

# **BUSINESS ANALYTICS (BANA)**

## **BANA 2010 - Business Statistics (3 Credits)**

Basic principles of probability and statistics with applications in business. Includes descriptive statistics, probability and probability distributions, data collection, sampling distributions, statistical inference, simple regression and the use of a computer to perform statistical analysis. Students are required to present their analyses in written and/or oral form and defend their conclusions. This is a business core course. Therefore a grade of a 'C-' or better must be earned to satisfy Business graduation requirements and prerequisites for other business courses. Prereq: MATH 1060, or MATH 1070, or MATH 1080, or MATH 1109, or MATH 1110, MATH 1130, or MATH 1401 with a grade of C- or higher. Term offered: fall, spring, summer. Max hours: 3 Credits.

Grading Basis: Letter Grade

Prereq: MATH 1060, or MATH 1070, or MATH 1080, or MATH 1109, or MATH 1110, MATH 1130, or MATH 1401 with a grade of C- or higher.

Typically Offered: Fall, Spring, Summer.

## **BANA 3000 - Operations Management (3 Credits)**

Introduces the concepts and methods commonly used in manufacturing and service operations. Topics include aggregate planning, inventory control, scheduling, quality control, and linear programming. This is a business core course. Therefore a grade of 'C-' or better must be earned to satisfy Business graduation requirements. Prereq: Requires prerequisite courses of ACCT 2200 AND (BANA 2010 or MATH 2830 or CSCI 2980 or ECON 3811) (all minimum grade C-). Restriction: Restricted to undergraduate students with 45 credit hours or more. Max hours: 3 Credits.

Grading Basis: Letter Grade

Requires prerequisite courses of ACCT 2200 AND (BANA 2010 or MATH 2830 or CSCI 2980 or ECON 3811) (all minimum grade C-). Restricted to undergraduate students with 45 credit hours or more. Typically Offered: Fall, Spring, Summer.

## **BANA 4110 - Business Analytics Process (3 Credits)**

This course introduces the processes, tools, and techniques essential to Business Analytics. Students will learn about the business analytics life cycle. Along the way, students will learn about database access tools, and extracting, transforming, and loading data sets (ETL). This is followed by exploratory data analysis (EDA). Students will learn fundamental programming concepts and common syntax for the Python programming language to construct models and propose business solutions. Throughout this process a variety of data visualization methods will be used, and the use of clear and impactful data storytelling will be emphasized. Prereq: Requires prerequisite courses of BANA 2010 or MATH 2830 or CSCI 2980 or ECON 3811. Restriction: Restricted to students with Junior status. Max hours: 3 Credits.

Grading Basis: Letter Grade

Requires prerequisite course of BANA 2010 or MATH 2830 or CSCI 2980 or ECON 3811. Restricted to students with Junior status.

Typically Offered: Fall.

## **BANA 4120 - Forecasting Techniques (3 Credits)**

This course will explain and utilize popular time series techniques, as well as cross-sectional forecasting techniques. Students will learn forecasting methodologies applicable to marketing, finance, accounting, human resources management, as well as supply chain and production management decision-making. This course focuses on practical applications of forecasting techniques, choosing and comparing appropriate methods, and applying the results to workplace situations. Students will utilize Excel for data-based forecasting tasks, as well receive some exposure to utilizing R and SAS analytics software packages. Other topics may be covered, as time and student interest allows. Prereq: Requires prerequisite courses of BANA 2010 or MATH 2980 or CSCI 2980 or ECON 3811. Term offered: Spring. Max hours: 3 Credits.

Grading Basis: Letter Grade

Requires prerequisite course of BANA 2010 or MATH 2830 or CSCI 2980 or ECON 3811.

Typically Offered: Spring.

## **BANA 4840 - Independent Study (3 Credits)**

Restriction: Restricted to undergraduate Business majors with junior standing or higher. Repeatable. Max Hours: 9 Credits.

Grading Basis: Letter Grade

Repeatable. Max Credits: 9.

Restriction: Restricted to undergraduate Business majors with junior standing or higher

## **BANA 4950 - Special Topics in Business Analytics (3 Credits)**

Course offered on an irregular basis for the purpose of presenting new subject matter in Business Analytics. Prereq: Will vary depending upon the particular topic and instructor. Restriction: Restricted to undergraduate Business majors with junior standing or higher. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to undergraduate Business majors with junior standing or higher