

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

General Education Requirements	30
Major Required	39
Select one concentration from the following:	9
General (p. 2)	
Accounting (p. 2)	
Human Resources (p. 3)	
Marketing (p. 3)	
Security and Intelligence (p. 4)	
Final Program Requirements	6
Elective Requirements	36
Total Semester Hours	120

Degree Program Requirements

General Education Requirements (30 semester hours)

Arts and Humanities (6 semester hours)¹

Select 2 courses from the following:	6
ARTH200 Art Appreciation	
ARTH241 Film and Literature	
DSIN141 Image Enhancement using Adobe Photoshop	
LITR201 World Literature through the Renaissance	
LITR202 World Literature since the Renaissance	
LITR210 English Literature: Beowulf to 18th Century	
LITR211 English Literature: 18th Century to Present	
LITR220 American Literature before The Civil War	
LITR221 American Literature from The Civil War to Present	
ARAB100 Arabic I	
ARAB101 Arabic II	
FREN100 French I	
FREN101 French II	
GERM100 German I	
GERM101 German II	
JAPN100 Introduction to Japanese	
MUSI200 Music Appreciation	
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	

Civics, Political and Social Sciences (6 semester hours)¹

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
LITR204	Contemporary World Culture Through Literature
LITR205	Cultural Diversity in Contemporary American Literature
POLS210	American Government I
PSYC101	Introduction to Psychology
SOCI111	Introduction to Sociology
SOCI212	Social Problems
SOCI220	American Popular Culture

Communication: Writing, Oral, and Multimedia (8 semester hours)

COMM110	Information & Digital Literacy	2
ENGL110	Making Writing Relevant	3
Select 1 course from the following:		3
COMM200	Public Speaking	
ENGL102	Effectiveness in Writing	
ENGL200	Composition and Literature	
ENGL221	Scientific Writing	
ENGL220	Technical Writing	
ENGL225	Business Writing	
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	

Mathematics and Applied Reasoning (3 semester hours)

MATH110	College Algebra	3
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Natural Sciences with Lab (4 semester hours)

Select 1 course from the following:		4
SCIN130	Introduction to Biology with Lab	
SCIN131	Introduction to Chemistry with Lab	
SCIN132	Introduction to Human Anatomy & Physiology with Lab	

SCIN133	Introduction to Physics with Lab	
SCIN134	Introduction to Astronomy with Lab	
SCIN137	Introduction to Meteorology with Lab	
SCIN140	Introduction to Environmental Science with Lab	

Total Semester Hours 30

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

Major Required (39 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 Human Resources, Concentration in Marketing, 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.

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.

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 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.

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.

Select 3 courses from the following: 9

MKTG305	Advertising
MKTG400	Marketing Research
MKTG401	Marketing Strategy
MKTG403	Marketing Management

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.

Select 3 courses from the following: 9

INTL401	Critical Analysis
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)

ANLY499	Analytics Senior Seminar (to be taken as the last course before graduation) ¹	6
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Total Semester Hours 6

¹ 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.