

# Bachelor of Science in Business Analytics

The Bachelor of Science in Business Analytics teaches you how to apply data analytics and mining techniques to help you meet your organization's business objectives. You'll be given problem-solving exercises working with fictional data sets and analysis for hands-on learning. The curriculum will prepare you to collect and analyze data in order to help you to tackle difficulties in business processes and create better tools for decision-making. Regardless of your industry, acquiring training in business intelligence is good preparation for positions as a business analyst, analytic system designer, or data scientist.

## Degree Program Objectives

In addition to the institutional and degree level learning objectives, graduates of this program are expected to achieve these learning outcomes:

- Integrate the various statistical analytics outputs and applications.
- Implement the models and add-ins used by Excel to process statistical data.
- Deconstruct student experiences with real time analytics applications and work problems.
- Produce a functional or chronological analytic project, along with an appropriate display and interpretation of results, findings, and recommendations for decision makers.
- Integrate key issues and topics in a reflective essay from the overall program experience.

## Degree at a Glance

Code	Title	Semester Hours
	General Education Requirements	30
	Major Required	39
	Select one concentration from the following:	9
	General (p. 3)	
	Accounting (p. 3)	
	Entrepreneurship (p. 3)	
	Human Resources (p. 4)	
	Marketing (p. 4)	
	Retail Management (p. 4)	
	Security and Intelligence (p. 5)	
	Final Program Requirements	6

Elective Requirements	36
Total Semester Hours	120

## Degree Program Requirements

### General Education Requirements (30 semester hours)

Code	Title	Semester Hours
<b>Arts and Humanities (6 semester hours)<sup>1</sup></b>		
Select 2 courses from the following:		6
ARAB100	Arabic I	
ARAB101	Arabic II	
ARTH200	Art Appreciation	
ARTH241	Film and Literature	
DSIN141	Image Enhancement using Adobe Photoshop	
FREN100	French I	
FREN101	French II	
GERM100	German I	
GERM101	German II	
JAPN100	Introduction to Japanese	
LITR215	Literature of American Encounters, Revolution, and Rebellion	
LITR218	From Abolition to #MeToo: Literature of the American Civil Rights Movement	
LITR222	Pivotal Figures in Early British Literature	
LITR225	British Literature from Wordsworth through the Wasteland	
LITR231	Leadership in World Literature: Antiquity to the Early Modern Period	
LITR233	Literature of the Newly Globalized World: The Individual's Struggle to Adapt	
MUSI200	Music Appreciation	
MUSI250	World Music and Cultures	
PHIL101	Introduction to Philosophy	
PHIL110	Critical Thinking	
PHIL200	Introduction to Ethics	
PHIL202	Philosophy of Science	
PORT100	Introduction to Brazilian Portuguese	
RELS201	Introduction to World Religions	
RUSS100	Russian I	
SPAN100	Spanish I	
SPAN101	Spanish II	
STEM270	Thinking and Acting Ethically	
<b>Civics, Political and Social Sciences (6 semester hours)<sup>1</sup></b>		

Select 1 course from the following: 3

ECON201 Microeconomics for Business

ECON202 Macroeconomics for Business

Select 1 course from the following: 3

ANTH100 Introduction to Anthropology

ANTH202 Introduction to Cultural Anthropology

CHFD220 Human Sexuality

COMM211 Social Media and Society

COMM240 Intercultural Communication

EDUC200 Humane Education: A Global Interdisciplinary Perspective

GEOG101 Introduction to Geography

HOSP110 Practical Food Safety and Awareness

IRLS210 International Relations I

LITR212 Forgotten America--Under Represented Cultures in American Literature

LITR235 Four Points of the Compass: Culture and Society Around the World

POLS101 Introduction to Political Science

POLS210 American Government I

PSYC101 Introduction to Psychology

SOCI111 Introduction to Sociology

SOCI212 Social Problems

SOCI220 American Popular Culture

STEM280 Exploring Society and Cultures via Science Fiction

**Communication: Writing, Oral, and Multimedia (9 semester hours)**

COMM120 Information and Digital Literacy 3

ENGL110 Making Writing Relevant 3

Select 1 course from the following: 3

COMM200 Public Speaking

ENGL101 Proficiency in Writing

ENGL115 Argumentation and Rhetoric

ENGL210 Introduction to Literature

ENGL221 Scientific Writing

ENGL220 Technical Writing

ENGL226 Effective Business Communication

HRMT101 Human Relations Communication

IRLS200 Information Literacy and Global Citizenship

ITCC231 Introduction to Information Technology Writing

MGMT100 Human Relations

**History (3 semester hours)**

Select 1 course from the following: 3

HIST101 American History to 1877

HIST102 American History since 1877

HIST111 World Civilization before 1650

HIST112 World Civilization since 1650

HIST121 Western Civilization before The Thirty Years War

HIST122 Western Civilization since The Thirty Years War

HIST221 African-American History before 1877

HIST222 African-American History since 1877

HIST223 History of the American Indian

HIST270 History of Science

STEM185 The History and Context of STEM

**Mathematics and Applied Reasoning (3 semester hours)**

MATH110 College Algebra 3

**Natural Sciences (3 semester hours)**

Select 1 course from the following: 3

BIOL180 Introduction to Biology

BIOL181 Introduction to Human Anatomy and Physiology

CHEM180 Introduction to Chemistry

ERSC180 Introduction to Meteorology

ERSC181 Introduction to Geology

EVSP180 Introduction to Environmental Science

PHYS180 Introduction to Physics

SPST180 Introduction to Astronomy

STEM100 Introduction to STEM Disciplines

Total Semester Hours 30

<sup>1</sup> All literature courses require successful completion of ENGL101 - Proficiency in Writing or ENGL110 - Making Writing Relevant.

