Business Analytics Courses: Summer 2024

BZAN102101

Operations Management

Parker, Delvon B

Summer 2024

This course is an introduction to operations management. Operations, like accounting, finance, marketing, and human resources, is one of the primary functions of every organization. Operations managers transform human, physical, and technical resources into goods and services. Hence, it is vital that every organization manage this resource conversion effectively and efficiently. How effectively this is accomplished depends upon the linkages between operating decisions and top management (strategic) decisions. The focus of the course is decision-making at the operating level of the firm. A strong emphasis will be placed on the development and use of quantitative models to assist decision making.

Credits: 3

Room and Schedule: On-line Asynchronous

Satisifies Core Requirement: None

Prerequisites: BZAN1135 or BZAN1137

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

BZAN103601

Introduction to Excel

Neale, John J

Summer 2024

Due to their accessibility and versatility, spreadsheets are still the most common tool for quantitative analysis in the business world. This module will teach you how to use spreadsheets to analyze data and build models, ultimately leading to better business decisions. Topics covered will include formulas and functions, pivot tables, and best practices for spreadsheet design.

Credits: 1

Room and Schedule: Stokes Hall 295S W 12:30PM-02:45PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None **Frequency:** Every Summer

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN103602

Introduction to Excel

Neale, John J

Summer 2024

Due to their accessibility and versatility, spreadsheets are still the most common tool for quantitative analysis in the business world. This module will teach you how to use spreadsheets to analyze data and build models, ultimately leading to better business decisions. Topics covered will include formulas and functions, pivot tables, and best practices for spreadsheet design.

Credits: 1

Room and Schedule: Stokes Hall 295S F 12:30PM-02:45PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None **Frequency:** Every Summer

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN103701

Excel for Business Analytics Beebe, Jonathan R

Summer 2024

This course provides an introduction to the use of Excel in business analytics. Topics include spreadsheet formatting, charts, basic and logical functions, and more advanced Excel tools like vlookups and pivot tables. In addition to learning how to use Excel as an analytical tool, the course will also discuss ways in which Excel can be used to effectively communicate business results and insights.

Credits: 1

Room and Schedule: On-line Asynchronous

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

BZAN202101

Coding for Business

Sterpe, Peter J

Summer 2024

An introductory course in coding based on Python (a language suitable for all business and analytics programs) and SQL (Structured Query Language--the main language for working with databases). The course emphasizes coding literacy and teaches coding skills that are relevant for business decision makers.

Credits: 3

Room and Schedule: On-line Asynchronous

Satisifies Core Requirement: None

Prerequisites: BZAN1137

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None

Status: Offered

BZAN492101

Advanced Independent Study

VanderWerf, Pieter A

Summer 2024

Investigation of a topic under the direction of a faculty member. Student develops a paper with publication potential

Credits: 3

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring, Every Summer

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN770001

Operations Management

Parker, Delvon B

Summer 2024

Operations, like accounting, finance and marketing, is one of the primary functions of every organization. Operations managers transform human, physical and technical resources into goods and services. Hence, it is vital that every organization manage this resource conversion effectively and efficiently. How effectively this is accomplished depends upon the linkages between operating decisions and top management (strategic) decisions. The focus of the course is decision-making at the operating level of the firm, converting broad policy directives into specific actions within the organization. Strong emphasis will be placed on the development and use of quantitative models to assist in decision making.

Credits: 3

Room and Schedule: On-line Asynchronous

Satisifies Core Requirement: None

Prerequisites: BZAN7703

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring, Every Summer

Student Level: Graduate

Comments: None **Status:** Offered

BZAN770301

Managerial Statistics Boardman Liu, Linda

Summer 2024

This course teaches the tools and techniques of statistics most commonly used in business. The major topic areas include: populations, random variables, distributions, and sampling; parameter estimation; hypothesis testing; and simple and multiple regression. All topics are taught by application to actual business problems using original data. The course provides the tools students will need for their functional courses, such as finance and marketing, as well as for core courses in business analytics.STEM-designated

Credits: 0

Room and Schedule: On-line Asynchronous

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring, Every Summer

Student Level: Graduate

Comments: None **Status:** Offered

BZAN770601

Data Analytics 1: Model Building

VanderWerf, Pieter A

Summer 2024

Machine Learning, big data, data mining, predictive analytics. These are what the course covers. They consist of the creation and use of mathematical computer models to predict important quantities and events with uncanny accuracy. As one book put it, "Who clicks, who buys, and who dies." The course teaches both the principles and the details of the major methods of making and applying these models to actual business problems. To produce models on the computer, students also learn the R coding language. This is the preferred high-level software for Machine Learning and statistical applications.STEM-designated

Credits: 3

Room and Schedule: On-line Asynchronous

Satisifies Core Requirement: None

Prerequisites: BZAN7703

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring, Every Summer

Student Level: Graduate

Comments: None **Status:** Offered

BZAN802201

Coding for Business

Sterpe, Peter J

Summer 2024

This is an introductory course in computer programming based on Python (a language suitable for all business and analytics programs). The course emphasizes coding literacy and teaches coding skills that are relevant for business decision makers. MBA DA3 is a prerequisite. This course will give students the knowledge and confidence to apply coding to a business problem, and the ability to go from a problem statement to a repeatable set of steps for solving the problem in a general way. It will enable students who might not code professionally to work effectively with colleagues who do, and it will equip interested students to develop significant programs of their own.STEM-Designated.

Credits: 3

Room and Schedule: 245 Beacon Street Room 229 TuTh 06:30PM-09:30PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Periodically in the Summer

Student Level: Graduate

Comments: None **Status:** Offered

BZAN803101

Managing Projects Boardman Liu, Linda

Summer 2024

This course takes a holistic approach to planning, organizing, and controlling projects. It looks at how projects are uniquely suited to support an organization's strategy in a fast-paced business environment. Topics include project life cycle, algorithms and statistical concepts underlying network planning models, managing risk and resource allocation. It emphasizes the use of effective interpersonal and communication skills to organize, plan, and control the project team.

Credits: 3

Room and Schedule: On-line Asynchronous

Satisifies Core Requirement: None

Prerequisites: BZAN7700

Corequisites: None

Cross-listed with: None

Frequency: Periodically in the Spring

Student Level: Graduate

Comments: None **Status:** Offered

BZAN849701

Directed Readings

Evenchik. Leonard N

Summer 2024

Extensive reading under the direction of a faculty member. Student presents written critiques of the reading as well as comparisons between readings.

Credits: 3

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None
Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Graduate

Comments: None **Status:** Offered

BZAN849702

Directed Readings

Alev, Isil

Summer 2024

Extensive reading under the direction of a faculty member. Student presents written critiques of the reading as well as comparisons between readings.

Credits: 3

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Graduate

Comments: None **Status:** Offered

Business Analytics Courses: Fall 2024

BZAN102001

Seminar in Statistical Analysis & Data Management

Boardman Liu, Linda

Fall 2024

This seminar has a focus on problem solving and critical thinking, with an emphasis on data fluency, statistical literacy, and analytical thinking.

Credits: 1

Room and Schedule: Fulton Hall 245 F 09:00AM-10:15AM

Satisifies Core Requirement: None

Prerequisites: Permission of Department

Cross-listed with: None Frequency: Annually

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN102101

Operations Management

Liu, Nan Fall 2024

This course is an introduction to operations management. Operations, like accounting, finance, marketing, and human resources, is one of the primary functions of every organization. Operations managers transform human, physical, and technical resources into goods and services. Hence, it is vital that every organization manage this resource conversion effectively and efficiently. How effectively this is accomplished depends upon the linkages between operating decisions and top management (strategic) decisions. The focus of the course is decision-making at the operating level of the firm. A strong emphasis will be placed on the development and use of quantitative models to assist decision making.

Credits: 3

Room and Schedule: Fulton Hall 245 TuTh 09:00AM-10:15AM

Satisifies Core Requirement: None

Prerequisites: BZAN1135 or BZAN1137

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

BZAN102102

Operations Management

Liu, Nan Fall 2024 This course is an introduction to operations management. Operations, like accounting, finance, marketing, and human resources, is one of the primary functions of every organization. Operations managers transform human, physical, and technical resources into goods and services. Hence, it is vital that every organization manage this resource conversion effectively and efficiently. How effectively this is accomplished depends upon the linkages between operating decisions and top management (strategic) decisions. The focus of the course is decision-making at the operating level of the firm. A strong emphasis will be placed on the development and use of quantitative models to assist decision making.

Credits: 3

Room and Schedule: Fulton Hall 245 TuTh 10:30AM-11:45AM

Satisifies Core Requirement: None

Prerequisites: BZAN1135 or BZAN1137

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

BZAN102103

Operations Management

Parker, Delvon B

Fall 2024

This course is an introduction to operations management. Operations, like accounting, finance, marketing, and human resources, is one of the primary functions of every organization. Operations managers transform human, physical, and technical resources into goods and services. Hence, it is vital that every organization manage this resource conversion effectively and efficiently. How effectively this is accomplished depends upon the linkages between operating decisions and top management (strategic) decisions. The focus of the course is decision-making at the operating level of the firm. A strong emphasis will be placed on the development and use of quantitative models to assist decision making.

Credits: 3

Room and Schedule: Fulton Hall 220 TuTh 03:00PM-04:15PM

Satisifies Core Requirement: None

Prerequisites: BZAN1135 or BZAN1137

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN102104

Operations Management

Parker, Delvon B

Fall 2024

This course is an introduction to operations management. Operations, like accounting, finance, marketing, and human resources, is one of the primary functions of every organization. Operations managers transform human, physical, and technical resources into goods and services. Hence, it is vital that every organization manage this resource conversion effectively and efficiently. How effectively this is accomplished depends upon the linkages between operating decisions and top management (strategic) decisions. The focus of the course is decision-making at the operating level of the firm. A strong emphasis will be placed on the development and use of quantitative models to assist decision making.

Credits: 3

Room and Schedule: Fulton Hall 245 TuTh 01:30PM-02:45PM

Satisifies Core Requirement: None

Prerequisites: BZAN1135 or BZAN1137

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

BZAN102106

Operations Management

Alev, Isil

Fall 2024

This course is an introduction to operations management. Operations, like accounting, finance, marketing, and human resources, is one of the primary functions of every organization. Operations managers transform human, physical, and technical resources into goods and services. Hence, it is vital that every organization manage this resource conversion effectively and efficiently. How effectively this is accomplished depends upon the linkages between operating decisions and top management (strategic) decisions. The focus of the course is decision-making at the operating level of the firm. A strong emphasis will be placed on the development and use of quantitative models to assist decision making.

Credits: 3

Room and Schedule: Fulton Hall 260 MW 01:30PM-02:45PM

Satisifies Core Requirement: None

Prerequisites: BZAN1135 or BZAN1137

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

BZAN102107

Operations Management

Alev, Isil

Fall 2024

This course is an introduction to operations management. Operations, like accounting, finance, marketing, and human resources, is one of the primary functions of every organization. Operations managers transform human, physical, and technical resources into goods and services. Hence, it is vital that every organization manage this resource conversion effectively and efficiently. How effectively this is accomplished depends upon the linkages between operating decisions and top management (strategic) decisions. The focus of the course is decision-making at the operating level of the firm. A strong emphasis will be placed on the development and use of quantitative models to assist decision making.

Credits: 3

Room and Schedule: Fulton Hall 260 MW 03:00PM-04:15PM

Satisifies Core Requirement: None

Prerequisites: BZAN1135 or BZAN1137

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN102108

Operations Management

Xue, Mei Fall 2024

This course is an introduction to operations management. Operations, like accounting, finance, marketing, and human resources, is one of the primary functions of every organization. Operations managers transform human, physical, and technical resources into goods and services. Hence, it is vital that every organization manage this resource conversion effectively and efficiently. How effectively this is accomplished depends upon the linkages between operating decisions and top management (strategic) decisions. The focus of the course is decision-making at the operating level of the firm. A strong emphasis will be placed on the development and use of quantitative models to assist decision making.

Credits: 3

Room and Schedule: Fulton Hall 260 MW 10:30AM-11:45AM

Satisifies Core Requirement: None

Prerequisites: BZAN1135 or BZAN1137

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

BZAN102109

Operations Management

Xue, Mei Fall 2024 This course is an introduction to operations management. Operations, like accounting, finance, marketing, and human resources, is one of the primary functions of every organization. Operations managers transform human, physical, and technical resources into goods and services. Hence, it is vital that every organization manage this resource conversion effectively and efficiently. How effectively this is accomplished depends upon the linkages between operating decisions and top management (strategic) decisions. The focus of the course is decision-making at the operating level of the firm. A strong emphasis will be placed on the development and use of quantitative models to assist decision making.

Credits: 3

Room and Schedule: Fulton Hall 260 MW 12:00 Noon-01:15PM

Satisifies Core Requirement: None

Prerequisites: BZAN1135 or BZAN1137

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

BZAN103701

Excel for Business Analytics

Beebe, Jonathan R

Fall 2024

This course provides an introduction to the use of Excel in business analytics. Topics include spreadsheet formatting, charts, basic and logical functions, and more advanced Excel tools like vlookups and pivot tables. In addition to learning how to use Excel as an analytical tool, the course will also discuss ways in which Excel can be used to effectively communicate business results and insights.

Credits: 1

Room and Schedule: On-line Asynchronous

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

BZAN103801

Excel for Business Analytics

Beebe, Jonathan R

Fall 2024

This course provides an introduction to the use of Excel in business analytics. Topics include spreadsheet formatting, charts, basic and logical functions, and more advanced Excel tools like lookup functions and pivot tables. In addition to learning how to use Excel as an analytical tool, the course will also discuss ways in which Excel can be used to effectively communicate business results and insights. This version of the course is specifically intended for non-CSOM students.

