

BS in Business Analytics

66 units

The Bachelor of Science in Business Analytics (<https://www.apu.edu/business/programs/business-analytics-major/>) is for students interested in developing expertise in data science and data analytics with specialization in the field of business. This program gives students a foundation in business and business management, and they are able to customize their degree by selecting a concentration in accounting, economics, finance, or marketing.

Utilizing methods and systems to extract information or knowledge from large quantities of data that come in various forms, students learn to synthesize broad perspectives, knowledge, skills, and interconnections in business. Coursework gives students the opportunity to use big data and historical data to develop models that help organizations make data-driven decisions.

This program equips students to solve complex problems and offer practical conclusions based on real business data, as they learn to utilize models, theories, and techniques drawn from the broad areas of mathematics, business and management sciences, and management information systems. Students learn to analyze large quantities of data and discover value-oriented insights, becoming data-driven decision makers in their organizations. Information is applied to a wide range of data-rich business domains such as accounting, economics, finance, marketing, human resource management, and supply chain management.

Experiential Learning Opportunities

Students in this program acquire practical skills and experience in business analytics, building their portfolios and résumés through applied projects. Coursework includes opportunities for hands-on application with big data manipulation and analysis, system management, and data visualization, including multiple strategies to produce and leverage data-driven decision making.

Students may also participate in internships, student clubs, honor societies, and study-away opportunities. Students participating in study-away programs engage with topics of globalization, trade, culture, and global management and leadership as they travel the world. Typically, study-away trips include visiting global and international organizations and learning from universities and business leaders around the world.

Certificates, Credentials, and Microcredentials

Today, employers are looking for new hires with technical skills in big data and data analytics. This program gives students the opportunity to earn industry-valued, internationally recognized certificates, credentials, and microcredentials, such as in spreadsheets, data visualization, business analytics, and much more, that can be added to résumés and uploaded to online portfolios, certifying and showcasing their mastery of these skills to potential employers.

Career Opportunities

BS in Business Analytics students are equipped to pursue professional careers in industry, as demand for data analysts, data scientists, and data engineers in job markets across all industries is high and supply is low. The U.S. Bureau of Labor Statistics sees strong growth in the data science field and predicts that the number of jobs will increase by about 28% through 2026, which is equivalent to approximately 11.5 million new jobs in the field.

The median annual wage for management analysts was \$93,000 as of May 2021. And about 41,000 openings for financial analysts are projected each year, on average, over the decade.

Requirements

Code	Title	Units
Business and Management Core		
ACCT 120	Principles of Accounting I	3
ACCT 121	Principles of Accounting II	3
BUSI 111	Business Statistics ¹	3
BUSI 100	Personal Finance ²	3
BUSI 240	Introduction to Information Systems and Business Applications	3
BUSI 244	Data Analytics, Spreadsheets, and Data Visualization	3
BUSI 296	Business Law	3
BUSI 311	Quantitative Analysis for Management	3
BUSI 370	International Business ³	3
ECON 200	Survey of Economics ⁴	3
FIN 300	Business Finance for Managers	3
MGMT 210	Principles of Management ⁵	3

MGMT 448	Organizational and Administrative Behavior ²	3
MGMT 450	Strategic Management ⁵	3
MKTG 260	Principles of Marketing ³	3
Business Analytics Core		
BUSI 246	Foundations of Business Analytics	3
BUSI 314	Big Data Analytics for Business	3
BUSI 414	Application of Business Analytics	3
Concentration		12
Select one of the following:		
Accounting		
ACCT 320	Intermediate Accounting I	
ACCT 321	Intermediate Accounting II	
ACCT 426	Auditing Principles I	
ACCT 427	Auditing Principles II	
Economics		
ECON 350	Intermediate Macroeconomics	
ECON 351	Intermediate Microeconomics	
ECON 452	Econometrics	
FIN 352	Financial Markets and Institutions	
Finance		
FIN 330	Financial Analysis	
FIN 433	Applied Portfolio Management	
FIN 432	Investment Analysis	
FIN 436	Financial Risk Management	
Marketing		
MKTG 262	Consumer Behavior: An Applied Approach ²	
MKTG 363	Marketing Research	
MKTG 368	Retail Management	
MKTG 466	Digital and Social Media Marketing	
Total Units		66

- ¹ Meets the General Education Quantitative Literacy requirement.
- ² Meets the General Education Civic Knowledge and Engagement requirement.
- ³ Meets the General Education Intercultural Competence requirement.
- ⁴ Meets the General Education Social Sciences requirement.
- ⁵ Meets the General Education Integrative and Applied Learning requirement.

Program Learning Outcomes

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Students who successfully complete this program shall be able to:

1. Describe business issues which require business analytics' skills and methods.
2. Transform large quantities of real-life data from a wide range of domains to resolve issues.
3. Apply appropriate analytical methods (descriptive, diagnostic, predictive, and prescriptive analytics) to find solutions to business problems.
4. Explain the results of analytical activities clearly and concisely using oral, written, or electronic media.
5. Describe the ethical and legal issues involved with collecting, storing, and using big data from a Christian perspective.