**Major Required (39 semester hours)**

Code	Title	Semester Hours
ACCT105	Accounting for Non Accounting Majors	3
BUSN100	Basics of Business	3
MGMT101	Principles of Supervision	3
MKTG201	Fundamentals of Marketing	3
ITCC200	Application Software Integration	3
BUSN311	Law and Ethics in the Business Environment	3
BUSN312	Operations Research	3
BUSN410	Critical Thinking Strategies for Business Decisions	3
FINC300	Foundations of Financial Management	3
MATH302	Statistics	3
BUSN250	Analytics I	3
BUSN350	Analytics II	3
BUSN450	Advanced Analytics	3

Total Semester Hours 39

Students must choose a concentration for this degree program and may select from a General Concentration, Concentration in Accounting, Concentration in Entrepreneurship, Concentration in Human Resources, Concentration in Marketing, Concentration in Retail Management, or a Concentration in Security and Intelligence.

### General Concentration (9 semester hours)

A general concentration allows you to take courses across a number of areas of study within your program based on your own interests.

#### Concentration Requirements (9 semester hours)

Code	Title	Semester Hours
ANLY460	Applied Analytics I	3
ANLY461	Applied Analytics II	3
ANLY462	Applied Analytics III	3
Total Semester Hours		9

### Concentration in Accounting (9 semester hours)

This concentration offers the opportunity to Business Analytics students to get exposure and a bit of knowledge about Accounting processes and management and how students can leverage data and analytics tools to Accounting areas. This concentration satisfies the growing trend of Accounting Analytics. Students who successfully complete this concentration will be able to apply analytics tools to solve accounting problems and support decision making in accounting.

#### Objectives

Upon successful completion of this concentration, the student will be able to:

- Research and appraise historic, current, and developing methodologies in business and big data analytics and apply them appropriately to accounting & financial transactions.
- Demonstrate knowledge of the ethical framework for accountants adopted by professional accounting organizations, and accounting principles.
- Analyze, evaluate, and organize financial data to facilitate managerial decision making in accounting.
- Conduct an in-depth analysis of an organization's financial information and provide a written assessment of the results.

### Concentration Requirements (9 semester hours)

Code	Title	Semester Hours
Select 3 courses from the following:		9
ACCT202	Introduction to Payroll	
ACCT300	Financial Accounting	
ACCT301	Intermediate Accounting I	
ACCT302	Intermediate Accounting II	
ACCT303	Intermediate Accounting III	
ACCT305	Accounting Information Systems	
ACCT400	Auditing	
ACCT406	Managerial/Cost Accounting	
ACCT410	Governmental and Not-for-Profit Accounting	
ACCT415	Law for Accountants	
ACCT420	Individual Federal Taxes	
Total Semester Hours		9

### Concentration in Entrepreneurship (9 semester hours)

This concentration offers a unique skill for entrepreneurs who are looking to make informed decision and to solve business problems.

#### Objectives

Upon successful completion of this concentration, the student will be able to:

- Research and appraise historic, current, and developing methodologies in business and big data analytics and apply them appropriately to manage the operations of a wide variety of Entrepreneurship aspects
- Demonstrate knowledge of the data analytics framework adopted by and for Entrepreneurship functions associated with owning and operating a business.
- Analyze, evaluate, and organize Entrepreneurship data, to facilitate problem solving, and decision making in all functions associated with owning and operating a business, where data is collected and utilized.

### Concentration Requirements (9 semester hours)

Code	Title	Semester Hours
Select 3 courses from the following:		9
ENR150	Idea Generation	
ENR311	Business Plan Foundations	
ENR320	Practical Law for the Entrepreneur	

ENTR315 Financing a New Venture

Total Semester Hours 9

## Concentration in Human Resources (9 semester hours)

This concentration offers the opportunity to Business Analytics students to get exposure and a bit of knowledge about Human Resource processes & management, and how students can leverage data and analytics tools to HR areas like Compensation and Benefits, Information Systems, or Recruitment and Staffing. This concentration satisfies the growing trend of HR Analytics. Students who successfully complete this concentration will be able to apply analytics tools to solve HR problems and support decision making in HR.

### Objectives

Upon successful completion of this concentration, the student will be able to:

- Research and appraise historic, current, and developing methodologies in business and big data analytics and apply them appropriately to Human Resource Management and operations.
- Demonstrate knowledge of the ethical framework for accountants adopted by businesses professional organizations, and Human Resource Management principals.
- Analyze, evaluate, and organize employee’s financial data, administrative data, information data, and Human Resource Management data, to facilitate managerial decision making.
- Conduct an in-depth analysis of an organization’s personnel and Human Resource Management information, and provide a written assessment of the results.

