

Business Analytics Minor

(open to all non-business and business majors)

- Do you want to strengthen skills in applying current analytics technology to explore, analyze, and visualize data?
- Do you want to develop abilities of using data analytics tools to transform data into insights and assist managers with fact-based decision making?
- Do you want to be an expert who can provide data-driven solutions to complex business problems?

The **Business Analytics Minor** will help you prepare to be an analytical professional with skills, knowledge, and ability to turn massive, complex, and diverse data into actionable business decisions.

Learn how to

- Use analytical techniques (e.g., descriptive analytics, predictive analytics, and prescriptive analytics), software tools and applications to explore, analyze, and visualize data.
- Communicate effectively with visualized data and statistical reports.
- Collect data, present data, and analyze data to derive useful business insights.
- Use data mining techniques to uncover factors that affect sales patterns, and identify potential profitable investments and opportunities.

The **Business Analytics Minor** can help prepare you for exciting career opportunities such as:

Business Analyst
(including Marketing Analyst, Sales Analyst, Operations Analyst, Reporting Analyst)
Consultant in Analytics System Analyst Data Analyst Quantitative Analyst

With experience, it can help prepare you for executive roles such as:

Analytics Manager Business Intelligence Manager Project Manager
Administrative Assistant to CIO, CTO, or CEO.

The **Business Analytics Minor** offers a core of courses focused on how businesses capture, store, and analyze data and incorporate it into decision making.

Ready to Become a Business Analytics Minor?

- Talk with your academic advisor to see how the minor will impact your academic plan.

Have questions about the minor?

Please contact:

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Business Analytics Minor Core Courses

All students in the **Business Analytics Minor** will complete five core courses (15 semester hours) designed to develop fundamental knowledge and skills needed to understand how businesses capture and store data, analyze large volumes of data and incorporate them into real-time decision making.

BUS 1950 Computer Concepts and Applications for Business. A study of computer concepts, including the information processing cycle, file organization, telecommunications, and operating systems and systems software. Applications software, including spreadsheets, databases, word processing, presentation graphics, computer communications, and operating systems with graphical user interfaces.

BUS 2810 Business Statistics I. A study of statistical analysis with business applications, including descriptive statistics, probability, interval estimation, hypothesis tests of means and proportions, simple correlation, chi square, one-way analysis of variation and linear regression. Includes use of spreadsheet software. **Prerequisite & Notes:** BUS 1950 with C or better, or AET major with AET 1323, or permission of the Chair, School of Business.

BUS 3500 Management Information Systems. An introduction to MIS by management level. Special emphasis is given to database design and use. Other topics include: telecommunications, types of IS, approaches to systems development, and security. **Prerequisites & Notes:** BUS 1950 with C or better, and MAT 2120G (MAT 2120G may be taken concurrently), or permission of the Chair, School of Business.

OSC 3800 Spreadsheet Modeling and Analysis for Management Decision Making. An introduction to, and survey of, the quantitative methods and techniques of today's problems in managerial decision-making. Topics include linear programming, optimization, simulation, spreadsheet modeling and analysis, and decision theory. **Prerequisites & Notes:** Sophomore standing, BUS 1950 with C or better, or permission of the Chair, School of Business.

OSC 4820 Business Analytics and Data Mining. Management of statistical methods and tools for transforming massive amounts of data into new and useful information, uncovering factors that affect purchasing patterns, and identifying potential profitable investments and opportunities. Among the topics are: simple linear regression, multiple regression and correlation, partial regression techniques, model selections, validation, and diagnostics, logistics regression, data mining, decision tree, neural network models, visualization, and methods for model selection. Includes application of statistical software solution techniques. **Prerequisites & Notes:** Junior, Senior or Graduate standing, BUS 2810 with C or better, or permission of the Chair, School of Business.

Business Analytics Minor Elective Courses

To complete the **Business Analytics Minor**, students will take two additional courses (6 semester hours) approved as electives for the minor from the list below:

BUS 3950	Operations Management.
MIS 2000	Business Analytics Programming.
MIS 3505	Advanced Microcomputer Applications and Development.
OSC 3430	Enterprise Resource Planning Systems.
OSC 4810	Supply Chain and Logistics Management.

Footnote

No more than 15 semester hours counted toward this minor can be double-counted with another minor or major.