 – Invention, Innovation, and Entrepreneurship (F)

### **Start-Up Option**

Then, students wishing to pursue the start-up path can elect 2 courses from the following list:

- MGMT 6260 - Entrepreneurial Finance (S)
- MGMT 6590 - Commercializing Advanced Technologies (S)
- MGMT 6630 - Starting Up A New Venture (F, S)
- MGMT 69xx - Social Entrepreneurship -Upon availability of instructor
- MGMT 6670 - Practicum in Technological Entrepreneurship (S)

### **Corporate Entrepreneurship Option**

Students wishing to pursue the corporate entrepreneurship option can elect 2 courses from the following list:

- MGMT 6530 - Making Business Happen (F)
- MGMT 6580 - Marketing High-Tech Products (S)
- MGMT 6590 - Commercializing Advanced Technologies (S)
- MGMT 6600 - Research and Development Management (F)
- MGMT 6700 - Corporate Entrepreneurship (S)
- MGMT 69xx - Social Entrepreneurship -Upon availability of instructor
- MGMT 7070 - Managing on the Edge -(S)
- MGMT 6050 - Organizational Design and Change - Upon availability of instructor