



# Data Analytics

Washington State University

## Introduction

Data analytics is the application of data science to a particular domain. The WSU Data Analytics core curriculum and specialization tracks develop strong technical skills and working knowledge of an application area, combined with strong communication skills and the ability to work in teams.

The degree is offered jointly by the Department of Mathematics and Statistics and the School of Electrical and Computer Science.

## Program Strengths

Eight specialization tracks connect academic interests to career goals. See reverse for more information.

Extensive “hands-on” opportunities to work with real industry and academic datasets.

One of only two undergraduate data analytics programs at a U.S. research university.

Interdisciplinary excellence: teaching faculty span five colleges, numerous academic departments and schools, and three campuses:

- College of Arts & Sciences
- Voiland College of Engineering & Architecture
- College of Agricultural, Human, & Natural Resource Sciences
- Carson College of Business
- College of Education



## Certification Requirements

- Complete all lower division core courses with a GPA of 2.5 or higher
- Cumulative GPA of 2.5 or higher
- Acceptance is competitive and meeting minimum requirements does not guarantee certification.
- Transfer students must have a 3.0 GPA and accepted course-equivalents for core courses.

## Lower Division Core Courses (all students)

Math 171: Calculus I

Math 172: Calculus II

OR

Math 182: Honors Calculus II

Math 220: Linear Algebra

CPTS/STAT 115: Intro to Data Analytics

CPTS 215: Data Analytics Systems & Algorithms

And one of:

CPTS 131, 132: Java design and data structures

CPTS 121, 122: C++ design and data structures

## Upper Division Core Courses (all students)

Statistics:

STAT 360: Probability & Statistics

STAT 380: Decision Science

STAT 419: Multivariate Statistics

STAT 436: Computation Methods

And one of:

ECON 311: Intro to Econometrics

STAT 412: Statistical Models in Research

STAT 423: Statistical Models for Engineers  
& Scientists

Computer Science/Data Science:

CPTS 315: Intro to Data Mining

CPTS 415: Big Data

CPTS 451: Intro to Database Systems

Data Analytics:

PHIL 450: Data Analytics Ethics

CPTS/STAT 424: Data Analytics Capstone

## Specialization Options

Core data skills will enable students to work as data analysts in diverse employment sectors such as manufacturing, education, retail, e-commerce, transportation, finance, healthcare, government, insurance, and environmental management.

Through specialization tracks students will develop knowledge enhancing their ability to compete in specific industries and application areas.

The eight specialization tracks are:

- Actuarial Science
- Environmental Systems
- Business
- Economics
- Life Sciences
- Physical Sciences
- Social Sciences

## Campus Options

Pullman:

All seven tracks are currently available.

North Puget Sound at Everett:

The Actuarial Science and Business tracks are currently available.

Global Campus:

The Actuarial Science and Business tracks are anticipated to be available online in the fall of 2017.

**Information about specific coursework required for each track is available at [data-analytics.wsu.edu](http://data-analytics.wsu.edu).**

## For more information:

**Website:** [data-analytics.wsu.edu](http://data-analytics.wsu.edu)

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### Pullman campus

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### North Puget Sound at Everett

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### WSU Global Campus

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