Data Analytics - M.S.

Curriculum

The Data Analytics Master of Science degree program is designed to provide students with in-depth knowledge for applying statistical methods and tools to solve real-world problems using data. The program includes core courses in statistical topics as well as advanced applications of data analytics. Students delve into the areas of data mining, analytics, management and visualization, forecasting, modeling, and optimization and simulation which provide skills necessary to fill the current analytics gap and prepare students for both the technical and business challenges posed by big data.

Upon completion of the program, graduates are expected to:

- Integrate the knowledge of mathematics, statistics and computer science to collect, analyze and interpret data.
- Use data to drive organizational decisions and optimize performance.
- Conduct analysis for advanced data mining strategies to optimize model performance.
- Make recommendations based on the evaluation of the ethical, legal and political issues of data usage and its implications for a given application, market or population.

Data Analytics

Master of Science

Prerequisite Courses *		
FIT1040	Spreadsheet Design for Business Solutions (or passing grade on challenge exam)	3
Core Courses		
DATA5025	Tools for Data Analytics	3
DATA5050	Data Management	3
DATA5100	Statistical Analysis	3
DATA5150	Data Mining	3
DATA5200	Data Visualization	3
DATA5300	Big Data Analytics	3
DATA5350	Text & Web Mining Analytics	3
DATA5400	Introduction to Predictive Modeling	3
DATA5515	Advanced Topics in Predictive Analytics	3
DATA5550	Optimization Simulation	3
DATA5600	Research Methods in Data Analytics	3
DATA5700	Data Analytics Capstone	3
Total Credits		**36.0-39.0**

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Prerequisite courses must be completed prior to or concurrently with core courses.

Admissions Requirements

Johnson & Wales University holistically reviews all elements of a student's application to identify those students most likely to succeed at the university.

Prior to being considered for admission into an online JWU graduate program, the following must be submitted:

1. A completed application for admission

2. Official or certified transcripts from all institutions attended, including bachelor's and master's degree conferral (if applicable). When a graduate program application is submitted prior to completing requirements for the bachelor's degree, Admissions will consider the application and, if admissible, will offer an acceptance pending submission of final transcript verifying bachelor's degree conferral. Without such verification, students will not be allowed to register for the current semester or continue enrollment, and will be in jeopardy of losing their academic status with the university.

3. Statement of Purpose: An essay explaining your motivation, aptitude and goals related to graduate-level academic study

4. Two letters of recommendation from individuals qualified to attest to the applicant's potential for success at the graduate level of study. A Personal Reference Form may be substituted for the letters of recommendation.

5. A current résumé or CV (required for applicants for conditional acceptance; optional for other applicants)

The letters of recommendation and Statement of Purpose may be emailed (cpsadmissions@jwu.edu).

Conditional Acceptance

Conditional acceptance to the Master of Science Data Analytics program may be extended to students who have a 2.41–2.99 cumulative undergraduate grade point average, and demonstrate significant evidence of professional success. Students granted conditional acceptance may take a maximum of three JWU graduate courses in their first semester (students may not enroll in two 8-week courses at the same time). If an overall GPA of 3.0 is earned in the first conditional semester, the student will be granted full admission to that program. Students who do not earn an overall GPA of 3.0 will be dismissed from the program and will not be accepted to any JWU graduate program.