Credits: 1

Room and Schedule: On-line Asynchronous

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

BZAN113501 Statistical Analysis Boardman Liu, Linda Fall 2024 This course provides an introduction to statistics with a focus on the analytical tools that are applicable to management practice and decision making. Statistical topics include descriptive statistics, probability, random variables, sampling distributions, estimation of parameters, hypothesis testing, and regression. Data handling and management skills are developed through extensive use of modern statistical programming tools and real data sets. Students will gain an understanding of statistical methods, the ability to formulate business questions as statistical models to test, and critical thinking skills to evaluate the results of those models.

Credits: 3

Room and Schedule: Fulton Hall 130 TuTh 09:00AM-10:15AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN113502

Statistical Analysis Boardman Liu, Linda

Fall 2024

This course provides an introduction to statistics with a focus on the analytical tools that are applicable to management practice and decision making. Statistical topics include descriptive statistics, probability, random variables, sampling distributions, estimation of parameters, hypothesis testing, and regression. Data handling and management skills are developed through extensive use of modern statistical programming tools and real data sets. Students will gain an understanding of statistical methods, the ability to formulate business questions as statistical models to test, and critical thinking skills to evaluate the results of those models.

Credits: 3

Room and Schedule: Fulton Hall 220 TuTh 10:30AM-11:45AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN113503

Statistical Analysis Boardman Liu, Linda

Fall 2024

This course provides an introduction to statistics with a focus on the analytical tools that are applicable to management practice and decision making. Statistical topics include descriptive statistics, probability, random variables, sampling distributions, estimation of parameters, hypothesis testing, and regression. Data handling and management skills are developed through extensive use of modern statistical programming tools and real data sets. Students will gain an understanding of statistical methods, the ability to formulate business questions as statistical models to test, and critical thinking skills to evaluate the results of those models.

Credits: 3

Room and Schedule: Fulton Hall 220 TuTh 12:00 Noon-01:15PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN113504 Statistical Analysis Pan, Xiaohong Fall 2024 This course provides an introduction to statistics with a focus on the analytical tools that are applicable to management practice and decision making. Statistical topics include descriptive statistics, probability, random variables, sampling distributions, estimation of parameters, hypothesis testing, and regression. Data handling and management skills are developed through extensive use of modern statistical programming tools and real data sets. Students will gain an understanding of statistical methods, the ability to formulate business questions as statistical models to test, and critical thinking skills to evaluate the results of those models.

Credits: 3

Room and Schedule: Fulton Hall 220 MW 09:00AM-10:15AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN113505

Statistical Analysis

Wei, Lai

Fall 2024

This course provides an introduction to statistics with a focus on the analytical tools that are applicable to management practice and decision making. Statistical topics include descriptive statistics, probability, random variables, sampling distributions, estimation of parameters, hypothesis testing, and regression. Data handling and management skills are developed through extensive use of modern statistical programming tools and real data sets. Students will gain an understanding of statistical methods, the ability to formulate business questions as statistical models to test, and critical thinking skills to evaluate the results of those models.

Credits: 3

Room and Schedule: Fulton Hall 220 MW 10:30AM-11:45AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN113506

Statistical Analysis

Wei, Lai

Fall 2024

This course provides an introduction to statistics with a focus on the analytical tools that are applicable to management practice and decision making. Statistical topics include descriptive statistics, probability, random variables, sampling distributions, estimation of parameters, hypothesis testing, and regression. Data handling and management skills are developed through extensive use of modern statistical programming tools and real data sets. Students will gain an understanding of statistical methods, the ability to formulate business questions as statistical models to test, and critical thinking skills to evaluate the results of those models.

Credits: 3

Room and Schedule: Fulton Hall 220 MW 12:00 Noon-01:15PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN113507
Statistical An

Statistical Analysis

Wei, Lai

Fall 2024

This course provides an introduction to statistics with a focus on the analytical tools that are applicable to management practice and decision making. Statistical topics include descriptive statistics, probability, random variables, sampling distributions, estimation of parameters, hypothesis testing, and regression. Data handling and management skills are developed through extensive use of modern statistical programming tools and real data sets. Students will gain an understanding of statistical methods, the ability to formulate business questions as statistical models to test, and critical thinking skills to evaluate the results of those models.

Credits: 3

Room and Schedule: Fulton Hall 220 MW 01:30PM-02:45PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN113508

Statistical Analysis

Pan, Xiaohong

Fall 2024

This course provides an introduction to statistics with a focus on the analytical tools that are applicable to management practice and decision making. Statistical topics include descriptive statistics, probability, random variables, sampling distributions, estimation of parameters, hypothesis testing, and regression. Data handling and management skills are developed through extensive use of modern statistical programming tools and real data sets. Students will gain an understanding of statistical methods, the ability to formulate business questions as statistical models to test, and critical thinking skills to evaluate the results of those models.

Credits: 3

Room and Schedule: Fulton Hall 245 MW 03:00PM-04:15PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN113509

Statistical Analysis

Dept, Dept

Fall 2024

This course provides an introduction to statistics with a focus on the analytical tools that are applicable to management practice and decision making. Statistical topics include descriptive statistics, probability, random variables, sampling distributions, estimation of parameters, hypothesis testing, and regression. Data handling and management skills are developed through extensive use of modern statistical programming tools and real data sets. Students will gain an understanding of statistical methods, the ability to formulate business questions as statistical models to test, and critical thinking skills to evaluate the results of those models.

Credits: 0

Room and Schedule: Fulton Hall 150 F 10:00AM-10:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN113510 Statistical Analysis Dept, Dept Fall 2024 This course provides an introduction to statistics with a focus on the analytical tools that are applicable to management practice and decision making. Statistical topics include descriptive statistics, probability, random variables, sampling distributions, estimation of parameters, hypothesis testing, and regression. Data handling and management skills are developed through extensive use of modern statistical programming tools and real data sets. Students will gain an understanding of statistical methods, the ability to formulate business questions as statistical models to test, and critical thinking skills to evaluate the results of those models.

Credits: 0

Room and Schedule: Fulton Hall 150 F 11:00AM-11:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN113511

Statistical Analysis

Dept, Dept

Fall 2024

This course provides an introduction to statistics with a focus on the analytical tools that are applicable to management practice and decision making. Statistical topics include descriptive statistics, probability, random variables, sampling distributions, estimation of parameters, hypothesis testing, and regression. Data handling and management skills are developed through extensive use of modern statistical programming tools and real data sets. Students will gain an understanding of statistical methods, the ability to formulate business questions as statistical models to test, and critical thinking skills to evaluate the results of those models.

Credits: 0

Room and Schedule: Fulton Hall 150 F 12:00 Noon-12:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN113512

Statistical Analysis

Dept, Dept

Fall 2024

This course provides an introduction to statistics with a focus on the analytical tools that are applicable to management practice and decision making. Statistical topics include descriptive statistics, probability, random variables, sampling distributions, estimation of parameters, hypothesis testing, and regression. Data handling and management skills are developed through extensive use of modern statistical programming tools and real data sets. Students will gain an understanding of statistical methods, the ability to formulate business questions as statistical models to test, and critical thinking skills to evaluate the results of those models.

Credits: 0

Room and Schedule: Fulton Hall 150 F 01:00PM-01:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN113513 Statistical Analysis Dept, Dept

Fall 2024

This course provides an introduction to statistics with a focus on the analytical tools that are applicable to management practice and decision making. Statistical topics include descriptive statistics, probability, random variables, sampling distributions, estimation of parameters, hypothesis testing, and regression. Data handling and management skills are developed through extensive use of modern statistical programming tools and real data sets. Students will gain an understanding of statistical methods, the ability to formulate business questions as statistical models to test, and critical thinking skills to evaluate the results of those models.

Credits: 0

Room and Schedule: Fulton Hall 150 Th 06:00PM-06:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN113701

Statistical Computing: Programming in R

Boardman Liu, Linda

Fall 2024

This course provides an introduction to statistical computing which includes setup of the R operating environment, programming in R, reading data in R, accessing R packages, writing R scripts, and creating R markdown documents. Examples are drawn from the variety of topics covered in business statistics. Students who have completed BZAN1135 or OPER1135/1136 are not eligible to take this course.

Credits: 1

Room and Schedule: Fulton Hall 310 Th 03:00PM-04:15PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Periodically in the Fall, Periodically in the Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN202101

Coding for Business Jernigan, Stephanie A

Fall 2024

An introductory course in coding based on Python (a language suitable for all business and analytics programs) and SQL (Structured Query Language--the main language for working with databases). The course emphasizes coding literacy and teaches coding skills that are relevant for business decision makers.

Credits: 3

Room and Schedule: Fulton Hall 245 MW 09:00AM-10:15AM

Satisifies Core Requirement: None

Prerequisites: BZAN1137

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

BZAN202102

Coding for Business Jernigan, Stephanie A

Fall 2024

An introductory course in coding based on Python (a language suitable for all business and analytics programs) and SQL (Structured Query Language--the main language for working with databases). The course emphasizes coding literacy and teaches coding skills that are relevant for business decision makers.

Credits: 3

Room and Schedule: Fulton Hall 245 MW 10:30AM-11:45AM

Satisifies Core Requirement: None

Prerequisites: BZAN1137

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN202103

Coding for Business Jernigan, Stephanie A

Fall 2024

An introductory course in coding based on Python (a language suitable for all business and analytics programs) and SQL (Structured Query Language--the main language for working with databases). The course emphasizes coding literacy and teaches coding skills that are relevant for business decision makers.

Credits: 3

Room and Schedule: Fulton Hall 245 MW 12:00 Noon-01:15PM

Satisifies Core Requirement: None

Prerequisites: BZAN1137

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

BZAN202104

Coding for Business

Pan, Xiaohong

Fall 2024

An introductory course in coding based on Python (a language suitable for all business and analytics programs) and SQL (Structured Query Language--the main language for working with databases). The course emphasizes coding literacy and teaches coding skills that are relevant for business decision makers.

Credits: 3

Room and Schedule: Fulton Hall 245 MW 01:30PM-02:45PM

Satisifies Core Requirement: None

Prerequisites: BZAN1137

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

BZAN202105

Coding for Business

Karpovsky, Anna

Fall 2024

An introductory course in coding based on Python (a language suitable for all business and analytics programs) and SQL (Structured Query Language--the main language for working with databases). The course emphasizes coding literacy and teaches coding skills that are relevant for business decision makers.

Credits: 3

Room and Schedule: Fulton Hall 245 TuTh 12:00 Noon-01:15PM

Satisifies Core Requirement: None

Prerequisites: BZAN1137

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

BZAN202106

Coding for Business

Karpovsky, Anna

Fall 2024

An introductory course in coding based on Python (a language suitable for all business and analytics programs) and SQL (Structured Query Language--the main language for working with databases). The course emphasizes coding literacy and teaches coding skills that are relevant for business decision makers.

Credits: 3

Room and Schedule: Fulton Hall 220 TuTh 01:30PM-02:45PM

Satisifies Core Requirement: None

Prerequisites: BZAN1137

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

BZAN202107

Coding for Business

Sterpe, Peter J

Fall 2024

An introductory course in coding based on Python (a language suitable for all business and analytics programs) and SQL (Structured Query Language--the main language for working with databases). The course emphasizes coding literacy and teaches coding skills that are relevant for business decision makers

Credits: 3

Room and Schedule: Fulton Hall 245 TuTh 03:00PM-04:15PM

Satisifies Core Requirement: None

Prerequisites: BZAN1137

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

Coding for Business

Sterpe, Peter J

Fall 2024

An introductory course in coding based on Python (a language suitable for all business and analytics programs) and SQL (Structured Query Language--the main language for working with databases). The course emphasizes coding literacy and teaches coding skills that are relevant for business decision makers.

Credits: 3

Room and Schedule: Fulton Hall 245 TuTh 04:30PM-05:45PM

Satisifies Core Requirement: None

Prerequisites: BZAN1137

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN202201

SQL Module

Jernigan, Stephanie A

Fall 2024

This self-paced course covers the basics of Structured Query Language to retrieve data from a database. The course is designed only for those students placing out of BZAN 2021 because they've taken CSCI 1101.

Credits: 0

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: null

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN216501

Intro to Programming using Swift for iOS App Development Gallaugher, John M

Fall 2024

In this fast-paced course, students will learn the Swift programming language and iOS app development skills. Using a "flipped-classroom" approach, the students take lectures in a series of online videos embedded in a web-based course/reference/quiz book, following along with videos as they learn programming concepts and build apps. Although this is a flipped class, expect a challenging course. Class is mandatory (this is NOT an online course) and class time will be used for additional exercises, concept review, and student questions. Students are required to bring a fully-charged Mac laptop to each class with the latest version of Apple's free Xcode software installed (make sure you have access to a Mac that meets these requirements before enrolling). The course assumes no programming background, but students with some experience will likely have an easier time. Students should be prepared to spend significant time each week on self-directed learning and regular programming projects. This course was formerly numbered: ISYS2160.

