Master of Science in Business Analytics and Information Management (MS BAIM)

Become an industry leader using data to impact prominent companies from a STEM certified program. The MS BAIM program equips students to extract meaningful insights from data and to deploy state-of-the-art information technologies and analytical techniques. The program's rigorous curriculum and real-world application through experiential learning will prepare students to meet the growing data science demand.

1. Apply classroom knowledge to real-world problems through experiential learning.
2. Increase competency in current best practices of data handling and analysis.
3. Meet with influential data-science and consulting companies.
4. Gain opportunities to earn industry certifications and compete in business analytics events.

Students also enjoy access to a wide range of business foundation courses through the Krannert School of Management.

Program Highlights
- Award winning Management Information Systems and Quantitative Methods faculty.
- Flexible curriculum with varied electives to build industry savvy toward individual career objectives.
- Develop software tool proficiencies with Python, SAS, SQL, R, Hadoop, Minitab, Gurobi, and various big data technologies.
- Ability to specialize in supply chain analytics, investment analytics, or corporate finance analytics.
- Courses maximize peer-to-peer learning through case studies and class activities.
- Apply unique techniques of data collection, manipulation, optimization, analysis, and visualization to solve real-world business problems.
- MS BAIM program is STEM designated. Successful graduates of the program may be eligible for STEM OPT extension.

Program Components: Taught by respective domain experts
Curriculum

36 total required credits

Core: 17 Credits
Business Foundation Electives: 6 Credits
Restricted Electives: 8 Credits
Free Electives: 5 Credits

Core Courses

• IT Innovation and Competitive Advantage
• Business Analytics
• Data Mining with SAS Enterprise Miner (Machine Learning)
• Management of Organizational Data
• Communication and Persuasion
• Advanced Business Analytics
• Spreadsheet Modeling and Simulation
• IT Project Management

Restricted Electives

• Web Data Analytics
• Analyzing Unstructured Data
• Predictive Analytics
• Optimization and Data Science
• Python Programming
• Big Data
• Computing for Analytics
• Optimization Modeling with Spreadsheets
• Six Sigma & Quality Management
• Using R for Analytics
• Systems Development
• Statistical and Machine Learning
• Digital Business and Information Strategy
• Design Social Networks & Engagements
• Linear Algebra for Data Science
• Industry Practicum
• Predictive Analytics ELI Project

The Krenicki Center for Business Analytics & Machine Learning

To help organizations and individuals excel in the data-driven business world, Purdue University’s Krannert School of Management is pioneering a bold, comprehensive initiative - the Krenicki Center for Business Analytics & Machine Learning. The cutting-edge research and experiential learning projects that the Krenicki Center will foster aims to accelerate the advances of Krannert’s strong focus on data-centric work. This center will encompass data analytics-oriented initiatives spanning all areas of businesses, economics, and other data-intensive efforts at Purdue. The Krenicki Center will collect and house data from various sources for exploration, modeling, and prediction, making Purdue a leader in STEM-based business education and research.

RANKINGS

#1 Master’s in Data Science
Data Science Degree Programs

#1 Data Science Master’s Program
CIO Magazine

#1 Information Systems Management
Best-Masters.com

#7 MS Business Analytics in the U.S.
QS World University Rankings

#8 MS in Business Analytics in the U.S.
MasterinDataScience.org

#13 MS Business Analytics in the World
QS World University Rankings

“I had heard so much about Krannert’s strong technical and analytical focus before coming here. The strong industry connections and experiential learning opportunities have given me the hands on experience I need. Krannert has really prepared me well for the future, enhancing my technical abilities while the team dynamic has made me more open-minded when working with future colleagues.”

Xiangyi Che, '18 MS BAIM