ALL COURSES

BUSINESS DATA ANALYTICS

BDA 2003: Business Problem Solving
Prerequisites: BUAD 2003 Business Information Systems with a C or better or COMS 2003 Microcomputer Applications with a C or better or Microsoft certification in both Access and Excel or permission of instructor.
This course is designed to provide students training in solving business problems. Students will work individually and in groups on projects to learn and apply various problem solving frameworks, methods, and tools to realistic business situations. Frameworks include general problem solving, systems thinking, critical thinking, and ethical reasoning. Methods and tools include project management, communication and coordination techniques, quantitative models, and software applications.

BDA 2023: Introduction to Data Visualization
This course introduces students to data visualization, including principles, concepts, and techniques. The goal of the course is to empower students to identify and illuminate important insights and skillfully display them to improve decision making. This course covers basic quantitative analysis and software to create effective displays. The course will advance critical thinking skills because students will be better equipped to evaluate data and eliminate bias from the process of turning data into knowledge. Students will enhance their written and oral communication skills in written reports and presentations of their data visualizations.

BDA 3003: Data Analytics Apps Development
Offered: Fall
Prerequisites: BDA 2003 Business Problem Solving and MATH 2223 Quantitative Business Analysis or permission of instructor.
This course covers how business data analysts develop software applications to retrieve and analyze data and provide information and business intelligence useful to solve business problems, to support business decisions, and to determine business tactics and strategy. Students will learn how to design appropriate logic and user interfaces for business data analytic software as well as write and debug professional code in a typical production environment. The student will develop a set of standard data analysis techniques representing typical approaches to solving business intelligence problems.

BDA 3013: Business Spreadsheet Modeling
Offered: Fall
Prerequisites: BDA 2003 Business Problem Solving, (BUAD 2053 Business Statistics or PSY 2053 Statistics for the Behavioral Sciences or STAT 2163 Introduction to Statistical Methods with a C or better), and MATH 2223 Quantitative Business Analysis or permission of instructor.
This is an introductory course for business major undergraduate students. The main objective of the course is to teach how to solve problems arising in modern business environments using Microsoft Excel. The course will begin by teaching common tools available in Microsoft Excel. Then it will introduce the students to a variety of analytical problems arising in modem businesses and present ways in which these problems can be solved using Microsoft Excel.

BDA 3033: Data Modeling and Management
Offered: Fall
Prerequisite: BDA 2003 Business Problem Solving, BUAD 2003 Business Information Systems, and MATH 2223 Quantitative Business Analysis, or permission of the instructor
This course covers how databases are constructed and managed so that business data analysts can store, update, manage, retrieve, and process data. Students will learn to design, implement, and use databases to create information and business intelligence useful for solving problems, making business decisions, and determining business strategy and tactics. The content addresses how to design effective and efficient data models, implement data models in commonly used database management systems, retrieve and process that data, present information to clients and managers, and address the main issues and tradeoffs in database administration.

BDA 3053: Business Data Analysis
Offered: Spring
Prerequisites: BDA 2003 Business Problem Solving and (BUAD 2053 Business Statistics or PSY 2053 Statistics for the Behavioral Sciences or STAT 2163 Introduction to Statistical Methods with a C or better), or permission of instructor.
This course explores the development of exploratory and predictive models for managers and business decision-makers. Specific tools addressed include analysis of variance (ANOVA), multiple regression, factor analysis, cluster analysis, logistic regression, and path analysis. Emphasis is on analyzing data using statistical software, visualizing and interpreting the results of those analyses and translating results into clear and simple insights to aid managerial decision making.

BDA 4003: Business Intelligence
Offered: Spring
Prerequisites: BDA 3003 Data Analytics Apps Development, BDA 3033 Data Modeling and Management, and BDA 3053 Business Data Analysis with a C or better and 90 earned hours or permission of instructor.
This course covers how data analysts can process large data sets from a variety of sources to create information by that guides leaders in crafting strategy and tactics which allow an organization to survive and thrive in a turbulent environment. Students will review how business intelligence has

been created and successfully used in the past and learn appropriate processes and a variety of techniques to accomplish this transformation. The course also addresses professional and ethical conduct with respect to data mining and use of business intelligence.

BDA 4031: BDA Internship

Offered: As needed

Prerequisites: Permission of the instructor, Department Chair, and Dean; a minimum GPA of 2.50 on 54 or more earned hours and on at least 15 earned hours at ATU.

A supervised, practical experience providing undergraduate BDA majors with a hands-on professional experience in a position relating to an area of career interest. The student will work in a local cooperating business establishment under the supervision of a member of management of that firm. A College of Business faculty member will observe and consult with the students and the management of the cooperating firm periodically during the period of the internship. Students will be required to make oral reports in the classroom, maintain an internship log, and prepare a final term paper.

Note: Only three hours of internship may be used to satisfy the curriculum requirements for Business Data Analytics electives. Additional hours may be used to satisfy the curriculum requirements for general electives.

BDA 4032: BDA Internship

Offered: As needed

Prerequisites: Permission of the instructor, Department Chair, and Dean; a minimum GPA of 2.50 on 54 or more earned hours and on at least 15 earned hours at ATU.

A supervised, practical experience providing undergraduate BDA majors with a hands-on professional experience in a position relating to an area of career interest. The student will work in a local cooperating business establishment under the supervision of a member of management of that firm. A College of Business faculty member will observe and consult with the students and the management of the cooperating firm periodically during the period of the internship. Students will be required to make oral reports in the classroom, maintain an internship log, and prepare a final term paper.

Note: Only three hours of internship may be used to satisfy the curriculum requirements for Business Data Analytics electives. Additional hours may be used to satisfy the curriculum requirements for general electives.

BDA 4033: BDA Internship

Offered: As needed

Prerequisites: Permission of the instructor, Department Chair, and Dean; a minimum GPA of 2.50 on 54 or more earned hours and on at least 15 earned hours at ATU.

A supervised, practical experience providing undergraduate BDA majors with a hands-on professional experience in a position relating to an area of career interest. The student will work in a local cooperating business establishment under the supervision of a member of management of that firm. A College of Business faculty member will observe and consult with the students and the management of the cooperating firm periodically during the period of the internship. Students will be required to make oral reports in the classroom, maintain an internship log, and prepare a final term paper.

Note: Only three hours of internship may be used to satisfy the curriculum requirements for Business Data Analytics electives. Additional hours may be used to satisfy the curriculum requirements for general electives.

BDA 4071: Special Topics

Offered: As needed

Prerequisites: Permission of the Instructor, Associate Dean, and Dean; at least 54 earned hours with a minimum 2.5 overall GPA.

This course offers an in-depth exploration of selected business data analytics topics. The primary topic will vary from offering to offering; thus, the course may be taken more than once.

BDA 4072: Special Topics

Offered: As needed

Prerequisites: Permission of the Instructor, Associate Dean, and Dean; at least 54 earned hours with a minimum 2.5 overall GPA.

This course offers an in-depth exploration of selected business data analytics topics. The primary topic will vary from offering to offering; thus, the course may be taken more than once.

BDA 4073: Special Topics

Offered: As needed

Prerequisites: Permission of the Instructor, Associate Dean, and Dean; at least 54 earned hours with a minimum 2.5 overall GPA.

This course offers an in-depth exploration of selected business data analytics topics. The primary topic will vary from offering to offering; thus, the course may be taken more than once.