Credits: 3

Room and Schedule: Fulton Hall 415 M 04:30PM-06:50PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: UNAS2165

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN217501

Physical Computing - Interactive Art, Robotics, and Tech for Good Gallaugher, John M

Fall 2024

Low-cost microcontrollers, sensors, and computing devices like the Raspberry Pi make it possible to create technical projects that humans can physically interact with. This course assumes no prior programming experience but will progress quickly through block-based MakeCode programming, then CircuitPython programming so that all students have coding knowledge necessary to create hardware projects. Students will purchase an amount of hardware and tools similar to the cost of books in a standard course, and we'll use these parts to build a series of projects that control lights, read sensors, produce sound, respond to touch and app control, capture camera images, and more. We'll also build a wheel-based robot, and students will have an opportunity to create and present several original projects and share their work with classmates. This course was formerly numbered: ISYS2170.

Credits: 3

Room and Schedule: Fulton Hall 415 W 04:30PM-06:50PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: UNAS2175

Frequency: null

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN225501

Managing Projects Coakley, Charles E

Fall 2024

This course takes a holistic approach to planning, organizing, and controlling projects. It looks at how projects are uniquely suited to support an organization's strategy in a fast-paced business environment. Topics include project life cycle, algorithms and statistical concepts underlying network planning models, managing risk, and resource allocation. Microsoft Project will be used as to support the planning and monitoring phases of project management. The conceptual part of this course is framed with an eye to the behavioral realities a manager faces and the psychology of managing project teams.

Credits: 3

Room and Schedule: Fulton Hall 220 W 07:00PM-09:30PM

Satisifies Core Requirement: None

Prerequisites: None

Corequisites: None Cross-listed with: None

Frequency: Every Fall, Every Spring, Every Summer

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN330701

Machine Learning and Artificial Intelligence Ransbotham, Samuel, III

Fall 2024

Machine Learning and Artificial Intelligence won't replace managers in the near term, but managers who use ML and AI well will replace those who don't. Organizations now have too much data and insufficient time for managers to consume data only in spreadsheets. Instead, the future of work involves managers designing models that, for example, segment customers, forecast sales, schedule preventative maintenance, or predict markets. This course addresses both the technical and managerial aspects of these applications. Technically, students use Python to create, evaluate, and tune multiple practical models (e.g., classifiers, trees, neural networks) in supervised and unsupervised machine learning contexts. Managerially, this course examines how organizations create value through AI applications.

Credits: 3

Room and Schedule: Fulton Hall 260 TuTh 09:00AM-10:15AM

Satisifies Core Requirement: None

Prerequisites: Coding for Business (BZAN2021) or Python equivalent and Statistical Analysis

(BZAN1135) or equivalent.

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN330702

Machine Learning and Artificial Intelligence Ransbotham, Samuel, III

Fall 2024

Machine Learning and Artificial Intelligence won't replace managers in the near term, but managers who use ML and AI well will replace those who don't. Organizations now have too much data and insufficient time for managers to consume data only in spreadsheets. Instead, the future of work involves managers designing models that, for example, segment customers, forecast sales, schedule preventative maintenance, or predict markets. This course addresses both the technical and managerial aspects of these applications. Technically, students use Python to create, evaluate, and tune multiple practical models (e.g., classifiers, trees, neural networks) in supervised and unsupervised machine learning contexts. Managerially, this course examines how organizations create value through AI applications.

Credits: 3

Room and Schedule: Fulton Hall 260 TuTh 10:30AM-11:45AM

Satisifies Core Requirement: None

Prerequisites: Coding for Business (BZAN2021) or Python equivalent and Statistical Analysis

(BZAN1135) or equivalent.

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

BZAN330703

Machine Learning and Artificial Intelligence Ransbotham, Samuel, III

Fall 2024

Machine Learning and Artificial Intelligence won't replace managers in the near term, but managers who use ML and AI well will replace those who don't. Organizations now have too much data and insufficient time for managers to consume data only in spreadsheets. Instead, the future of work involves managers designing models that, for example, segment customers, forecast sales, schedule preventative maintenance, or predict markets. This course addresses both the technical and managerial aspects of these applications. Technically, students use Python to create, evaluate, and tune multiple practical models (e.g., classifiers, trees, neural networks) in supervised and unsupervised machine learning contexts. Managerially, this course examines how organizations create value through AI applications.

Credits: 3

Room and Schedule: Fulton Hall 260 TuTh 12:00 Noon-01:15PM

Satisifies Core Requirement: None

Prerequisites: Coding for Business (BZAN2021) or Python equivalent and Statistical Analysis

(BZAN1135) or equivalent.

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

BZAN331001

Sports Analytics

Neale, John J

Fall 2024

This course will introduce you to the field of sports analytics. We will apply quantitative methods from statistics and management science in a sports context. Our focus will be on-field analysis including player and team evaluation and game strategy. We will cover baseball, football, and basketball in depth with occasional references to other sports. We will also discuss concepts from behavioral economics and psychology that help explain the actions of players, coaches, and referees.

Credits: 3

Room and Schedule: Fulton Hall 150 W 04:30PM-06:50PM

Satisifies Core Requirement: None

Prerequisites: A previous course in statistics (BZAN1135 OR BZAN1137), management science (BZAN2235 or BZAN6604), and Excel (BZAN1037 or ISYS1021) plus familiarity with the rules of baseball, football, and basketball.

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN335001

Data Management for Analytics and Applications

Steffen, Sebastian

Fall 2024

This course provides a foundation in how databases and other data management technologies are used in business analytics and software applications. It will familiarize students with the process of collecting, storing, querying, and manipulating data, which comprise the core practices for building software applications and making data-driven decisions. This course was formerly numbered: ISYS3350

Credits: 3

Room and Schedule: Fulton Hall 220 MW 03:00PM-04:15PM

Satisifies Core Requirement: None

Prerequisites: Prerequisite: BZAN2021 or proficiency with SQL and BZAN1135 or proficiency

with R

Corequisites: None

Cross-listed with: None **Frequency:** Every Fall

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN335002

Data Management for Analytics and Applications Steffen. Sebastian

Fall 2024

This course provides a foundation in how databases and other data management technologies are used in business analytics and software applications. It will familiarize students with the process of collecting, storing, querying, and manipulating data, which comprise the core practices for building software applications and making data-driven decisions. This course was formerly numbered: ISYS3350

Credits: 3

Room and Schedule: 245 Beacon Street Room 230 MW 10:30AM-11:45AM

Satisifies Core Requirement: None

Prerequisites: Prerequisite: BZAN2021 or proficiency with SQL and BZAN1135 or proficiency

with R

Cross-listed with: None
Frequency: Every Fall

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN335003

Data Management for Analytics and Applications

Steffen, Sebastian

Fall 2024

This course provides a foundation in how databases and other data management technologies are used in business analytics and software applications. It will familiarize students with the process of collecting, storing, querying, and manipulating data, which comprise the core practices for building software applications and making data-driven decisions. This course was formerly numbered: ISYS3350

Credits: 3

Room and Schedule: 245 Beacon Street Room 230 MW 09:00AM-10:15AM

Satisifies Core Requirement: None

Prerequisites: Prerequisite: BZAN2021 or proficiency with SQL and BZAN1135 or proficiency

with R

Cross-listed with: None Frequency: Every Fall

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN337501

Operations Strategy and Consulting

Field, Joy M Fall 2024 This course examines concepts, principles, and techniques for formulating, implementing, and evaluating operations strategy. It links strategic and tactical operational decisions to creation of a competitive advantage. Topics include operations strategy content and process, service operations, capacity and facilities strategy, supply chain management, process design and technology choice, and quality and productivity improvement. Case studies are used to illustrate concepts covered in the course. In collaboration with a consulting firm, students also learn how to develop and deliver a consulting presentation. These skills are applied to a mock consulting project.

Credits: 3

Room and Schedule: Fulton Hall 220 Th 04:30PM-06:50PM

Satisifies Core Requirement: None

Prerequisites: None
Corequisites: None

Cross-listed with: None **Frequency:** Every Fall

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN337502

Operations Strategy and Consulting

Field, Joy M

Fall 2024

This course examines concepts, principles, and techniques for formulating, implementing, and evaluating operations strategy. It links strategic and tactical operational decisions to creation of a competitive advantage. Topics include operations strategy content and process, service operations, capacity and facilities strategy, supply chain management, process design and technology choice, and quality and productivity improvement. Case studies are used to illustrate concepts covered in the course. In collaboration with a consulting firm, students also learn how to develop and deliver a consulting presentation. These skills are applied to a mock consulting project.

Credits: 3

Room and Schedule: Fulton Hall 220 W 04:30PM-06:50PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None **Frequency:** Every Fall

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN338501

Applied Statistical Modeling

Beebe, Jonathan R

Fall 2024

This course provides an intensive introduction to methodologies for applying statistical economic techniques to problems in a variety of disciplines. Techniques for both time series and cross-sectional data will be explored, and real data and cases will be used extensively.

Credits: 3

Room and Schedule: Fulton Hall 245 MW 04:30PM-05:45PM

Satisifies Core Requirement: None

Prerequisites: BZAN1135 or BZAN1137

Corequisites: None

Cross-listed with: None

Frequency: Periodically in the Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN338502

Applied Statistical Modeling

Beebe, Jonathan R

Fall 2024

This course provides an intensive introduction to methodologies for applying statistical economic techniques to problems in a variety of disciplines. Techniques for both time series and cross-sectional data will be explored, and real data and cases will be used extensively.

Credits: 3

Room and Schedule: Fulton Hall 260 MW 09:00AM-10:15AM

Satisifies Core Requirement: None Prerequisites: BZAN1135 or BZAN1137

Corequisites: None
Cross-listed with: None

Frequency: Periodically in the Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN425801

Systems Analysis and Design

Wyner, George M

Fall 2024

This course is required for Information Systems concentrators. The course studies information systems (IS) development including requirements, analysis, design and implementation phases and workflows. We investigate the roles of systems analysts; serving as intermediaries between users, managers, and implementers; and helping each to understand the needs and problems of others. The student will learn about major methods and tools used in the systems development process. Please note that Database Systems and Applications (BZAN3257/CSCI1157) must be completed prior to taking this course. This course was formerly numbered: ISYS4258.

Credits: 3

Room and Schedule: Fulton Hall 415 MW 03:00PM-04:15PM

Satisifies Core Requirement: None

Prerequisites: BZAN2021 and either ISYS3257 or ISYS3350

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

BZAN492101

Advanced Independent Study

Kim, Do Yoon

Investigation of a topic under the direction of a faculty member. Student develops a paper with publication potential

Credits: 3

Room and Schedule: By Arrangement **Satisifies Core Requirement:** None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring, Every Summer

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN492103

Advanced Independent Study

Mc Gowan, Richard, SJ

Fall 2024

Investigation of a topic under the direction of a faculty member. Student develops a paper with publication potential

Credits: 3

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring, Every Summer

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN492104

Advanced Independent Study VanderWerf, Pieter A

Investigation of a topic under the direction of a faculty member. Student develops a paper with publication potential

Credits: 3

Room and Schedule: By Arrangement **Satisifies Core Requirement:** None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring, Every Summer

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN660401

Management Science

Neale, John J

Fall 2024

This course provides an overview of the concepts and methods of management science. Sometimes referred to as prescriptive analytics or decision analytics, management science is a subset of the larger field of business analytics and focuses on the use of math models to make better business decisions. The primary goal of the course is to help you become a more skilled builder and consumer of models. The course will show you how to use Excel spreadsheets effectively for business analysis and introduce you to some of the more important analytic methods including optimization and simulation. These methods will be applied to problems arising in a variety of functional areas including operations, finance, and marketing.STEM-designated.

Credits: 3

Room and Schedule: Fulton Hall 150 M 04:30PM-06:50PM

Satisifies Core Requirement: None

Prerequisites: A previous course in statistics and familiarity with Excel.

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Both **Comments:** None

Status: Offered

BZAN660402

Management Science

Neale, John J

Fall 2024

This course provides an overview of the concepts and methods of management science. Sometimes referred to as prescriptive analytics or decision analytics, management science is a subset of the larger field of business analytics and focuses on the use of math models to make better business decisions. The primary goal of the course is to help you become a more skilled builder and consumer of models. The course will show you how to use Excel spreadsheets effectively for business analysis and introduce you to some of the more important analytic methods including optimization and simulation. These methods will be applied to problems arising in a variety of functional areas including operations, finance, and marketing.STEM-designated.

Credits: 3

Room and Schedule: Fulton Hall 150 M 07:00PM-09:30PM

Satisifies Core Requirement: None

Prerequisites: A previous course in statistics and familiarity with Excel.

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Both Comments: None Status: Offered

BZAN663201 Supply Chain Management Alev, Isil Fall 2024 A supply chain consists of all parties involved in fulfilling a customer request, including suppliers, manufacturers, distributors, and retailers. Over the last decade, firms have started focusing on supply chain management as a source of competitive advantage. Theres a realization that no company can do better than its supply chain. This course will provide students with an overview of the concepts, models, and methods that are important for the design and operation of modern, global supply chains. Classes are hands-on, with many opportunities to analyze cases and play simulation games.STEM-designated.

Credits: 3

Room and Schedule: Fulton Hall 245 M 07:00PM-09:30PM

Satisifies Core Requirement: None

Prerequisites: Students should take either BZAN1021 (Undergraduate) or BZAN7700/7720

(Graduate) prior to this course.

