

BUSINESS ANALYTICS AND INFORMATION SYSTEMS, B.S.

Seven Penn State campuses are scheduled for closure after Spring 2027: DuBois, Fayette, New Kensington, Mont Alto, Shenango, Wilkes-Barre, and York. New students are not being admitted at these campuses.

Begin Campus: Abington, Altoona, Berks, Beaver, Brandywine, DuBois, Erie, Fayette, Greater Allegheny, Harrisburg, Hazleton, Lehigh Valley, Mont Alto, New Kensington, Shenango, Schuylkill, University Park, Wilkes-Barre, Scranton, York

End Campus: University Park

Program Description

The Business Analytics and Information Systems program provides coursework that addresses the topic of business analytics from the descriptive, predictive, and prescriptive angles. It includes courses on business analytics, database systems management, and machine learning and Artificial Intelligence. Students learn techniques for exploring, analyzing, integrating and reporting business data to facilitate fact-based decisions and enterprise-wide management. They also learn techniques for visualization and social network analysis. The framework encompasses the concepts, principles, and methods for (1) collecting, transforming, and managing data, (2) conducting business analytics and visualization, (3) communicating and sharing results, and (4) aligning business analytics with business strategy. Other topics include systems analysis and design, business process management and enterprise integration.

What is Business Analytics and Information Systems?

Data is everywhere: location-based from smart phones, social media, text, corporate data, and more. Companies need to analyze this data to get meaningful information to the people who need it. Hence, Business Analytics and Information Systems lives in the space that intersects technology and business.

Some of the skills learned in the major include how to mine and analyze data, build interactive digital dashboards, create visual analytics, and how to use a variety of business software tools to support companies and facilitate data driven decision making within an organization.

Our Business Analytics and Information Systems graduates use these business software tools to design informative and graphical applications, allowing executives to make strategic decisions analytically. Smeal Business Analytics and Information Systems graduates are well prepared for careers in industry, consulting, and government sectors as business analytics specialists and systems analysis professionals.