

DATA ANALYTICS MAJOR (B.S.)

The ability to work with numbers and data is critical to the modern workforce. Every area of business, science, entertainment and, increasingly, the non-profit sector, is becoming more data-driven. The Data Analytics Major prepares graduates to add value to any organization through quantitative decision-making from both structured and unstructured data. As more industries embrace big data and analytics, skills in areas such as data science, statistics, programming, modeling, and data mining are becoming more important. Through a combination of mathematics, statistics, and computing courses - including intensive, hands-on work with R, Python, and SQL - our Data Analytics graduates will not only understand key concepts and techniques, but will also know how to apply them and communicate results to the modern business world.

For further information about degree requirement policies and guidelines, see the Degree Requirements (catalog.bentley.edu/undergraduate/degree-requirements/) page.

Major Requirements

Prerequisite Course

Course	Title	Credits
MA 131	Calculus I	3
or MA 131L	Calculus I with Lab	

Program Requirements

Course	Title	Credits
Required Courses:		
CS 230	Introduction to Programming with Python	3
CS 350	Database Management Systems	3
MA 214	Intermediate Applied Statistics	3
MA 252	Regression Analysis	3
MA 255	Design of Experiments	3
MA 346	Data Science	3
MA 347	Data Mining	3
MA 380	Introduction to Generalized Linear Models and Survival Analysis in Business	3
Total Credits		24

General Degree Requirements

Foundations for Success (15 Credits)

Course	Title	Credits
FDS 100	Falcon Discovery Seminar	3

Communications and Writing

Select one from:

EMS 101	Critical Reading and Writing	3
or EMS 101L	Critical Reading and Writing with Lab	
or EMS 102	Critical Reading and Writing for Multilingual Students	
or EMS 102L	Critical Reading and Writing for Multilingual Students with Lab	

And one from:

EMS 104	Multimodal Communication	3
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or EMS 105 Multimodal Communication for Multilingual Students

Information Technology

CS 100	Solving Business Problems with Information Technology	3
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Mathematical Sciences

Select one from:

MA 105	Mathematical Foundations for Business	3
or MA 105L	Mathematical Foundations for Business with Lab	
or MA 107	Applied Calculus for Business	
or MA 107L	Applied Calculus for Business with Lab	
or MA 131	Calculus I	
or MA 131L	Calculus I with Lab	

Total Credits 15

Context and Perspectives (18 Credits)

Course **Title** **Credits**
Students must take six courses, one in each category of Context and Perspectives:

Culture, Change, and Behavior (catalog.bentley.edu/undergraduate/degree-requirements/context-and-perspectives/#culturechangeandbehavior)

Globalization (catalog.bentley.edu/undergraduate/degree-requirements/context-and-perspectives/#globalization)

Institutions and Power (catalog.bentley.edu/undergraduate/degree-requirements/context-and-perspectives/#institutionsandpower)

Race, Gender, and Inequality (catalog.bentley.edu/undergraduate/degree-requirements/context-and-perspectives/#racegenderandinequality)

Scientific Inquiry (catalog.bentley.edu/undergraduate/degree-requirements/context-and-perspectives/#scientificinquiry)

Values, Ethics, and Society (catalog.bentley.edu/undergraduate/degree-requirements/context-and-perspectives/#valuesethicsandsociety)

Total Credits 18

Business Dynamics/Business Administration Minor (18 Credits)

Course	Title	Credits
All courses are required:		
AC 115	Introduction to Financial Reporting and Analysis	3
EC 111	Principles of Microeconomics	3
FI 118	Introduction to Finance	3
LA 100	Business Law	3
MG 116	Human Dynamics in Organizations	3
ST 113	Business Statistics	3
Total Credits		18

Communication Intensive

All students are required to take a three-credit course designated as a Communication Intensive. This requirement can be met within a variety of course subjects in both Arts & Sciences and Business. Communication Intensive courses are designated with a "Communication Intensive"

course tag in Workday. *Transfer students with a minimum of 30 credits will be waived from the Communication Intensive requirement.*

Please note that certain majors have an additional three-credit Communication Intensive built into their major requirements, separate from the general CI requirement.

Additional Requirements

Unrestricted Electives (45 Credits)

Course	Title	Credits
Select 15 elective courses		45
Total Credits		45

Total: 120 Credits