Corequisites: None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Both Comments: None Status: Offered

BZAN665501

Introduction to Blockchain and its Business Applications Cathcart, Graham T

The objective of this course is to introduce the business of blockchain--a technology that has the potential to drastically alter the way value is stored, exchanged, shared, and distributed. It is the backbone of the next iteration of the Internet: Web 3.0 or The Internet of Value. This course does not require any technical knowledge or prior knowledge of the subject, and is designed to give students a foundational knowledge of blockchain technology and a familiarity with the basic principles that govern blockchain protocols. Students will obtain a fluency in the terms and concepts required to understand how this powerful technology works. Most importantly, students will study real-world applications of the technology, which range far beyond blockchain's original use case (cryptocurrency) and hear from a number of influential guest speakers who are using or investing in blockchain technology at their companies today. Students who complete the course will understand blockchain and cryptocurrency's gamechanging potential, be able to separate fact from hype, and be effective leaders in the space.STEM-designated. This course was formerly numbered: ISYS6655

Credits: 3

Room and Schedule: Th 07:00PM-09:30PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None Frequency: Every Fall Student Level: Both Comments: None

Status: Offered

BZAN770001 Operations Management Parker, Delvon B Fall 2024 Operations, like accounting, finance and marketing, is one of the primary functions of every organization. Operations managers transform human, physical and technical resources into goods and services. Hence, it is vital that every organization manage this resource conversion effectively and efficiently. How effectively this is accomplished depends upon the linkages between operating decisions and top management (strategic) decisions. The focus of the course is decision-making at the operating level of the firm, converting broad policy directives into specific actions within the organization. Strong emphasis will be placed on the development and use of quantitative models to assist in decision making.

Credits: 3

Room and Schedule: On-line Asynchronous

Satisifies Core Requirement: None

Prerequisites: BZAN7703

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring, Every Summer

Student Level: Graduate

Comments: None **Status:** Offered

BZAN770002

Operations Management

Liu, Nan

Fall 2024

Operations, like accounting, finance and marketing, is one of the primary functions of every organization. Operations managers transform human, physical and technical resources into goods and services. Hence, it is vital that every organization manage this resource conversion effectively and efficiently. How effectively this is accomplished depends upon the linkages between operating decisions and top management (strategic) decisions. The focus of the course is decision-making at the operating level of the firm, converting broad policy directives into specific actions within the organization. Strong emphasis will be placed on the development and use of quantitative models to assist in decision making.

Credits: 3

Room and Schedule: Fulton Hall 145 Tu 07:00PM-09:30PM

Satisifies Core Requirement: None

Prerequisites: BZAN7703

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring, Every Summer

Student Level: Graduate

Comments: None **Status:** Offered

BZAN770301

Managerial Statistics Boardman Liu, Linda

Fall 2024

This course teaches the tools and techniques of statistics most commonly used in business. The major topic areas include: populations, random variables, distributions, and sampling; parameter estimation; hypothesis testing; and simple and multiple regression. All topics are taught by application to actual business problems using original data. The course provides the tools students will need for their functional courses, such as finance and marketing, as well as for core courses in business analytics.STEM-designated

Credits: 0

Room and Schedule: On-line Asynchronous

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring, Every Summer

Student Level: Graduate

Comments: None **Status:** Offered

BZAN770302

Managerial Statistics Boardman Liu, Linda

This course teaches the tools and techniques of statistics most commonly used in business. The major topic areas include: populations, random variables, distributions, and sampling; parameter estimation; hypothesis testing; and simple and multiple regression. All topics are taught by application to actual business problems using original data. The course provides the tools students will need for their functional courses, such as finance and marketing, as well as for core courses in business analytics.STEM-designated

Credits: 0

Room and Schedule: On-line Asynchronous

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring, Every Summer

Student Level: Graduate

Comments: None **Status:** Offered

BZAN770602

Data Analytics 1: Model Building

VanderWerf, Pieter A

Fall 2024

Machine Learning, big data, data mining, predictive analytics. These are what the course covers. They consist of the creation and use of mathematical computer models to predict important quantities and events with uncanny accuracy. As one book put it, "Who clicks, who buys, and who dies." The course teaches both the principles and the details of the major methods of making and applying these models to actual business problems. To produce models on the computer, students also learn the R coding language. This is the preferred high-level software for Machine Learning and statistical applications.STEM-designated

Credits: 3

Room and Schedule: On-line Asynchronous

Satisifies Core Requirement: None

Prerequisites: BZAN7703

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring, Every Summer

Student Level: Graduate

Comments: None **Status:** Offered

BZAN770603

Data Analytics 1: Model Building

VanderWerf, Pieter A

Fall 2024

Machine Learning, big data, data mining, predictive analytics. These are what the course covers. They consist of the creation and use of mathematical computer models to predict important quantities and events with uncanny accuracy. As one book put it, "Who clicks, who buys, and who dies." The course teaches both the principles and the details of the major methods of making and applying these models to actual business problems. To produce models on the computer, students also learn the R coding language. This is the preferred high-level software for Machine Learning and statistical applications.STEM-designated

Credits: 3

Room and Schedule: Fulton Hall 245 W 07:00PM-09:30PM

Satisifies Core Requirement: None

Prerequisites: BZAN7703

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring, Every Summer

Student Level: Graduate

Comments: None **Status:** Offered

BZAN770701

Data Analytics 2: Data Management for Analytics

Evenchik. Leonard N

Information Technology (IT) and Data Analytics now permeate the strategy, structure, and operations of modern enterprises, and new business practices have led to an orders of magnitude increase in the amount of data available for analysis and decision-making. It is essential that managers develop a deep understanding of how data can be structured, captured, and gueried in order to support operations, decision-making, and strategic insight. At the same time, managers must become fluent with IT so that they can promote innovative strategic initiatives that are increasingly data and IT dependent. In this course, students will develop an understanding of IT theory and practice, study key emerging technologies, and develop their ability to identify new opportunities made possible by IT. This course will also provide students with a deep understanding of data and analytics by exploring how business processes are analyzed, data is modeled (using entity relationship diagrams), databases are designed, and data is gueried using SQL. This combination of theory and practice will allow students to develop their ability to identify and take advantage of the new opportunities now made possible by data analytics and Information Technology. The on-campus section of this course (BZAN7707) will meet weekly on campus. Please note that the online asynchronous section of this course will also include two or three synchronous web conferences during the semester. Please review the course syllabus for the schedule for these web conferences, or contact the instructor. STEM-designated This course was formerly numbered: ISYS7700

Credits: 3

Room and Schedule: Fulton Hall 130 W 07:00PM-09:30PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Graduate

Comments: None **Status:** Offered

BZAN770702

Data Analytics 2: Data Management for Analytics

Evenchik, Leonard N

Information Technology (IT) and Data Analytics now permeate the strategy, structure, and operations of modern enterprises, and new business practices have led to an orders of magnitude increase in the amount of data available for analysis and decision-making. It is essential that managers develop a deep understanding of how data can be structured, captured, and gueried in order to support operations, decision-making, and strategic insight. At the same time, managers must become fluent with IT so that they can promote innovative strategic initiatives that are increasingly data and IT dependent. In this course, students will develop an understanding of IT theory and practice, study key emerging technologies, and develop their ability to identify new opportunities made possible by IT. This course will also provide students with a deep understanding of data and analytics by exploring how business processes are analyzed, data is modeled (using entity relationship diagrams), databases are designed, and data is gueried using SQL. This combination of theory and practice will allow students to develop their ability to identify and take advantage of the new opportunities now made possible by data analytics and Information Technology. The on-campus section of this course (BZAN7707) will meet weekly on campus. Please note that the online asynchronous section of this course will also include two or three synchronous web conferences during the semester. Please review the course syllabus for the schedule for these web conferences, or contact the instructor. STEM-designated This course was formerly numbered: ISYS7700

Credits: 3

Room and Schedule: On-line Asynchronous

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Graduate

Comments: None **Status:** Offered

BZAN770801

Data Analytics 3: In Practice

Beebe, Jonathan R

Modern information systems now generate massive volumes of data. Organizations everywhere struggle to aggregate, analyze, and monetize the growing deluge of data. Business Analytics capitalizes on this data by combining statistical and quantitative analysis, explanatory and predictive modeling, and fact-based management. Managers can explore patterns, predict future trends and develop proactive, knowledge-driven decisions that affect all parts of modern organizations. This course provides students with a pragmatic familiarity with the capabilities and limitations of emerging analytics techniques, an introduction to Python, an overview of methods and tools, and a core understanding required to be an intelligent manager, designer, and consumer of analytics models. STEM-designated This course was formerly numbered: ISYS7705

Credits: 3

Room and Schedule: On-line Asynchronous

Satisifies Core Requirement: None

Prerequisites: BZAN7703 and BZAN7706

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Graduate

Comments: None **Status:** Offered

BZAN770802

Data Analytics 3: In Practice

Beebe, Jonathan R

Modern information systems now generate massive volumes of data. Organizations everywhere struggle to aggregate, analyze, and monetize the growing deluge of data. Business Analytics capitalizes on this data by combining statistical and quantitative analysis, explanatory and predictive modeling, and fact-based management. Managers can explore patterns, predict future trends and develop proactive, knowledge-driven decisions that affect all parts of modern organizations. This course provides students with a pragmatic familiarity with the capabilities and limitations of emerging analytics techniques, an introduction to Python, an overview of methods and tools, and a core understanding required to be an intelligent manager, designer, and consumer of analytics models. STEM-designated This course was formerly numbered: ISYS7705

Credits: 3

Room and Schedule: Fulton Hall 250 W 07:00PM-09:30PM

Satisifies Core Requirement: None

Prerequisites: BZAN7703 and BZAN7706

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Graduate

Comments: None **Status:** Offered

BZAN771601

Data Analytics 1: Model Building

Chod, Jiri

Fall 2024

Machine Learning, big data, data mining, predictive analytics. These are what the course covers. They consist of the creation and use of mathematical computer models to predict important quantities and events with uncanny accuracy. As one book put it, "Who clicks, who buys, and who dies." The course teaches both the principles and the details of the major methods of making and applying these models to actual business problems. To produce models on the computer, students also learn the R coding language. This is the preferred high-level software for Machine Learning and statistical applications.STEM-designated

Credits: 2

Room and Schedule: Fulton Hall 150 MW 01:45PM-03:45PM

Satisifies Core Requirement: None

Prerequisites: BZAN7703

Corequisites: None
Cross-listed with: None
Frequency: Every Fall
Student Level: Graduate

Comments: None **Status:** Offered

BZAN771602

Data Analytics 1: Model Building

Chod, Jiri Fall 2024

Machine Learning, big data, data mining, predictive analytics. These are what the course covers. They consist of the creation and use of mathematical computer models to predict important quantities and events with uncanny accuracy. As one book put it, "Who clicks, who buys, and who dies." The course teaches both the principles and the details of the major methods of making and applying these models to actual business problems. To produce models on the computer, students also learn the R coding language. This is the preferred high-level software for Machine Learning and statistical applications.STEM-designated

Credits: 2

Room and Schedule: Fulton Hall 150 MW 11:00AM-01:00PM

Satisifies Core Requirement: None

Prerequisites: BZAN7703

Corequisites: None

Cross-listed with: None **Frequency:** Every Fall **Student Level:** Graduate

Comments: None **Status:** Offered

BZAN771701

Data Analytics 2: Data Management for Analytics

Wyner, George M

Information Technology (IT) and Data Analytics now permeate the strategy, structure, and operations of modern enterprises, and new business practices have led to an orders of magnitude increase in the amount of data available for analysis and decision-making. It is essential that managers develop a deep understanding of how data can be structured, captured, and gueried in order to support operations, decision-making, and strategic insight. At the same time, managers must become fluent with IT so that they can promote innovative strategic initiatives that are increasingly data and IT dependent. In this course, students will develop an understanding of IT theory and practice, study key emerging technologies, and develop their ability to identify new opportunities made possible by IT. This course will also provide students with a deep understanding of data and analytics by exploring how business processes are analyzed, data is modeled (using entity relationship diagrams), databases are designed, and data is gueried using SQL. This combination of theory and practice will allow students to develop their ability to identify and take advantage of the new opportunities now made possible by data analytics and Information Technology. The on-campus section of this course (ISYS7700) will meet weekly on campus. Please note that the online asynchronous section of this course will also include two or three synchronous web conferences during the semester. Please review the course syllabus for the schedule for these web conferences, or contact the instructor.STEM-designated

Credits: 2

Room and Schedule: Fulton Hall 130 TuTh 01:45PM-03:45PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Graduate

Comments: None **Status:** Offered

BZAN771702

Data Analytics 2: Data Management for Analytics

Wyner, George M

Information Technology (IT) and Data Analytics now permeate the strategy, structure, and operations of modern enterprises, and new business practices have led to an orders of magnitude increase in the amount of data available for analysis and decision-making. It is essential that managers develop a deep understanding of how data can be structured, captured, and gueried in order to support operations, decision-making, and strategic insight. At the same time, managers must become fluent with IT so that they can promote innovative strategic initiatives that are increasingly data and IT dependent. In this course, students will develop an understanding of IT theory and practice, study key emerging technologies, and develop their ability to identify new opportunities made possible by IT. This course will also provide students with a deep understanding of data and analytics by exploring how business processes are analyzed, data is modeled (using entity relationship diagrams), databases are designed, and data is gueried using SQL. This combination of theory and practice will allow students to develop their ability to identify and take advantage of the new opportunities now made possible by data analytics and Information Technology. The on-campus section of this course (ISYS7700) will meet weekly on campus. Please note that the online asynchronous section of this course will also include two or three synchronous web conferences during the semester. Please review the course syllabus for the schedule for these web conferences, or contact the instructor.STEM-designated

Credits: 2

Room and Schedule: Fulton Hall 130 TuTh 11:00AM-01:00PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Graduate

Comments: None **Status:** Offered

BZAN806701

Machine Learning & Artificial Intelligence

VanderWerf, Pieter A

Fall 2024

This course builds on Data Analytics 1 to provide students with advanced tools and skills forMachine learning (ML) in business practice. On the technical side, the course content extends to a wider range of algorithms as well as advanced methods for data sampling and model building and evaluation. More depth in application comes from student reports on current events in Machine Learning, and a course project that involves complete model construction and analysis for an actual business problem with an actual corporate data set. The course assumes the student has experience with the basic machine learning algorithms and the R codinglanguage.STEM-designated.

