

BUSINESS ANALYTICS

What can I do with this major?

AREAS

EMPLOYERS

STRATEGIES

BUSINESS ANALYTICS

Data collection/Data mining
Experiment design
Data analysis
Decision analysis and modeling
Predictive analytics
Customer loyalty and selection programs
Marketing strategy development
Fraud detection
Applied statistics
Process optimization
Operations research/Management
Manufacturing design
Supply chain management
Information technology
Database administration
Program/Project management
Consulting
Service analytics
Artificial Intelligence
Behavioral analytics
Cyber security

Nearly all industries need business analytics:

Retail, online retail
Software and technology
Telecommunications
Financial services and banking
Insurance
Manufacturing
Consumer products
Sports
Supply chain
Transportation
Consulting
Entertainment
Hospitality
Healthcare
Government/Public sector
Nonprofit organizations

Seek broad exposure to business principles while honing statistics and quantitative skills.
Gain relevant experience through an internship in an industry of interest.
Develop excellent information technology, database management, and programming skills.
Learn to use relevant software or tools such as Apache Hadoop, SQL, R, Python, and SPSS.
Earn industry certifications (e.g., SAS and Google) when possible.
Learn to work effectively on interdisciplinary teams and how to communicate data intensive information to colleagues. Hone presentation skills.
Develop strong analytical skills and a logical approach to problem solving.
Get involved in campus organizations and seek leadership roles.
Conduct informational interviews with professionals to learn about various industries or functional areas because business analytics professionals can fit into a wide array of positions.
Consider earning a master's degree to qualify for advanced opportunities.
Stay abreast of industry developments through professional societies and websites dedicated to business analytics, data mining, information technology, or other relevant topics.

AREAS

EMPLOYERS

STRATEGIES

OPERATIONS MANAGEMENT

Operations research analysis:

Business strategy

Facilities layout

Inventory control

Personnel scheduling

Production management:

Line supervision

Manufacturing management

Production planning

Quality assurance

Materials management:

Purchasing/buying

Traffic management

Inventory management

Manufacturers

Industrial organizations

Service organizations

Develop strong analytical skills and a logical approach to problem solving. Skills in budgeting and cost management are also important.

Take courses in statistics, computer systems, or logistics. This is a more technical side of management.

Learn to manage multiple situations and problems.

Be able to communicate effectively with different types of people in various functional areas.

Earn an MBA to reach the highest levels of operations management.

BANKING AND FINANCE

Corporate and consumer credit analysis

Commercial lending

Trust management

Capital services

Mergers and acquisitions

Mortgage loans

Originations and packaging

Branch management

Operations

Cash management

Credit scoring and risk management

Private banking

Financial analysis

Investment banking

Commercial banks

Credit unions

Savings and loan associations

Savings banks

Mortgage banks

Captive finance companies

Brokerage firms

Regulatory agencies:

Federal Reserve

Federal Deposit Insurance Corporation (FDIC)

Office of the Comptroller of the Currency (OCC)

Office of Thrift Supervision (OTS)

Build a solid background in business including marketing, finance, and accounting.

Gain experience through part-time, summer, or internship positions in a financial services firm.

Develop strong interpersonal and communication skills in order to work well with a diverse clientele.

Plan to earn an MBA to enter investment banking.

Research professional certifications that may be valuable in this field.

AREAS

INSURANCE

Actuary science
Risk management/Assessment
Loss management/Control
Underwriting
Asset management
Claims
Sales
Customer service

EMPLOYERS

Insurance firms
Insurance agents and brokers
Professional, scientific, and technical consulting firms
Government agencies

STRATEGIES

Take additional courses in mathematics and finance. Complete an internship with an insurance agency to gain relevant experience.

Talk to professionals in the industry to learn more about claims, underwriting, and risk management. Many entry-level positions exist in these areas.

Develop strong communication skills as many positions require interaction with others and the ability to explain information clearly and concisely.

Learn how to use statistical analysis software and various computer programming languages.

For Actuary Science:
Plan to take a series of actuarial exams to gain licensure from either the Society of Actuaries or the Casualty Actuarial Society. The type of insurance you deal with will determine which path to pursue. Most actuaries take these exams while working full-time, and the process takes several years. More than half of actuaries work for insurance carriers.

Initiative and sales ability are necessary to be a successful agent or broker.

There are many certifications in the insurance industry. Research those relevant to your area.

AREAS	EMPLOYERS	STRATEGIES
<p>MANAGEMENT</p> <p>Types of management:</p> <ul style="list-style-type: none">Entry-level/management-traineeEmployee supervisionOperations supervisionProject managementTeam managementInformation managementMiddle managementTop management	<p>Nearly every type of organization/industry offers management positions:</p> <ul style="list-style-type: none">Banks and financial institutionsRetail storesRestaurantsHotels and other facilitiesService providersHealthcare organizationsManufacturersSoftware and technology companiesEducational institutionsLocal, state, and federal governmentNonprofit organizationsSelf-employed	<ul style="list-style-type: none">Be prepared to start in entry-level management trainee positions or corporate rotational training programs.Gain related experience through internships or summer and part-time jobs.Work at a retail store or restaurant; advance into an assistant manager position.Get involved in student organizations and assume leadership roles.Demonstrate a strong work ethic, integrity, and a sense of independence.Take courses in a secondary specialty such as marketing or information systems to increase job opportunities.Learn to communicate effectively with a wide variety of people and to work well on a team.Develop strong problem solving skills.

GENERAL INFORMATION

- Business analytics is a rapidly expanding career field due to the growth of "big data." The job outlook for "data scientists" is very strong because businesses have more access to data than ever before and that data requires analysis for decision making.
- An undergraduate degree can be used in a variety of business settings if combined with relevant experience and skills. Plan to complete one or more internships in an industry or functional area of interest.
- Some positions in business, such as sales and management, are open to any major. Seek experiences and build skills that will help you prepare for those jobs.
- Earn an MBA or master's degree in business analytics or related field to qualify for higher level opportunities. To prepare for graduate school, maintain a high grade point average and secure strong faculty recommendations.
- Develop a solid background in information technology, software, and tools related to data mining, statistical analysis, and business process optimization. Earn relevant industry certifications to increase marketability.
- Good communication skills are critical in order to communicate statistical information clearly to people who do not have technical backgrounds. Writing and presentation skills are also frequently used.
- Get involved with campus organizations to build leadership and teamwork skills.
- Conduct informational interviews with professionals in fields of interest to learn more about their work and to build a network of contacts. Join relevant professional associations.