Data (DATA)

Data Science

DATA 1501. Introduction to Data Science. 3 Hours.
An introduction to the field of Data Science. Students will develop skills in appropriate technology and basic statistical methods by completing hands-on projects focused on real-world data and addressing the social consequences of data analysis and application.

DATA 2000. Information Systems and Data Transformation in Business. 3 Hours.
An introduction to how information and information systems support business operations and decision-making, and to the use of data in business.

DATA 3100. Introduction to Data Analytics. 3 Hours.
Prerequisite: BUSA 2100. Introduction to a variety of modeling and analytic methods using data to describe, diagnose, predict, and prescribe real world decisions and processes. Topics include finding data, cleaning data, visualizing data, analyzing data, and making statistical inferences.

DATA 3200. Data Visualizations and Analytics. 3 Hours.
Prerequisite: DATA 3100. An introduction to data visualization techniques to communicate information and identify business problems. Students will manipulate data, create visual objects to describe data, create hierarchies, linked and dynamic graphs to gain as deeper understanding of existing relationships in the data.

DATA 3200H. Data Visualizations and Analytics Honors. 3 Hours.
An introduction to data visualization techniques to communicate information and identify business problems. Students will manipulate data, create visual objects to describe data, create hierarchies, linked and dynamic graphs to gain a deeper understanding of existing relationships in the data. This honors section is restricted to the honors business major and requires coverage of advanced topics.

DATA 3500. Data Organization and Management. 3 Hours.
An introduction to methods, techniques, and programs to organize and manage data, including data representations in computer systems, arrays, lists, trees, objects, classes, database concepts, data modeling, entity-relationship mode, entity-relationship diagram, relational data model, and structured query language.

DATA 3600. Data Mining in Business. 3 Hours.
The application of data mining techniques and tools for business analytics to improve managerial decision making, in a variety of business domains using data-driven approaches.

DATA 4000. Business Analytics Capstone. 3 Hours.
Prerequisites: CS 1010, ECON 4000, and DATA 3600 with a grade of "C" or better. A capstone in which students will integrate and apply data analytics knowledge and tools to real business problems.

DATA 4980. Data Analytics Internship. 3 Hours.
Graded "Satisfactory" or "Unsatisfactory". The application of data analytics skills in an employment situation. A written reflection and an employer evaluation is required. May be taken more than once with Department Head approval.