Credits: 3

Room and Schedule: Fulton Hall 245 Tu 07:00PM-09:30PM

Satisifies Core Requirement: None

Prerequisites: Prior to this course, students should have completed BZAN7703 (Managerial

Statistics) and either BZAN7706 or BZAN7716 (DA1: Model Building).

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Graduate

Comments: None **Status:** Offered

BZAN816501

Intro to Programming using Swift for iOS App Development Gallaugher, John M

In this fast-paced course, students will learn the Swift programming language and iOS app development skills. Using a "flipped-classroom" approach, the students take lectures in a series of online videos embedded in a web-based course/reference/quiz book, following along with videos as they learn programming concepts and build apps. Although this is a flipped class, expect a challenging course. Class is mandatory (this is NOT an online course) and class time will be used for additional exercises, concept review, and student questions. Students are required to bring a fully-charged Mac laptop to each class with the latest version of Apple's free Xcode software installed (make sure you have access to a Mac that meets these requirements before enrolling). The course assumes no programming background, but students with some experience will likely have an easier time. Students should be prepared to spend significant time each week on self-directed learning and regular programming projects. This course was formerly numbered: ISYS2160.

Credits: 3

Room and Schedule: Fulton Hall 415 M 04:30PM-06:50PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Graduate

Comments: None **Status:** Offered

BZAN817501

Physical Computing - Interactive Art, Robotics, and Tech for Good Gallaugher, John M

Low-cost microcontrollers, sensors, and computing devices like the Raspberry Pi make it possible to create technical projects that humans can physically interact with. This course assumes no prior programming experience but will progress quickly through block-based MakeCode programming, then CircuitPython programming so that all students have coding knowledge necessary to create hardware projects. Students will purchase an amount of hardware and tools similar to the cost of books in a standard course, and we'll use these parts to build a series of projects that control lights, read sensors, produce sound, respond to touch and app control, capture camera images, and more. We'll also build a wheel-based robot, and students will have an opportunity to create and present several original projects and share their work with classmates. This course was formerly numbered: ISYS2170.

Credits: 3

Room and Schedule: Fulton Hall 415 W 04:30PM-06:50PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: null

Student Level: Graduate

Comments: None **Status:** Offered

BZAN825801

Business Analysis Survival Guide

Sterpe, Peter J

Fall 2024

This course teaches the why and how of "business analysis" those activities an organization performs to ensure the success of an IT/software project. Students will learn how to consider the build-or-buy decision. We'll explore effective ways to capture and communicate requirements, including how to construct a visually appealing wireframe prototype. We'll cherry pick the most useful techniques from the Unified Modeling Language (UML), we'll demystify Agile and Scrum, we'll explore at a high level how applications are constructed, and we'll equip you to set any IT/software project on a successful path. This is not a coding course, and no coding experience is required. STEM-Designated.

Credits: 3

Room and Schedule: Fulton Hall 220 Tu 07:00PM-09:30PM

Satisifies Core Requirement: None

Prerequisites: ISYS7700 or ISYS7720

Corequisites: None

Cross-listed with: None **Frequency:** Annually

Student Level: Graduate

Comments: None **Status:** Offered

BZAN844501

Data Visualization Karpovsky, Anna

Fall 2024

This course covers foundations of data visualization and best practices to help students effectively analyze data and present their insights clearly in a way that will engage their audience. The course provides discussions and presentations on topics such as visual perception, the various chart types and when to use them, the effective use of colors, typography, maps, and other visualization techniques for incorporating analytics and storytelling, and teaches through many examples of compare and contrast. The conceptual discussions will be integrated with hands-on experience using Tableau. STEM-designated. This course was formerly numbered: ISYS8445

Credits: 3

Room and Schedule: On-line Asynchronous

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: null

Student Level: Graduate

Comments: None **Status:** Offered

BZAN849701

Directed Readings

Alev, Isil

Extensive reading under the direction of a faculty member. Student presents written critiques of the reading as well as comparisons between readings.

Credits: 3

Room and Schedule: By Arrangement **Satisifies Core Requirement:** None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Graduate

Comments: None **Status:** Offered

BZAN849702

Directed Readings

Field, Joy M

Fall 2024

Extensive reading under the direction of a faculty member. Student presents written critiques of the reading as well as comparisons between readings.

Credits: 3

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Graduate

Comments: None **Status:** Offered

BZAN849801

Directed Research I

Graves, Samuel B

Investigation of a topic under the direction of a faculty member. Student develops a paper with publication potential.

Credits: 3

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: With permission of the department chairperson. or Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Graduate

Comments: None **Status:** Offered

BZAN881001

Sports Analytics

Parker, Delvon B

Fall 2024

This course will introduce you to the field of sports analytics. We will apply quantitative methods from statistics and management science in a sports context. Our focus will be on-field analysis including player and team evaluation and game strategy. We will cover baseball, football, and basketball in depth with occasional references to other sports. We will also discuss concepts from behavioral economics and psychology that help explain the actions of players, coaches, and referees.STEM-designated

Credits: 3

Room and Schedule: Fulton Hall 220 Th 07:00PM-09:30PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: null

Student Level: Graduate

Comments: None **Status:** Offered

Business Analytics Courses: Spring 2025

BZAN102101
Operations Management
Mitrofanov, Dmitry
Spring 2025

This course is an introduction to operations management. Operations, like accounting, finance, marketing, and human resources, is one of the primary functions of every organization. Operations managers transform human, physical, and technical resources into goods and services. Hence, it is vital that every organization manage this resource conversion effectively and efficiently. How effectively this is accomplished depends upon the linkages between operating decisions and top management (strategic) decisions. The focus of the course is decision-making at the operating level of the firm. A strong emphasis will be placed on the development and use of quantitative models to assist decision making.

Credits: 3

Room and Schedule: Fulton Hall 220 TuTh 09:00AM-10:15AM

Satisifies Core Requirement: None

Prerequisites: BZAN1135 or BZAN1137

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

BZAN102102 Operations Management Beebe, Jonathan R

Spring 2025

This course is an introduction to operations management. Operations, like accounting, finance, marketing, and human resources, is one of the primary functions of every organization. Operations managers transform human, physical, and technical resources into goods and services. Hence, it is vital that every organization manage this resource conversion effectively and efficiently. How effectively this is accomplished depends upon the linkages between operating decisions and top management (strategic) decisions. The focus of the course is decision-making at the operating level of the firm. A strong emphasis will be placed on the development and use of quantitative models to assist decision making.

Credits: 3

Room and Schedule: Fulton Hall 415 TuTh 03:00PM-04:15PM

Satisifies Core Requirement: None

Prerequisites: BZAN1135 or BZAN1137

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

BZAN102103

Operations Management

Xue, Mei

Spring 2025

This course is an introduction to operations management. Operations, like accounting, finance, marketing, and human resources, is one of the primary functions of every organization. Operations managers transform human, physical, and technical resources into goods and services. Hence, it is vital that every organization manage this resource conversion effectively and efficiently. How effectively this is accomplished depends upon the linkages between operating decisions and top management (strategic) decisions. The focus of the course is decision-making at the operating level of the firm. A strong emphasis will be placed on the development and use of quantitative models to assist decision making.

Credits: 3

Room and Schedule: Fulton Hall 453 MW 12:00 Noon-01:15PM

Satisifies Core Requirement: None

Prerequisites: BZAN1135 or BZAN1137

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN102105

Operations Management

Xue, Mei

Spring 2025

This course is an introduction to operations management. Operations, like accounting, finance, marketing, and human resources, is one of the primary functions of every organization. Operations managers transform human, physical, and technical resources into goods and services. Hence, it is vital that every organization manage this resource conversion effectively and efficiently. How effectively this is accomplished depends upon the linkages between operating decisions and top management (strategic) decisions. The focus of the course is decision-making at the operating level of the firm. A strong emphasis will be placed on the development and use of quantitative models to assist decision making.

Credits: 3

Room and Schedule: Fulton Hall 453 MW 10:30AM-11:45AM

Satisifies Core Requirement: None

Prerequisites: BZAN1135 or BZAN1137

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

BZAN102106
Operations Management
Mitrofanov, Dmitry
Spring 2025

This course is an introduction to operations management. Operations, like accounting, finance, marketing, and human resources, is one of the primary functions of every organization. Operations managers transform human, physical, and technical resources into goods and services. Hence, it is vital that every organization manage this resource conversion effectively and efficiently. How effectively this is accomplished depends upon the linkages between operating decisions and top management (strategic) decisions. The focus of the course is decision-making at the operating level of the firm. A strong emphasis will be placed on the development and use of quantitative models to assist decision making.

Credits: 3

Room and Schedule: Fulton Hall 220 TuTh 10:30AM-11:45AM

Satisifies Core Requirement: None

Prerequisites: BZAN1135 or BZAN1137

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

BZAN102107

Operations Management Mitrofanov, Dmitry Spring 2025

This course is an introduction to operations management. Operations, like accounting, finance, marketing, and human resources, is one of the primary functions of every organization. Operations managers transform human, physical, and technical resources into goods and services. Hence, it is vital that every organization manage this resource conversion effectively and efficiently. How effectively this is accomplished depends upon the linkages between operating decisions and top management (strategic) decisions. The focus of the course is decision-making at the operating level of the firm. A strong emphasis will be placed on the development and use of quantitative models to assist decision making.

Credits: 3

Room and Schedule: Fulton Hall 220 TuTh 12:00 Noon-01:15PM

Satisifies Core Requirement: None

Prerequisites: BZAN1135 or BZAN1137

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN103701

Excel for Business Analytics

Beebe, Jonathan R

Spring 2025

This course provides an introduction to the use of Excel in business analytics. Topics include spreadsheet formatting, charts, basic and logical functions, and more advanced Excel tools like vlookups and pivot tables. In addition to learning how to use Excel as an analytical tool, the course will also discuss ways in which Excel can be used to effectively communicate business results and insights.

Credits: 1

Room and Schedule: On-line Asynchronous

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

BZAN103801

Excel for Business Analytics

Beebe, Jonathan R

Spring 2025

This course provides an introduction to the use of Excel in business analytics. Topics include spreadsheet formatting, charts, basic and logical functions, and more advanced Excel tools like lookup functions and pivot tables. In addition to learning how to use Excel as an analytical tool, the course will also discuss ways in which Excel can be used to effectively communicate business results and insights. This version of the course is specifically intended for non-CSOM students.

Credits: 1

Room and Schedule: On-line Asynchronous

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

BZAN113501

Statistical Analysis

Boardman Liu, Linda

Spring 2025

This course provides an introduction to statistics with a focus on the analytical tools that are applicable to management practice and decision making. Statistical topics include descriptive statistics, probability, random variables, sampling distributions, estimation of parameters, hypothesis testing, and regression. Data handling and management skills are developed through extensive use of modern statistical programming tools and real data sets. Students will gain an understanding of statistical methods, the ability to formulate business questions as statistical models to test, and critical thinking skills to evaluate the results of those models.

Credits: 3

Room and Schedule: Fulton Hall 245 TuTh 09:00AM-10:15AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

BZAN113502

Statistical Analysis Boardman Liu, Linda

Spring 2025

This course provides an introduction to statistics with a focus on the analytical tools that are applicable to management practice and decision making. Statistical topics include descriptive statistics, probability, random variables, sampling distributions, estimation of parameters, hypothesis testing, and regression. Data handling and management skills are developed through extensive use of modern statistical programming tools and real data sets. Students will gain an understanding of statistical methods, the ability to formulate business questions as statistical models to test, and critical thinking skills to evaluate the results of those models.

Credits: 3

Room and Schedule: Fulton Hall 245 TuTh 10:30AM-11:45AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

BZAN113503 Statistical Analysis Boardman Liu, Linda Spring 2025 This course provides an introduction to statistics with a focus on the analytical tools that are applicable to management practice and decision making. Statistical topics include descriptive statistics, probability, random variables, sampling distributions, estimation of parameters, hypothesis testing, and regression. Data handling and management skills are developed through extensive use of modern statistical programming tools and real data sets. Students will gain an understanding of statistical methods, the ability to formulate business questions as statistical models to test, and critical thinking skills to evaluate the results of those models.

Credits: 3

Room and Schedule: Fulton Hall 245 TuTh 12:00 Noon-01:15PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN113504

Statistical Analysis

Chen, Daniel

Spring 2025

This course provides an introduction to statistics with a focus on the analytical tools that are applicable to management practice and decision making. Statistical topics include descriptive statistics, probability, random variables, sampling distributions, estimation of parameters, hypothesis testing, and regression. Data handling and management skills are developed through extensive use of modern statistical programming tools and real data sets. Students will gain an understanding of statistical methods, the ability to formulate business questions as statistical models to test, and critical thinking skills to evaluate the results of those models.

Credits: 3

Room and Schedule: Fulton Hall 245 TuTh 01:30PM-02:45PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN113505

Statistical Analysis

Chen, Daniel

Spring 2025

This course provides an introduction to statistics with a focus on the analytical tools that are applicable to management practice and decision making. Statistical topics include descriptive statistics, probability, random variables, sampling distributions, estimation of parameters, hypothesis testing, and regression. Data handling and management skills are developed through extensive use of modern statistical programming tools and real data sets. Students will gain an understanding of statistical methods, the ability to formulate business questions as statistical models to test, and critical thinking skills to evaluate the results of those models.

