Data Analytics

Certificate
21 Credit Hours

This program is offered by the George Herbert Walker School of Business and Technology/Computer and Information Sciences Department. It is available online, at the St. Louis main campus.

For information on the general requirements for a certificate, see Certificate under the Academic Policies and Information section of this catalog.

Program Description

Data analytics encompasses a wide range of technologies to support analyzing data, transforming information and generating intelligence. Technologies play important roles in data analytics systems and form the foundation of architecture. There is a constant demand for data analysis and information analysts who can understand database, query data, perform activities in analytical processing, statistical analysis, forecasting and data mining. The certificate program is created to meet this demand, helping students understand underlying concepts and methodologies that are used in data analytics processes.

Students in the program will study concepts and principles in data analytics and the underlying building technologies. Students will experience a broad category of applications and techniques for gathering, storing, analyzing and providing access to data to help users in organizations perform better decision making.

The minor may be taken in lieu of the certificate program. Students may choose to receive the minor or certificate, but not both.

Learning Outcomes

- Students will be able to demonstrate critical thinking skills in the field of data analytics.
- Students will be able to demonstrate the ability to solve problems related to the program content.
- Students will be able to analyze, design and document a system component using appropriate data analytics techniques and models.
- Students will be able to demonstrate an understanding of fundamental principles of data analytics systems and technologies.

Requirements

- STAT 1100 Descriptive Statistics (3 hours)
- CSIS 1500 Introduction to Business Technologies (3 hours)
- CSIS 1700 Data Exploration (3 hours)
- CSIS 2500 Introduction to Data Science (3 hours)
- CSIS 3300 R Programming for Data Analytics (3 hours)
- CSIS 3410 Information Analysis (3 hours)
- CSIS 3700 Data Analytics Methods (3 hours)

Certificates