# **BUSINESS DATA ANALYTICS** (BDAN)

#### BDAN 250 Introduction to Analytics 3 Hours

An introduction to data analytics techniques and their application in business. Students will learn how data analytics can improve decision making. Real-world cases and examples are explored to place analytical methods in context.

Recent Term(s) Offered: fall 2022; spring 2023; fall 2023; spring 2024; summer 2024; fall 2024

#### BDAN 305 Data Modeling and Analysis 3 Hours

The basis of information systems and how data is used in a decision making environment. An introduction to data analysis in relation to managing information systems.

Recent Term(s) Offered: fall 2022; spring 2023; summer 2023; fall 2023; spring 2024; summer 2024; fall 2024

#### BDAN 310 Business Data Analytics 3 Hours

An introduction to the application of data analytics methods to business issues. Topics include business case studies, data analytic, model building techniques, and communication of results.

#### Prerequisite(s): BDAN 250

**Restriction(s):** Enrollment limited to students with a semester level of Junior or Senior.

Recent Term(s) Offered: spring 2022; summer 2022; fall 2022; spring 2023; summer 2023; fall 2023; spring 2024; summer 2024; fall 2024

#### BDAN 320 Web Analytics 3 Hours

An introduction to measuring, collecting, analyzing and reporting on online digital Web data using digital analytics and business intelligence. **Prerequisite(s):** BDAN 250

**Restriction(s):** Enrollment limited to students with a semester level of Junior or Senior.

Recent Term(s) Offered: spring 2022

# BDAN 330 Structured Data Analysis 3 Hours

An introduction to the practical analysis and interpretation of different forms of data, emphasizing how and when to use particular tools, techniques, and metrics to maximize decision-making.

Prerequisite(s): BDAN 250

Recent Term(s) Offered: spring 2022; fall 2022; spring 2023; fall 2023; spring 2024; summer 2024; fall 2024

# BDAN 350 Data Management 3 Hours

An introduction to managing the data used in business data analytics. Topics include data sources, acquisition, conditioning, storage, and security.

#### Prerequisite(s): BDAN 250

**Restriction(s):** Enrollment limited to students with a semester level of Junior or Senior.

Recent Term(s) Offered: fall 2022; spring 2023; fall 2023; spring 2024; fall 2024

# BDAN 399 Career Readiness in Business Data Analytics 1 Hour

Introduction to preparation for a career in Business Data Analytics, including exposure to careers in data analytics; certifications in the profession; development of professional writing skills, professional resumes and cover letters; oral communications; interviewing skills; goalsetting; ethical standards; and professional networking. This course is limited to juniors and seniors in the Business Data Analytics program. **Prerequisite(s):** MGT 261

**Restriction(s):** Enrollment limited to students with a semester level of Junior or Senior.

Enrollment is limited to students in Business Data Analytics (504) Recent Term(s) Offered: fall 2022; spring 2023; fall 2023; spring 2024; fall 2024

#### BDAN 410 DSS Analysis and Design 3 Hours

An exploration of the analysis and design processes used to develop and deploy decision support systems (DSS) in businesses, which are technology based tools that support decision-making activities. **Prerequisite(s):** BDAN 250

**Restriction(s):** Enrollment limited to students with a semester level of Junior or Senior.

Recent Term(s) Offered: spring 2022; fall 2022; spring 2023; fall 2023; spring 2024; fall 2024

# BDAN 420 Predictive Modeling 3 Hours

An introduction to predictive modeling and the demonstration of extraction principles from data stored in large heterogeneous volumes and how organizations can analyze data from multiple perspectives. **Prerequisite(s):** BDAN 310

Restriction(s): Students with a semester level of Academy Junior, Academy Senior or Freshman may not enroll.

Recent Term(s) Offered: spring 2022; fall 2022; spring 2023; fall 2023; spring 2024; fall 2024

# BDAN 430 Data Visualization 3 Hours

An introduction to the accumulation, analysis, and visualization of complex data sets for businesses, including the analysis of complex data sets and developing digital dashboards and score cards. **Prerequisite(s):** BDAN 310

**Restriction(s):** Enrollment limited to students with a semester level of Junior or Senior.

Recent Term(s) Offered: spring 2022; fall 2022; spring 2023; fall 2023; spring 2024; fall 2024

# **BDAN 440** Special Topics - Analytics & Information Systems 3 Hours (repeatable max of 6 hrs)

Study of an advanced topic not normally covered in other Business Data Analytics courses. (Some topics may require additional prerequisites). **Restriction(s):** Enrollment limited to students with a semester level of Junior or Senior.

Recent Term(s) Offered: spring 2023

# **BDAN 490** Practicum in Analytics and Information Systems 1-3 Hours (repeatable max of 3 hrs)

Internships, independent studies, and special projects of interest to students and faculty in Analytics, Cybersecurity, and Information Sytems. These may include individual research projects, meaningful internships in profit or not-for-profit organizations with duties relating to Analytics, Cybersecurity, Information Sytems, or other special projects approved by the Information Systems Chair and the Information Systems faculty. Note: A 2.5 cumulative GPA and 6 additional hours of Business Data Analytics courses are required; in addition, permission of the Information Systems Chair and the instructor is required.

Prerequisite(s): BDAN 250 with a minimum grade of C

**Restriction(s):** Enrollment limited to students with a semester level of Junior or Senior.

Enrollment is limited to students in Business Data Analytics (504) Recent Term(s) Offered: fall 2022; spring 2023; summer 2023; fall 2023; fall 2024

**BDAN 499** Senior Assessment in Business Data Analytics 1 Hour Preparation for and administration of the senior assessment exam. Discussion of educational and career opportunities beyond the baccalaureate degree. Discussion of the transition from college to workplace, including final preparation of career-related materials. Note: Required of all Business Data Analytics majors in the last semester. **Prerequisite(s):** (MGT 498 (may be taken concurrently) or ENT 496 (may be taken concurrently)) and BDAN 399

**Restriction(s):** Enrollment limited to students with a semester level of Senior.

Enrollment is limited to students in Business Data Analytics (504) *Recent Term*(s) *Offered: None*