Credits: 3

Room and Schedule: Fulton Hall 245 TuTh 03:00PM-04:15PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN113506 Statistical Analysis Dizdarer, Tolga Spring 2025 This course provides an introduction to statistics with a focus on the analytical tools that are applicable to management practice and decision making. Statistical topics include descriptive statistics, probability, random variables, sampling distributions, estimation of parameters, hypothesis testing, and regression. Data handling and management skills are developed through extensive use of modern statistical programming tools and real data sets. Students will gain an understanding of statistical methods, the ability to formulate business questions as statistical models to test, and critical thinking skills to evaluate the results of those models.

Credits: 3

Room and Schedule: Fulton Hall 220 MW 10:30AM-11:45AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN113507

Statistical Analysis

Dizdarer, Tolga

Spring 2025

This course provides an introduction to statistics with a focus on the analytical tools that are applicable to management practice and decision making. Statistical topics include descriptive statistics, probability, random variables, sampling distributions, estimation of parameters, hypothesis testing, and regression. Data handling and management skills are developed through extensive use of modern statistical programming tools and real data sets. Students will gain an understanding of statistical methods, the ability to formulate business questions as statistical models to test, and critical thinking skills to evaluate the results of those models.

Credits: 3

Room and Schedule: Fulton Hall 220 MW 12:00 Noon-01:15PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN113508

Statistical Analysis Dizdarer, Tolga Spring 2025

This course provides an introduction to statistics with a focus on the analytical tools that are applicable to management practice and decision making. Statistical topics include descriptive statistics, probability, random variables, sampling distributions, estimation of parameters, hypothesis testing, and regression. Data handling and management skills are developed through extensive use of modern statistical programming tools and real data sets. Students will gain an understanding of statistical methods, the ability to formulate business questions as statistical models to test, and critical thinking skills to evaluate the results of those models.

Credits: 3

Room and Schedule: Fulton Hall 220 MW 01:30PM-02:45PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN113509 Statistical Analysis Dept, Dept Spring 2025 This course provides an introduction to statistics with a focus on the analytical tools that are applicable to management practice and decision making. Statistical topics include descriptive statistics, probability, random variables, sampling distributions, estimation of parameters, hypothesis testing, and regression. Data handling and management skills are developed through extensive use of modern statistical programming tools and real data sets. Students will gain an understanding of statistical methods, the ability to formulate business questions as statistical models to test, and critical thinking skills to evaluate the results of those models.

Credits: 0

Room and Schedule: Fulton Hall 150 F 10:00AM-10:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN113510

Statistical Analysis

Dept, Dept

Spring 2025

This course provides an introduction to statistics with a focus on the analytical tools that are applicable to management practice and decision making. Statistical topics include descriptive statistics, probability, random variables, sampling distributions, estimation of parameters, hypothesis testing, and regression. Data handling and management skills are developed through extensive use of modern statistical programming tools and real data sets. Students will gain an understanding of statistical methods, the ability to formulate business questions as statistical models to test, and critical thinking skills to evaluate the results of those models.

Credits: 0

Room and Schedule: Fulton Hall 150 F 11:00AM-11:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN113511

Statistical Analysis

Dept, Dept

Spring 2025

This course provides an introduction to statistics with a focus on the analytical tools that are applicable to management practice and decision making. Statistical topics include descriptive statistics, probability, random variables, sampling distributions, estimation of parameters, hypothesis testing, and regression. Data handling and management skills are developed through extensive use of modern statistical programming tools and real data sets. Students will gain an understanding of statistical methods, the ability to formulate business questions as statistical models to test, and critical thinking skills to evaluate the results of those models.

Credits: 0

Room and Schedule: Fulton Hall 150 F 12:00 Noon-12:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN113512 Statistical Analysis Dept, Dept Spring 2025 This course provides an introduction to statistics with a focus on the analytical tools that are applicable to management practice and decision making. Statistical topics include descriptive statistics, probability, random variables, sampling distributions, estimation of parameters, hypothesis testing, and regression. Data handling and management skills are developed through extensive use of modern statistical programming tools and real data sets. Students will gain an understanding of statistical methods, the ability to formulate business questions as statistical models to test, and critical thinking skills to evaluate the results of those models.

Credits: 0

Room and Schedule: Fulton Hall 150 F 01:00PM-01:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN113513

Statistical Analysis

Dept, Dept

Spring 2025

This course provides an introduction to statistics with a focus on the analytical tools that are applicable to management practice and decision making. Statistical topics include descriptive statistics, probability, random variables, sampling distributions, estimation of parameters, hypothesis testing, and regression. Data handling and management skills are developed through extensive use of modern statistical programming tools and real data sets. Students will gain an understanding of statistical methods, the ability to formulate business questions as statistical models to test, and critical thinking skills to evaluate the results of those models.

Credits: 0

Room and Schedule: Fulton Hall 150 Th 06:00PM-06:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN113701

Statistical Computing: Programming in R

Boardman Liu, Linda

Spring 2025

This course provides an introduction to statistical computing which includes setup of the R operating environment, programming in R, reading data in R, accessing R packages, writing R scripts, and creating R markdown documents. Examples are drawn from the variety of topics covered in business statistics. Students who have completed BZAN1135 or OPER1135/1136 are not eligible to take this course.

Credits: 1

Room and Schedule: Fulton Hall 220 F 01:00PM-02:15PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Periodically in the Fall, Periodically in the Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN113702

Statistical Computing: Programming in R

Boardman Liu, Linda

Spring 2025

This course provides an introduction to statistical computing which includes setup of the R operating environment, programming in R, reading data in R, accessing R packages, writing R scripts, and creating R markdown documents. Examples are drawn from the variety of topics covered in business statistics. Students who have completed BZAN1135 or OPER1135/1136 are not eligible to take this course.

Credits: 1

Room and Schedule: 245 Beacon Street Room 204 Tu 03:00PM-04:15PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Periodically in the Fall, Periodically in the Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN202101

Coding for Business

Karpovsky, Anna

Spring 2025

An introductory course in coding based on Python (a language suitable for all business and analytics programs) and SQL (Structured Query Language--the main language for working with databases). The course emphasizes coding literacy and teaches coding skills that are relevant for business decision makers.

Credits: 3

Room and Schedule: Fulton Hall 245 MW 09:00AM-10:15AM

Satisifies Core Requirement: None

Prerequisites: BZAN1137

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

BZAN202102

Coding for Business

Karpovsky, Anna

An introductory course in coding based on Python (a language suitable for all business and analytics programs) and SQL (Structured Query Language--the main language for working with databases). The course emphasizes coding literacy and teaches coding skills that are relevant for business decision makers.

Credits: 3

Room and Schedule: Fulton Hall 245 MW 10:30AM-11:45AM

Satisifies Core Requirement: None

Prerequisites: BZAN1137

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

BZAN202103

Coding for Business

Sterpe, Peter J

Spring 2025

An introductory course in coding based on Python (a language suitable for all business and analytics programs) and SQL (Structured Query Language--the main language for working with databases). The course emphasizes coding literacy and teaches coding skills that are relevant for business decision makers

Credits: 3

Room and Schedule: Fulton Hall 423 TuTh 03:00PM-04:15PM

Satisifies Core Requirement: None

Prerequisites: BZAN1137

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

Coding for Business

Sterpe, Peter J

Spring 2025

An introductory course in coding based on Python (a language suitable for all business and analytics programs) and SQL (Structured Query Language--the main language for working with databases). The course emphasizes coding literacy and teaches coding skills that are relevant for business decision makers.

Credits: 3

Room and Schedule: Fulton Hall 423 TuTh 01:30PM-02:45PM

Satisifies Core Requirement: None

Prerequisites: BZAN1137

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN202105

Coding for Business

Jernigan, Stephanie A

Spring 2025

An introductory course in coding based on Python (a language suitable for all business and analytics programs) and SQL (Structured Query Language--the main language for working with databases). The course emphasizes coding literacy and teaches coding skills that are relevant for business decision makers.

Credits: 3

Room and Schedule: Fulton Hall 425 MW 01:30PM-02:45PM

Satisifies Core Requirement: None

Prerequisites: BZAN1137

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Status: Offered

Comments: None

BZAN202106

Coding for Business

Pan, Xiaohong

Spring 2025

An introductory course in coding based on Python (a language suitable for all business and analytics programs) and SQL (Structured Query Language--the main language for working with databases). The course emphasizes coding literacy and teaches coding skills that are relevant for business decision makers.

Credits: 3

Room and Schedule: Fulton Hall 245 MW 12:00 Noon-01:15PM

Satisifies Core Requirement: None

Prerequisites: BZAN1137

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

BZAN202107

Coding for Business

Pan, Xiaohong

Spring 2025

An introductory course in coding based on Python (a language suitable for all business and analytics programs) and SQL (Structured Query Language--the main language for working with databases). The course emphasizes coding literacy and teaches coding skills that are relevant for business decision makers.

Credits: 3

Room and Schedule: Fulton Hall 245 MW 01:30PM-02:45PM

Satisifies Core Requirement: None

Prerequisites: BZAN1137

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

BZAN202108

Coding for Business

Pan, Xiaohong

Spring 2025

An introductory course in coding based on Python (a language suitable for all business and analytics programs) and SQL (Structured Query Language--the main language for working with databases). The course emphasizes coding literacy and teaches coding skills that are relevant for business decision makers.

Credits: 3

Room and Schedule: Fulton Hall 245 MW 03:00PM-04:15PM

Satisifies Core Requirement: None

Prerequisites: BZAN1137

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

BZAN202201

SQL Module

Jernigan, Stephanie A

Spring 2025

This self-paced course covers the basics of Structured Query Language to retrieve data from a database. The course is designed only for those students placing out of BZAN 2021 because they've taken CSCI 1101.

Credits: 0

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: null

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN216501

Intro to Programming using Swift for iOS App Development Gallaugher, John M

Spring 2025

In this fast-paced course, students will learn the Swift programming language and iOS app development skills. Using a "flipped-classroom" approach, the students take lectures in a series of online videos embedded in a web-based course/reference/quiz book, following along with videos as they learn programming concepts and build apps. Although this is a flipped class, expect a challenging course. Class is mandatory (this is NOT an online course) and class time will be used for additional exercises, concept review, and student questions. Students are required to bring a fully-charged Mac laptop to each class with the latest version of Apple's free Xcode software installed (make sure you have access to a Mac that meets these requirements before enrolling). The course assumes no programming background, but students with some experience will likely have an easier time. Students should be prepared to spend significant time each week on self-directed learning and regular programming projects. This course was formerly numbered: ISYS2160.

Credits: 3

Room and Schedule: Fulton Hall 235 M 04:30PM-06:50PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: UNAS2165

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None

Status: Offered

BZAN217501

Physical Computing - Interactive Art, Robotics, and Tech for Good Gallaugher, John M
Spring 2025

Low-cost microcontrollers, sensors, and computing devices like the Raspberry Pi make it possible to create technical projects that humans can physically interact with. This course assumes no prior programming experience but will progress quickly through block-based MakeCode programming, then CircuitPython programming so that all students have coding knowledge necessary to create hardware projects. Students will purchase an amount of hardware and tools similar to the cost of books in a standard course, and we'll use these parts to build a series of projects that control lights, read sensors, produce sound, respond to touch and app control, capture camera images, and more. We'll also build a wheel-based robot, and students will have an opportunity to create and present several original projects and share their work with classmates. This course was formerly numbered: ISYS2170.

Credits: 3

Room and Schedule: Fulton Hall 415 W 04:30PM-06:50PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: UNAS2175

Frequency: null

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN225501

Managing Projects Coakley, Charles E

Spring 2025

This course takes a holistic approach to planning, organizing, and controlling projects. It looks at how projects are uniquely suited to support an organization's strategy in a fast-paced business environment. Topics include project life cycle, algorithms and statistical concepts underlying network planning models, managing risk, and resource allocation. Microsoft Project will be used as to support the planning and monitoring phases of project management. The conceptual part of this course is framed with an eye to the behavioral realities a manager faces and the psychology of managing project teams.

Credits: 3

Room and Schedule: Fulton Hall 245 W 07:00PM-09:30PM

Satisifies Core Requirement: None

Prerequisites: None

Corequisites: None
Cross-listed with: None

Frequency: Every Fall, Every Spring, Every Summer

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN330701

Machine Learning and Artificial Intelligence

Kim, Do Yoon Spring 2025

Machine Learning and Artificial Intelligence won't replace managers in the near term, but managers who use ML and Al well will replace those who don't. Organizations now have too much data and insufficient time for managers to consume data only in spreadsheets. Instead, the future of work involves managers designing models that, for example, segment customers, forecast sales, schedule preventative maintenance, or predict markets. This course addresses both the technical and managerial aspects of these applications. Technically, students use Python to create, evaluate, and tune multiple practical models (e.g., classifiers, trees, neural networks) in supervised and unsupervised machine learning contexts. Managerially, this course examines how organizations create value through Al applications.

Credits: 3

Room and Schedule: 245 Beacon Street Room 125 MW 12:00 Noon-01:15PM

Satisifies Core Requirement: None

Prerequisites: Coding for Business (BZAN2021) or Python equivalent and Statistical Analysis

(BZAN1135) or equivalent.

