Data Analytics

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
Nine 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.

The second undergraduate Data Analytics program at a U.S. research university, after Ohio State. Started in 2016.

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

Admission to the Major Requirements
A student may be admitted as a Data Analytics major upon completion of 24 credits and a minimum GPA of 2.0.

Lower Division Core Courses (all students)
  Math 171: Calculus I
  Math 172: Calculus II
  OR Math 182: Honors Calculus II
  Math 220: Linear Algebra
  DA 115: Intro to Data Analytics
  CPTS 215: Data Analytics Systems & Algorithms

And one of:
  CPTS 121, 122: C++ design and data structures
  CPTS 131, 132: Java design and data structures

Upper Division Core Courses (all students)
Statistics:
  STAT 360: Probability & Statistics
  STAT 380: Decision Making and Statistics
  STAT 419: Multivariate Statistics
  STAT 435: Statistical Modeling for Data Analytics
  STAT 437: High Dimensional Data Learning and Visualization

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
  DA 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 nine specialization tracks are:
• Actuarial Science
• Business
• Computation
• Data Visualization
• Economics
• Environmental Systems
• Life Sciences
• Physical Sciences
• Social Sciences

Campus Options
Pullman: All nine tracks are currently available.

Everett: The Actuarial Science and Business tracks are currently available.

Global Campus: Business track is currently available.

Vancouver: The Business and Data Visualization tracks are currently available.

Information about specific coursework required for each track is available at data-analytics.wsu.edu.

For more information:
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