### Concentration Requirements (9 semester hours)

Code	Title	Semester Hours
Select 3 courses from the following: 9		
HRMT407	Human Resource Management	
HRMT412	Compensation and Benefits	
HRMT415	Human Resource Management Information Systems	
HRMT419	Recruitment and Staffing	
Total Semester Hours		9

## Concentration in Marketing (9 semester hours)

This concentration offers the opportunity to Business Analytics students to get exposure and a bit of knowledge about Security and Intelligence processes related to national and international security elements, and

how students can leverage data and analytics tools to Security and Intelligence areas like Threat Analysis, Intel and Homeland Security, Intelligence Analysis, Cyber Warfare, Narcotics, Terrorism and US National Security. This concentration satisfies the growing trend of Intelligence Analytics. Students who successfully complete this concentration will be able to apply analytics tools to solve Security and Intelligence problems and support decision making.

### Objectives

Upon successful completion of this concentration, the student will be able to:

- Research and appraise historic, current, and developing methodologies in business and big data analytics and apply them appropriately to Marketing.
- Demonstrate knowledge of the ethical framework for marketers and marketing professionals adopted by businesses professional organizations, and marketing principals.
- Analyze, evaluate, and understand market dynamics & trends, sales and marketing data, to facilitate managerial decision making.
- Conduct an in-depth analysis of an organization’s sales and marketing information, and provide a written assessment of the results.

### Concentration Requirements (9 semester hours)

Code	Title	Semester Hours
Select 3 courses from the following: 9		
MKTG305	Advertising	
MKTG400	Marketing Research	
MKTG401	Marketing Strategy	
MKTG403	Marketing Management	
Total Semester Hours		9

## Concentration in Retail Management (9 semester hours)

This concentration offers a unique qualification and skill for problem solving for students interested in joining the retail industry as it grows to amass trillions of dollars in revenues worldwide, especially online retail data and transactions.

### Objectives

Upon successful completion of this concentration, the student will be able to:

- Research and appraise historic, current, and developing methodologies in business and big data analytics and apply them appropriately to manage the operations of a wide variety of retail businesses fields.
- Demonstrate knowledge of the data analytics framework adopted by and for retail management (including merchandizing, customer service, etc.) professionals and/or organizations, and analysis principals.
- Analyze, evaluate, and organize retail management data, to facilitate problem solving, and decision making in all areas of retail management where data is collected and utilized.

### Concentration Requirements (9 semester hours)

Code	Title	Semester Hours
Select 3 courses from the following:		
RTMG201	Retail Inventory Management	9
RTMG300	Retail Strategy	
RTMG302	Retail Operations	
RTMG303	Retail Merchandising Operations	
Total Semester Hours		9

### Concentration in Security and Intelligence (9 semester hours)

This concentration offers the opportunity to Business Analytics students to get exposure and a bit of knowledge about Security and Intelligence processes related to national and international security elements, and how students can leverage data and analytics tools to Security and Intelligence areas like Threat Analysis, Intel and Homeland Security, Intelligence Analysis, Cyber Warfare, Narcotics, Terrorism and US National Security. This concentration satisfies the growing trend of Intelligence Analytics. Students who successfully complete this concentration will be able to apply analytics tools to solve Security and Intelligence problems and support decision making.

#### Objectives

Upon successful completion of this concentration, the student will be able to:

- Research and appraise historic, current, and developing methodologies in business and big data analytics and apply them appropriately to Terrorism, Security & Intelligence fields.
- Demonstrate knowledge of the data analytics framework adopted by security & intelligence professionals and/or organizations, and analysis principals.

- Analyze, evaluate, and organize Terrorism, Security, War & Intelligence data, to facilitate tactical & strategic problem solving, and decision making.
- Conduct an in-depth analysis of an organization's Security & Intelligence information, and provide a written assessment of the data analytics results & interpretations.

### Concentration Requirements (9 semester hours)

Code	Title	Semester Hours
Select 3 courses from the following:		
INTL401	Critical Analysis	9
INTL434	Threat Analysis	
HLSS320	Intelligence and Homeland Security	
INTL402	Intelligence Analysis	
INTL440	Cyber Warfare	
INTL446	Intelligence and Narcotics	
INTL451	Terrorism and U.S. National Security	
INTL453	Illicit Finance	
CMRJ320	Law Enforcement Intelligence Applications	
Total Semester Hours		9

### Final Program Requirements (6 semester hours)

Code	Title	Semester Hours
ANLY499	Analytics Senior Seminar (to be taken as the last course before graduation) <sup>1</sup>	6
Total Semester Hours		6

<sup>1</sup> Prerequisite: Senior Standing and completion of all major courses prior to enrollment.

### Elective Requirements (36 semester hours)

Select any courses that have not been used to fulfill major requirements. Credits applied toward a minor or certificate in an unrelated field may be used to fulfill elective credit for the major.