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN330702

Machine Learning and Artificial Intelligence Kim, Do Yoon Spring 2025 Machine Learning and Artificial Intelligence won't replace managers in the near term, but managers who use ML and AI well will replace those who don't. Organizations now have too much data and insufficient time for managers to consume data only in spreadsheets. Instead, the future of work involves managers designing models that, for example, segment customers, forecast sales, schedule preventative maintenance, or predict markets. This course addresses both the technical and managerial aspects of these applications. Technically, students use Python to create, evaluate, and tune multiple practical models (e.g., classifiers, trees, neural networks) in supervised and unsupervised machine learning contexts. Managerially, this course examines how organizations create value through AI applications.

Credits: 3

Room and Schedule: 245 Beacon Street Room 125 MW 01:30PM-02:45PM

Satisifies Core Requirement: None

Prerequisites: Coding for Business (BZAN2021) or Python equivalent and Statistical Analysis

(BZAN1135) or equivalent.

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

BZAN330703

Machine Learning and Artificial Intelligence Kim, Do Yoon

Spring 2025

Machine Learning and Artificial Intelligence won't replace managers in the near term, but managers who use ML and AI well will replace those who don't. Organizations now have too much data and insufficient time for managers to consume data only in spreadsheets. Instead, the future of work involves managers designing models that, for example, segment customers, forecast sales, schedule preventative maintenance, or predict markets. This course addresses both the technical and managerial aspects of these applications. Technically, students use Python to create, evaluate, and tune multiple practical models (e.g., classifiers, trees, neural networks) in supervised and unsupervised machine learning contexts. Managerially, this course examines how organizations create value through AI applications.

Credits: 3

Room and Schedule: Fulton Hall 220 MW 09:00AM-10:15AM

Satisifies Core Requirement: None

Prerequisites: Coding for Business (BZAN2021) or Python equivalent and Statistical Analysis

(BZAN1135) or equivalent.

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

BZAN331001

Sports Analytics

Neale, John J

Spring 2025

This course will introduce you to the field of sports analytics. We will apply quantitative methods from statistics and management science in a sports context. Our focus will be on-field analysis including player and team evaluation and game strategy. We will cover baseball, football, and basketball in depth with occasional references to other sports. We will also discuss concepts from behavioral economics and psychology that help explain the actions of players, coaches, and referees.

Credits: 3

Room and Schedule: Fulton Hall 150 Tu 04:30PM-06:50PM

Satisifies Core Requirement: None

Prerequisites: A previous course in statistics (BZAN1135 OR BZAN1137), management science (BZAN2235 or BZAN6604), and Excel (BZAN1037 or ISYS1021) plus familiarity with the rules of baseball, football, and basketball.

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN338501

Applied Statistical Modeling

Jernigan, Stephanie A

Spring 2025

This course provides an intensive introduction to methodologies for applying statistical economic techniques to problems in a variety of disciplines. Techniques for both time series and cross-sectional data will be explored, and real data and cases will be used extensively.

Credits: 3

Room and Schedule: Fulton Hall 145 MW 09:00AM-10:15AM

Satisifies Core Requirement: None **Prerequisites:** BZAN1135 or BZAN1137

Corequisites: None

Cross-listed with: None

Frequency: Periodically in the Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN338502

Applied Statistical Modeling Jernigan, Stephanie A

Spring 2025

This course provides an intensive introduction to methodologies for applying statistical economic techniques to problems in a variety of disciplines. Techniques for both time series and cross-sectional data will be explored, and real data and cases will be used extensively.

Credits: 3

Room and Schedule: Fulton Hall 145 MW 10:30AM-11:45AM

Satisifies Core Requirement: None **Prerequisites:** BZAN1135 or BZAN1137

Corequisites: None

Cross-listed with: None

Frequency: Periodically in the Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN344501

Data Visualization

Karpovsky, Anna

Spring 2025

This course covers foundations of data visualization and best practices to help students effectively analyze data and present their insights clearly in a way that will engage their audience. The course provides discussions and presentations on topics such as visual perception, the various chart types and when to use them, the effective use of colors, typography, maps, and other visualization techniques for incorporating analytics and storytelling, and teaches through many examples of compare and contrast. The conceptual discussions will be integrated with hands-on experience using Tableau. This course was formerly numbered: ISYS3445

Credits: 3

Room and Schedule: Fulton Hall 415 MW 03:00PM-04:15PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: null

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN425801

Systems Analysis and Design

Sterpe, Peter J

Spring 2025

This course is required for Information Systems concentrators. The course studies information systems (IS) development including requirements, analysis, design and implementation phases and workflows. We investigate the roles of systems analysts; serving as intermediaries between users, managers, and implementers; and helping each to understand the needs and problems of others. The student will learn about major methods and tools used in the systems development process. Please note that Database Systems and Applications (BZAN3257/CSCI1157) must be completed prior to taking this course. This course was formerly numbered: ISYS4258.

Credits: 3

Room and Schedule: Fulton Hall 423 TuTh 09:00AM-10:15AM

Satisifies Core Requirement: None

Prerequisites: BZAN2021 and either ISYS3257 or ISYS3350

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

BZAN492101

Advanced Independent Study

Steffen, Sebastian

Spring 2025

Investigation of a topic under the direction of a faculty member. Student develops a paper with publication potential

Credits: 3

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring, Every Summer

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN492102

Advanced Independent Study

Dept, Dept

Spring 2025

Investigation of a topic under the direction of a faculty member. Student develops a paper with publication potential

Credits: 3

Room and Schedule: BY ARRANGEMENT Satisifies Core Requirement: None

Prerequisites: Permission of Department

Cross-listed with: None

Frequency: Every Fall, Every Spring, Every Summer

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN492103

Advanced Independent Study

Dept, Dept Spring 2025

Investigation of a topic under the direction of a faculty member. Student develops a paper with publication potential

Credits: 3

Room and Schedule: BY ARRANGEMENT Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring, Every Summer

Student Level: Undergraduate

Comments: None **Status:** Offered

BZAN660401

Management Science

Neale, John J Spring 2025 This course provides an overview of the concepts and methods of management science. Sometimes referred to as prescriptive analytics or decision analytics, management science is a subset of the larger field of business analytics and focuses on the use of math models to make better business decisions. The primary goal of the course is to help you become a more skilled builder and consumer of models. The course will show you how to use Excel spreadsheets effectively for business analysis and introduce you to some of the more important analytic methods including optimization and simulation. These methods will be applied to problems arising in a variety of functional areas including operations, finance, and marketing.STEM-designated.

Credits: 3

Room and Schedule: Fulton Hall 150 W 01:30PM-04:00PM

Satisifies Core Requirement: None

Prerequisites: A previous course in statistics and familiarity with Excel.

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Both Comments: None

Status: Offered

BZAN660402

Management Science

Neale, John J

Spring 2025

This course provides an overview of the concepts and methods of management science. Sometimes referred to as prescriptive analytics or decision analytics, management science is a subset of the larger field of business analytics and focuses on the use of math models to make better business decisions. The primary goal of the course is to help you become a more skilled builder and consumer of models. The course will show you how to use Excel spreadsheets effectively for business analysis and introduce you to some of the more important analytic methods including optimization and simulation. These methods will be applied to problems arising in a variety of functional areas including operations, finance, and marketing.STEM-designated.

Credits: 3

Room and Schedule: Fulton Hall 150 W 04:30PM-06:50PM

Satisifies Core Requirement: None

Prerequisites: A previous course in statistics and familiarity with Excel.

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Both Comments: None Status: Offered

BZAN661201

Forecasting for Business Analytics Ulusoy, Veysel Spring 2025

The theory and practice of applied time series analysis will be explored. First the different segments (trend, seasonality, cyclical, and irregular) of a time series will be analyzed by examining the Autocorrelation functions (ACF) and Partial Autocorrelation functions (PACF). The various types of time series models include linear regression, panel regression, seasonal decomposition, exponential smoothing, and ARIMA modeling as well as combining models. In short, this course will equip you with tools necessary to construct forecasts to inform business decisions. As such, the focus of the course will not be only on tools, but also on how they are used in business. STEM-designated

Credits: 3

Room and Schedule: Fulton Hall 220 W 07:00PM-09:30PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Annually
Student Level: Both
Comments: None
Status: Offered

BZAN665501

Introduction to Blockchain and its Business Applications Evenchik, Leonard N Spring 2025 The objective of this course is to introduce the business of blockchain--a technology that has the potential to drastically alter the way value is stored, exchanged, shared, and distributed. It is the backbone of the next iteration of the Internet: Web 3.0 or The Internet of Value. This course does not require any technical knowledge or prior knowledge of the subject, and is designed to give students a foundational knowledge of blockchain technology and a familiarity with the basic principles that govern blockchain protocols. Students will obtain a fluency in the terms and concepts required to understand how this powerful technology works. Most importantly, students will study real-world applications of the technology, which range far beyond blockchain's original use case (cryptocurrency) and hear from a number of influential guest speakers who are using or investing in blockchain technology at their companies today. Students who complete the course will understand blockchain and cryptocurrency's gamechanging potential, be able to separate fact from hype, and be effective leaders in the space.STEM-designated. This course was formerly numbered: ISYS6655

Credits: 3

Room and Schedule: Fulton Hall 130 Th 04:30PM-06:50PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None Frequency: Every Fall Student Level: Both Comments: None

Status: Offered

BZAN770001
Operations Management
Alev, Isil
Spring 2025

Operations, like accounting, finance and marketing, is one of the primary functions of every organization. Operations managers transform human, physical and technical resources into goods and services. Hence, it is vital that every organization manage this resource conversion effectively and efficiently. How effectively this is accomplished depends upon the linkages between operating decisions and top management (strategic) decisions. The focus of the course is decision-making at the operating level of the firm, converting broad policy directives into specific actions within the organization. Strong emphasis will be placed on the development and use of quantitative models to assist in decision making.

Credits: 3

Room and Schedule: Fulton Hall 415 W 07:00PM-09:30PM

Satisifies Core Requirement: None

Prerequisites: BZAN7703

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring, Every Summer

Student Level: Graduate

Comments: None **Status:** Offered

BZAN770002

Operations Management

Parker, Delvon B

Spring 2025

Operations, like accounting, finance and marketing, is one of the primary functions of every organization. Operations managers transform human, physical and technical resources into goods and services. Hence, it is vital that every organization manage this resource conversion effectively and efficiently. How effectively this is accomplished depends upon the linkages between operating decisions and top management (strategic) decisions. The focus of the course is decision-making at the operating level of the firm, converting broad policy directives into specific actions within the organization. Strong emphasis will be placed on the development and use of quantitative models to assist in decision making.

Credits: 3

Room and Schedule: ASYNCHRONOUS; ONLINE COURSE

Satisifies Core Requirement: None

Prerequisites: BZAN7703

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring, Every Summer

Student Level: Graduate

Comments: None **Status:** Offered

BZAN770301

Managerial Statistics Boardman Liu, Linda Spring 2025

This course teaches the tools and techniques of statistics most commonly used in business. The major topic areas include: populations, random variables, distributions, and sampling; parameter estimation; hypothesis testing; and simple and multiple regression. All topics are taught by application to actual business problems using original data. The course provides the tools students will need for their functional courses, such as finance and marketing, as well as for core courses in business analytics.STEM-designated

Credits: 0

Room and Schedule: ASYNCHRONOUS; ONLINE COURSE

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring, Every Summer

Student Level: Graduate

Comments: None **Status:** Offered

BZAN770601

Data Analytics 1: Model Building

VanderWerf, Pieter A

Machine Learning, big data, data mining, predictive analytics. These are what the course covers. They consist of the creation and use of mathematical computer models to predict important quantities and events with uncanny accuracy. As one book put it, "Who clicks, who buys, and who dies." The course teaches both the principles and the details of the major methods of making and applying these models to actual business problems. To produce models on the computer, students also learn the R coding language. This is the preferred high-level software for Machine Learning and statistical applications.STEM-designated

Credits: 3

Room and Schedule: On-line Asynchronous

Satisifies Core Requirement: None

Prerequisites: BZAN7703

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring, Every Summer

Student Level: Graduate

Comments: None **Status:** Offered

BZAN770602

Data Analytics 1: Model Building

VanderWerf, Pieter A

Spring 2025

Machine Learning, big data, data mining, predictive analytics. These are what the course covers. They consist of the creation and use of mathematical computer models to predict important quantities and events with uncanny accuracy. As one book put it, "Who clicks, who buys, and who dies." The course teaches both the principles and the details of the major methods of making and applying these models to actual business problems. To produce models on the computer, students also learn the R coding language. This is the preferred high-level software for Machine Learning and statistical applications.STEM-designated

Credits: 3

Room and Schedule: Fulton Hall 115 W 07:00PM-09:30PM

Satisifies Core Requirement: None

Prerequisites: BZAN7703

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring, Every Summer

Student Level: Graduate

Comments: None **Status:** Offered

BZAN770701

Data Analytics 2: Data Management for Analytics

Evenchik, Leonard N

Spring 2025

Information Technology (IT) and Data Analytics now permeate the strategy, structure, and operations of modern enterprises, and new business practices have led to an orders of magnitude increase in the amount of data available for analysis and decision-making. It is essential that managers develop a deep understanding of how data can be structured, captured, and queried in order to support operations, decision-making, and strategic insight. At the same time, managers must become fluent with IT so that they can promote innovative strategic initiatives that are increasingly data and IT dependent. In this course, students will develop an understanding of IT theory and practice, study key emerging technologies, and develop their ability to identify new opportunities made possible by IT. This course will also provide students with a deep understanding of data and analytics by exploring how business processes are analyzed, data is modeled (using entity relationship diagrams), databases are designed, and data is queried using SQL. This combination of theory and practice will allow students to develop their ability to identify and take advantage of the new opportunities now made possible by data analytics and Information Technology. The on-campus section of this course (BZAN7707) will meet weekly on campus. Please note that the online asynchronous section of this course will also include two or three synchronous web conferences during the semester. Please review the course syllabus for the schedule for these web conferences, or contact the instructor. STEM-designated This course was formerly numbered: ISYS7700

