



### INTRODUCTION

The Tepper School of Business prepares students to be the next generation of business leaders in an ever-fluid and advancing business world. Capstone projects offer companies direct access to these highly trained, intensely motivated students to apply their advanced skills and expertise to a wide range of challenges and opportunities.

Working with faculty supervision, teams focus on sponsor-defined projects that result in the exploration of solutions and potentially a proof-of-concept.

Capstones are the culmination of the graduate or undergraduate program experience, and we invite you to join us in educating the business leaders of tomorrow by providing a rich experiential learning opportunity for Tepper students through project sponsorship.

### **SPONSORS CAN EXPECT**

- A team of two to five students focused on a sponsor-defined project over the course of one semester
- Kick-off, mid-term, and final presentations
- Capstones may deliver a publication-quality report or a conference style presentation

### **BENEFITS**

- Exposure to innovative, insightful ideas.
- Access to highly trained students for problem-solving and recruitment purposes.
- Developing relationships with world-renowned faculty.
- Building brand awareness within the campus community.
- Input on the problem statement from Carnegie Mellon professor(s).
- Licensing options to student work product(s) developed during the course.

# **REQUIREMENTS**

- Problem to solve and/or data to analyze.
- Signed Educational Project Agreement.
- Company mentor who is available for a specified number of contacts and meetings with the student team.

### **SAMPLE PROJECT THEMES**

- Design a decision support system to aid managers in using analytical models.
- Optimize a delivery distribution network.
- Implement Al systems responsiveness to market needs.
- Complete customer discovery.
- Perform market analysis.
- Conduct technical research and feasibility evaluation.
- Evaluate privacy enhancing technologies for organizations.

# **PROGRAMS AT A GLANCE**

Program	Timing
MBA Energy & Sustainability Track	Fall Semester
MS Product Management	Fall Semester
MBA Technology Strategy & Product Management Track	Fall or Spring Semester
MBA Business Analytics Track	Spring Semester
MS Business Analytics	Spring Semester
Inter-School Programs (Undergraduate or Graduate Level)	Fall or Spring Semester

We invite our partners to make a philanthropic gift in support of the Tepper School; gifts of \$5000 or more qualify your organization for recognition through the Tepper Corporate Associates Program.





















# **MBA ENERGY & SUSTAINABILITY TRACK**

Fall Semester

Program Lead: Professor Nick Muller, Associate Professor Chris Telmer

### **PROGRAM DESCRIPTION**

Sustainability has become a key business performance metric. A firm's energy-related activities are central to the sustainability of its business practices. The Energy and Sustainability MBA Track brings together the Tepper School's path-breaking approach to business education with Carnegie Mellon's core strength in engineering to provide graduates with the ability to become leaders in a business environment in which a firm's energy and sustainability practices are key sources of competitive advantage.

### **EXAMPLES OF PAST PROJECTS**

- Identified business opportunities for utility-scale storage
- Competitive analysis for mid-merit utility-scale power generation
- Built new market development for commercial and industrial applications of fuel cells
- Developed Monte Carlo Simulation
  Technology for Wind Farm Revenues
- Developed green concrete business model for direct-air carbon-capture technology

### **MS PRODUCT MANAGEMENT**

Fall Semester

Program Lead: Brad Eiben

### PROGRAM DESCRIPTION

The MSPM program is one-of-a-kind. Offered through Tepper School of Business and CMU's #1 ranked School of Computer Science, this program combines the best of both schools, giving students an efficient, focused, and effective path to product management success.

### **EXAMPLES OF PAST PROJECTS**

- Customer discovery
- Market analysis
- Competitor analysis
- User experience paradigm recommendation
- · Building pricing capabilities
- · Service mesh strategy
- · Technical research and feasibility evaluation
- · Digital marketing growth evaluation

# MBA TECHNOLOGY STRATEGY & PRODUCT MANAGEMENT TRACK

Fall or Spring Semester

Program Lead: Adjunct Professor Mary Butler-Everson

# PROGRAM DESCRIPTION

The TSPM MBA track emphasizes strategic and management issues related to the development, application, and management of cutting-edge technologies. The track provides students a foundation in technology issues related broadly to hardware and software industries, as well as devleiers knowledge in financial technology, high-tech healthcare, mobile apps, IoT and robotics.

# **EXAMPLES OF PAST PROJECTS**

- Developed a marketing strategy for a new technology product and service
- Developed a new technology product offering (from ideation to commercialization)
- Identified a traditional industry ripe for disruption, specified a technological solution and developed a commercialization plan
- Created a commercialization plan for a newly developed technology product
- Delivered a new pricing or channel strategy for a technology product to increase reach and adoption

# **MBA BUSINESS ANALYTICS TRACK**

**Spring Semester** 

Program Lead: Professor Andrew Li

### PROGRAM DESCRIPTION

The Business Analytics track is for MBA students interested in transforming large amounts of data into better decisions. At the intersection of business and technology, Business Analytics is at the hear of the Tepper School. It practically defines our approach to operations research and information systems, and also finds application in marketing, operation management, and other fields.

### **EXAMPLES OF PAST PROJECTS**

- Constructed a pricing strategy using marketing transaction data
- Created a customer loyalty program that monitored customer response to marketing efforts
- Optimized a delivery distribution network
- Planned a new distribution channel or production system
- Customized promotional strategies to micro-market level
- Designed a decision support system to aid managers in using analytical models

# **MS BUSINESS ANALYTICS**

**Spring Semester** 

Program Lead: Kevin Dietrick

#### **PROGRAM DESCRIPTION**

The MSBA program offers two distinct tracks of study, a Full-Time program for recent college graduates, and a Part-Time program for experienced professionals. Each program is designed for individuals who want to deepen their analytical skills and move into sought-after business analyst positions. The programs give students analytical skills, business knowledge, and creative problem-solving expertise to transform data into better decision-making.

### **EXAMPLES OF PAST PROJECTS**

- Customer lifetime value modeling
- · Increased customer basket size
- Analyzed clickstream data
- Explored the use of GenAl for quarterly reporting in the investment management sector
- Investigated the use of AI and ML to learn and identify buying patterns, predict sales performance, and alert leadership of behaviors outside of a predicted value within the retail space

