Data Analytics (MS)

This program is offered by the Walker School of Business & Technology, and is only available at the St. Louis home campus.

Program Description
Data analytics is the science of interpreting vast amounts of complex data to make sound decisions. The MS in data analytics focuses on developing and applying data analytics skills to fulfill significant needs in the business community. Students will integrate business concepts as well as key methods and tools for large-size data modeling, analysis and solving challenging problems involving “Big Data.” The program provides a strong foundation in data analytics by bringing together salient techniques from statistics, mathematics, computer science, business, accounting, finance and management in a realistic business context.

Learning Outcomes
By the end of the program, students will be able to:

• Compose query statements to implement the data definition and manipulation.
• Construct multidimensional data cubes analysis.
• Apply effective methods for analyzing, presenting and using informational data.
• Develop meaningful reports and visualization of business data analytics appropriate to a technical and non-technical audience.
• Articulate forecasting and predictive models for real-world analytical applications.

Program Curriculum
The 33 credit hours for the MS in data analytics requires the following courses:

Introductory Courses
• BUSN 5200 Basic Finance for Managers (3 hours)
• BUSN 5760 Applied Business Statistics (3 hours)
• CSDA 5110 Analytics Programming with R (3 hours)
• CSDA 5130 Social and Ethical Issues in Analytics (3 hours)
• CSDA 5210 Databases and Data Warehouses (3 hours)

Reinforcement Courses
• CSDA 5230 Data Analytics (3 hours)
• CSDA 5310 Data Visualization (3 hours)
• CSDA 5330 Data Mining (3 hours)

Proficiency Courses
• CSDA 5410 Time Series Analytics (3 hours)
• CSDA 5430 Predictive Analytics (3 hours)

Subject Specific Courses
• CSDA 6010 Analytics Practicum (3 hours)

Admission
Students who are interested in applying to this degree program should see the Admission section of this catalog for general requirements.

Admission Requirements
Preliminary Skills and Prerequisite Courses
To ensure adequate preparation to both information technology and business, an applicant to this data analytics program must have the basic business knowledge and basic information technology knowledge. The Walker School of Business & Technology accepts individuals who have successfully graduated from undergraduate computer science, information systems, mathematics, business administration, management or similar degree programs and possess the basic business, mathematics and information technology knowledge.

Requirements
• Official transcripts from all of your previous attended colleges and universities (including community colleges and summer courses).
• To be eligible for this program, students must have either:
  • Earned an undergraduate degree in business, management, computer science, statistics, economics, biology (BS), chemistry (BS) or physics (BS).
  • OR
  • Completed college-level algebra and statistics, in the last 5 years, with a B or better in both courses.
  • Have work experience that includes business, database and analytics.

  • A phone interview or essay may be required.
  • It is preferred that students have a business background and strong analytical skills.

Send all admissions materials to:
Office of Admission
Webster University
470 E. Lockwood Ave.
St. Louis, MO 63119

Advancement to Candidacy
Students are admitted to their graduate program upon completion of all admission requirements. Students are advanced to candidacy status after successfully completing 12 credit hours of graduate credit, with grades of B- or better. In the MBA program and other specialized programs, courses required as prerequisites to the program do not count toward the 12 credit hours required for advancement.