Credits: 3

Room and Schedule: Fulton Hall 130 Th 07:00PM-09:30PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Graduate

Comments: None **Status:** Offered

BZAN770702

Data Analytics 2: Data Management for Analytics

Evenchik, Leonard N

Spring 2025

Information Technology (IT) and Data Analytics now permeate the strategy, structure, and operations of modern enterprises, and new business practices have led to an orders of magnitude increase in the amount of data available for analysis and decision-making. It is essential that managers develop a deep understanding of how data can be structured, captured, and gueried in order to support operations, decision-making, and strategic insight. At the same time, managers must become fluent with IT so that they can promote innovative strategic initiatives that are increasingly data and IT dependent. In this course, students will develop an understanding of IT theory and practice, study key emerging technologies, and develop their ability to identify new opportunities made possible by IT. This course will also provide students with a deep understanding of data and analytics by exploring how business processes are analyzed, data is modeled (using entity relationship diagrams), databases are designed, and data is gueried using SQL. This combination of theory and practice will allow students to develop their ability to identify and take advantage of the new opportunities now made possible by data analytics and Information Technology. The on-campus section of this course (BZAN7707) will meet weekly on campus. Please note that the online asynchronous section of this course will also include two or three synchronous web conferences during the semester. Please review the course syllabus for the schedule for these web conferences, or contact the instructor. STEM-designated This course was formerly numbered: ISYS7700

Credits: 3

Room and Schedule: On-line Asynchronous

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Graduate

Comments: None **Status:** Offered

BZAN770801

Data Analytics 3: In Practice

Beebe, Jonathan R

Spring 2025

Modern information systems now generate massive volumes of data. Organizations everywhere struggle to aggregate, analyze, and monetize the growing deluge of data. Business Analytics capitalizes on this data by combining statistical and quantitative analysis, explanatory and predictive modeling, and fact-based management. Managers can explore patterns, predict future trends and develop proactive, knowledge-driven decisions that affect all parts of modern organizations. This course provides students with a pragmatic familiarity with the capabilities and limitations of emerging analytics techniques, an introduction to Python, an overview of methods and tools, and a core understanding required to be an intelligent manager, designer, and consumer of analytics models. STEM-designated This course was formerly numbered: ISYS7705

Credits: 3

Room and Schedule: On-line Asynchronous

Satisifies Core Requirement: None

Prerequisites: BZAN7703 and BZAN7706

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Graduate

Comments: None **Status:** Offered

BZAN770802

Data Analytics 3: In Practice

Beebe, Jonathan R

Modern information systems now generate massive volumes of data. Organizations everywhere struggle to aggregate, analyze, and monetize the growing deluge of data. Business Analytics capitalizes on this data by combining statistical and quantitative analysis, explanatory and predictive modeling, and fact-based management. Managers can explore patterns, predict future trends and develop proactive, knowledge-driven decisions that affect all parts of modern organizations. This course provides students with a pragmatic familiarity with the capabilities and limitations of emerging analytics techniques, an introduction to Python, an overview of methods and tools, and a core understanding required to be an intelligent manager, designer, and consumer of analytics models. STEM-designated This course was formerly numbered: ISYS7705

Credits: 3

Room and Schedule: Fulton Hall 245 Th 07:00PM-09:30PM

Satisifies Core Requirement: None

Prerequisites: BZAN7703 and BZAN7706

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Graduate

Comments: None **Status:** Offered

BZAN771801

Data Analytics 3: In Practice

Beebe, Jonathan R

Modern information systems now generate massive volumes of data. Organizations everywhere struggle to aggregate, analyze, and monetize the growing deluge of data. Business Analytics capitalizes on this data by combining statistical and quantitative analysis, explanatory and predictive modeling, and fact-based management. Managers can explore patterns, predict future trends and develop proactive, knowledge-driven decisions that affect all parts of modern organizations. This course provides students with a pragmatic familiarity with the capabilities and limitations of emerging analytics techniques, an introduction to Python, an overview of methods and tools, and a core understanding required to be an intelligent manager, designer and consumer of analytics models. STEM-designated This course was formerly numbered: ISYS7730

Credits: 2

Room and Schedule: Fulton Hall 130 MW 11:00AM-01:00PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: null

Student Level: Graduate

Comments: None **Status:** Offered

BZAN771802

Data Analytics 3: In Practice

Beebe, Jonathan R

Modern information systems now generate massive volumes of data. Organizations everywhere struggle to aggregate, analyze, and monetize the growing deluge of data. Business Analytics capitalizes on this data by combining statistical and quantitative analysis, explanatory and predictive modeling, and fact-based management. Managers can explore patterns, predict future trends and develop proactive, knowledge-driven decisions that affect all parts of modern organizations. This course provides students with a pragmatic familiarity with the capabilities and limitations of emerging analytics techniques, an introduction to Python, an overview of methods and tools, and a core understanding required to be an intelligent manager, designer and consumer of analytics models. STEM-designated This course was formerly numbered: ISYS7730

Credits: 2

Room and Schedule: Fulton Hall 130 MW 08:30AM-10:30AM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: null

Student Level: Graduate

Comments: None **Status:** Offered

BZAN772001

Operations Management

Alev, Isil

Spring 2025

This course discusses the resource structure and the execution of activities that produce goods or deliver services. It focuses on the design and integration of the supply chain processes that support a company's business strategy. It offers a blend of the theory and practice of operations management. At the same time, the course shows the role of quantitative techniques in guiding the operations decisions. The pedagogy involves lecture, readings, and discussion of case studies.STEM-designated

Credits: 2

Room and Schedule: Fulton Hall 130 TuTh 11:00AM-01:00PM

Satisifies Core Requirement: None

Prerequisites: BZAN7703

Corequisites: None

Cross-listed with: None **Frequency:** Every Spring **Student Level:** Graduate

Comments: None **Status:** Offered

BZAN772002

Operations Management

Alev, Isil

Spring 2025

This course discusses the resource structure and the execution of activities that produce goods or deliver services. It focuses on the design and integration of the supply chain processes that support a company's business strategy. It offers a blend of the theory and practice of operations management. At the same time, the course shows the role of quantitative techniques in guiding the operations decisions. The pedagogy involves lecture, readings, and discussion of case studies.STEM-designated

Credits: 2

Room and Schedule: Fulton Hall 130 TuTh 08:30AM-10:30AM

Satisifies Core Requirement: None

Prerequisites: BZAN7703

Corequisites: None

Cross-listed with: None Frequency: Every Spring Student Level: Graduate

Comments: None **Status:** Offered

BZAN802101

Coding for Business Sterpe, Peter J Spring 2025 This is an introductory course in computer programming based on Python (a language suitable for all business and analytics programs). The course emphasizes coding literacy and teaches coding skills that are relevant for business decision makers. MBA DA3 is a prerequisite. This course will give students the knowledge and confidence to apply coding to a business problem, and the ability to go from a problem statement to a repeatable set of steps for solving the problem in a general way. It will enable students who might not code professionally to work effectively with colleagues who do, and it will equip interested students to develop significant programs of their own.STEM-designated.

Credits: 2

Room and Schedule: Devlin Hall 117 TuTh 04:30PM-06:30PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Periodically in the Spring

Student Level: Graduate

Comments: None **Status:** Offered

BZAN803001

Managing Projects

Chirkova, Aza

Spring 2025

This course takes a holistic approach to planning, organizing, and controlling projects. It looks at how projects are uniquely suited to support an organization's strategy in a fast-paced business environment. Topics include project life cycle, algorithms and statistical concepts underlying network planning models, managing risk and resource allocation. It emphasizes the use of effective interpersonal and communication skills to organize, plan, and control the project team.

Credits: 2

Room and Schedule: Fulton Hall 130 MW 08:30AM-10:30AM

Satisifies Core Requirement: None

Prerequisites: BZAN7700

Corequisites: None

Cross-listed with: None

Frequency: Periodically in the Spring

Student Level: Graduate

Comments: None **Status:** Offered

BZAN806701

Machine Learning & Artificial Intelligence VanderWerf, Pieter A

Spring 2025

This course builds on Data Analytics 1 to provide students with advanced tools and skills forMachine learning (ML) in business practice. On the technical side, the course content extends to a wider range of algorithms as well as advanced methods for data sampling and model building and evaluation. More depth in application comes from student reports on current events in Machine Learning, and a course project that involves complete model construction and analysis for an actual business problem with an actual corporate data set. The course assumes the student has experience with the basic machine learning algorithms and the R codinglanguage.STEM-designated.

Credits: 3

Room and Schedule: On-line Asynchronous

Satisifies Core Requirement: None

Prerequisites: Prior to this course, students should have completed BZAN7703 (Managerial

Statistics) and either BZAN7706 or BZAN7716 (DA1: Model Building).

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Graduate

Comments: None **Status:** Offered

BZAN816501

Intro to Programming using Swift for iOS App Development Gallaugher, John M Spring 2025 In this fast-paced course, students will learn the Swift programming language and iOS app development skills. Using a "flipped-classroom" approach, the students take lectures in a series of online videos embedded in a web-based course/reference/quiz book, following along with videos as they learn programming concepts and build apps. Although this is a flipped class, expect a challenging course. Class is mandatory (this is NOT an online course) and class time will be used for additional exercises, concept review, and student questions. Students are required to bring a fully-charged Mac laptop to each class with the latest version of Apple's free Xcode software installed (make sure you have access to a Mac that meets these requirements before enrolling). The course assumes no programming background, but students with some experience will likely have an easier time. Students should be prepared to spend significant time each week on self-directed learning and regular programming projects. This course was formerly numbered: ISYS2160.

Credits: 3

Room and Schedule: Fulton Hall 235 M 04:30PM-06:50PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Graduate

Comments: None **Status:** Offered

BZAN817501

Physical Computing - Interactive Art, Robotics, and Tech for Good Gallaugher, John M
Spring 2025

Low-cost microcontrollers, sensors, and computing devices like the Raspberry Pi make it possible to create technical projects that humans can physically interact with. This course assumes no prior programming experience but will progress quickly through block-based MakeCode programming, then CircuitPython programming so that all students have coding knowledge necessary to create hardware projects. Students will purchase an amount of hardware and tools similar to the cost of books in a standard course, and we'll use these parts to build a series of projects that control lights, read sensors, produce sound, respond to touch and app control, capture camera images, and more. We'll also build a wheel-based robot, and students will have an opportunity to create and present several original projects and share their work with classmates. This course was formerly numbered: ISYS2170.

Credits: 3

Room and Schedule: Fulton Hall 415 W 04:30PM-06:50PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: null

Student Level: Graduate

Comments: None **Status:** Offered

BZAN844501

Data Visualization Karpovsky, Anna

Spring 2025

This course covers foundations of data visualization and best practices to help students effectively analyze data and present their insights clearly in a way that will engage their audience. The course provides discussions and presentations on topics such as visual perception, the various chart types and when to use them, the effective use of colors, typography, maps, and other visualization techniques for incorporating analytics and storytelling, and teaches through many examples of compare and contrast. The conceptual discussions will be integrated with hands-on experience using Tableau. STEM-designated. This course was formerly numbered: ISYS8445

Credits: 3

Room and Schedule: On-line Asynchronous

Satisifies Core Requirement: None

Prerequisites: None
Corequisites: None

Cross-listed with: None

Frequency: null

Student Level: Graduate

Comments: None **Status:** Offered

BZAN849701

Directed Readings

Graves, Samuel B

Spring 2025

Extensive reading under the direction of a faculty member. Student presents written critiques of the reading as well as comparisons between readings.

Credits: 3

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Graduate

Comments: None **Status:** Offered

BZAN849801

Directed Research I

Graves, Samuel B

Spring 2025

Investigation of a topic under the direction of a faculty member. Student develops a paper with publication potential.

Credits: 3

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: With permission of the department chairperson. or Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Graduate

Comments: None **Status:** Offered

BZAN880401

Quality Management

Field, Joy M Spring 2025

This course focuses on quality management as a critical operations management capability. Students will explore a variety of quality programs and tools with an emphasis on the Six Sigma approach to quality analysis and process improvement in both services and goods producing operations. During the course students will have an opportunity to pursue Six Sigma Green Belt certification. STEM-Designated

Credits: 3

Room and Schedule: On-line Asynchronous

Satisifies Core Requirement: None

Prerequisites: BZAN7703

Corequisites: None

Cross-listed with: None

Frequency: Periodically in the Spring

Student Level: Graduate

Comments: None **Status:** Offered

BZAN881001

Sports Analytics
Parker, Delvon B

This course will introduce you to the field of sports analytics. We will apply quantitative methods from statistics and management science in a sports context. Our focus will be on-field analysis including player and team evaluation and game strategy. We will cover baseball, football, and basketball in depth with occasional references to other sports. We will also discuss concepts from behavioral economics and psychology that help explain the actions of players, coaches, and referees.STEM-designated

Credits: 3

Room and Schedule: Fulton Hall 423 M 07:00PM-09:30PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: null

Student Level: Graduate

Comments: None **Status:** Offered

BZAN889901

Directed Study

Graves, Samuel B

Spring 2025

The student will work under the direction of a professor with whom he or she has made specific advance arrangements.

Credits: 3

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: With permission of the Department Chairperson or Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Periodically in the Fall, Periodically in the Spring

Student Level: Graduate

Comments: None **Status:** Offered