MANAGEMENT INFORMATION SYSTEMS, B.S. (BEHREND)

Begin Campus: Any Penn State Campus
End Campus: Erie

Program Description
The MIS Major prepares students for typical IT-related jobs such as programmer/analyst, systems analyst, data analyst, database administrator, team leader, project manager, consultant, and MIS manager. Since the focus of such jobs is on the application of information technology to business problems and opportunities, the MIS curriculum integrates three main areas of study.

In the first area, students take core business courses in order to understand organizational processes and user requirements. In the second area, students take computer science courses in order to understand information technologies and to develop technical competencies. In the third area, students take core MIS courses in the areas of database management systems, systems analysis, and systems design and development where the focus is on learning tools, processes, and techniques required for successful application of information technology to business problems. These core courses are supplemented with a variety of electives and a required, and very useful, internship experience.

Business Analyst Option
The Business Analyst option focuses on educating students with principles, methods and tools related to business processes, enterprise systems, business reporting for decision-making and web technologies applications. The option provides a sharper focus for students who wish to pursue their careers emphasizing ERP, business process management, business intelligence, and web technologies.

Data Analyst Option
The Data Analyst option focuses on educating students with principles, methods and tools related to business analytics, business intelligence, data warehousing, and big data. The option provides the fundamental knowledge and skills in the area of analytics that draws on multiple areas including decision support systems, data mining, database technology, data visualization, and advances in large-scale computing. Students will gain skills needed to support data-driven decision-making for tackling business problems that often cut across conventional disciplinary boundaries and involve a blend business and information technology. The courses in this option are designed to convey key principles through projects and exercises that involve hands-on experiential learning using realistic datasets and applications. The option will provide a sharper focus for students who wish to pursue their careers emphasizing data analytics with applications in public and private sectors.

Systems Analyst Option
The Systems Analyst option focuses on educating students with principles, methods and tools related to systems design, systems development, programming tools, and IT systems architecture. The option provides a sharper focus for students who wish to pursue their careers emphasizing the design and development of new information systems.

What is Management Information Systems?
Management information systems lie at the intersection of business intelligence and computer programming. MIS managers apply information technology in ways that improve the efficiency and effectiveness of organizational decision-making and enterprise-wide management. This ability to save an organization time, money, and frustration by harnessing the usefulness of big data positions MIS managers to become valued members of a leadership team.

You Might Like This Program If...
- Your career interests intersect at “business” and “technology”
- You are equally curious about accounting and coding and economics and database management.
- You are interested in pursuing concurrent education in enterprise resource planning (ERP) with SAP or Oracle.