

Approx. program length:

47 months

Credits:

120

Cost per credit:

\$398

[Tuition Guarantee](#)

Format:

Online

Bachelor of Science in Data Science

Gain fundamental skills and knowledge needed to analyze, manipulate, and process data sets using statistical software. Learn ETL (extract, transform, load) processes for integrating datasets for BI use. Focus on data mining and modeling, data programming languages, statistical analysis, and data visualization and storytelling. Discover techniques to transform structured and unstructured data sets into meaningful information that can be used to identify data patterns and trends and drive strategic decision making.

Top skills learned in this program:

- Data Analytics
- Data Management
- Data Visualization
- Business Intelligence

Projected job growth:

16%

According to [Bureau of Labor Statistics](#)

What can you do with a Bachelor of Science in Data Science?

A BSDS can prepare you for:

- Information Systems (IS) Manager
- Data Analyst
- Business Intelligence Analyst
- Database Architect
- Research Scientist

According to the [Bureau of Labor Statistics](#), job growth for computer and information systems managers is projected to be much faster than average between 2021 and 2031.

BLS projections are not specific to University of Phoenix students or graduates.

Total credits required:

120

Requirements and prerequisites

Here's where you'll pick up the bulk of your program-specific knowledge. You'll need 120 credits to complete the Bachelor of Science in data science degree. Your course schedule may vary based on transferable credits or credits earned through Prior Learning Assessment.

19 Core courses

The Bachelor of Science in Data Science features 19 core courses in topics ranging from foundations of data analytics to predictive modeling.

- BSA/250: Foundations of Data Analytics
- PRG/211: Algorithms and Logic for Computer Programming
- DAT/210: Data Programming Languages
- BIS/340: Advanced Spreadsheet Applications
- DAT/305: Data Structures for Problem Solving
- PRG/310: Programming in Python
- DBM/300: Database Fundamentals
- PRG/315: R for Data Science
- QNT/375T: Business Data Analytics
- DAT/325: SQL
- DBM/370: Database Administration
- DSC/350: Exploratory Data Analysis
- IM/310: Data Analytics and Modeling
- DAT/350: Analyzing and Mining Data
- DSC/330: Data Communication and Visualization for Business
- DSC/460: Big Data
- DSC/435: Machine Learning
- DSC/445: Predictive Modeling
- DAT/380: Advanced Database Architecture
- DAT/390: Database Integration with Other Systems
- PRG/420: Java Programming I
- BDAT/376: Preparing Data for Analysis
- CSS/440: Artificial Intelligence and Big Data Trends
- PRG/421: Java Programming II
- DSC/495: Data Science Capstone
- ARTS/100: Introduction to the Visual and Performing Arts
- ENG/135: Essentials of Contemporary Communication
- SCI/163T: Elements of Health and Wellness

12 General Education courses

These courses lay the foundation for all our degree programs. Because communication, math and writing skills aren't just universally applicable in data science — they're useful in daily life.

- GEN/201: Foundations for University Success
- PSY/110: Psychology of Learning
- ENG/110: English Composition I
- HUM/115: Critical Thinking in Everyday Life
- FP/100T: Everyday Economics and Finances
- ENG/210: English Composition II
- SOC/110: Teamwork, Collaboration, and Conflict Resolution
- SCI/220T: Human Nutrition
- HUM/186: Media Influences on American Culture
- SCI/256: People, Science and the Environment
- MTH/215T: Quantitative Reasoning I
- MTH/216T: Quantitative Reasoning II

Schedule

Your academic counselor will help schedule your courses for a Bachelor of Science in Data Science. You can also customize your program at any time through your first year, by selecting a certificate to add within the credit requirements.

What you'll learn

When you earn your online Bachelor of Science in data science, you'll be equipped with a concrete set of skills you can apply on the job.

You'll learn how to:

- Perform statistical analyses using data-oriented programming languages and business software
- Analyze structured and unstructured data sets for meaningful information
- Evaluate business decisions using data mining and modeling
- Communicate business strategies via data visualization and storytelling