

Combined Degrees: Data Analytics B.S./M.S.

Curriculum

The College of Arts & Sciences offers students an opportunity to earn both their undergraduate and graduate degrees through its Combined Degrees: Data Analytics B.S./M.S. program. This program enables qualified students to earn, in a continuous plan of study, both a B.S. and a M.S. in Data Analytics in as little as five years.

Qualified students are able to complete five core Master of Data Analytics graduate courses that will count toward their undergraduate Data Analytics degree. Visit the Data Analytics B.S. degree and Data Analytics M.S. degree program pages for program descriptions and outcomes.

Requirements

Eligible undergraduate students who would like to pursue the Combined Degrees: Data Analytics B.S./Data Analytics M.S. program should apply directly for the program by the end of their first year to take maximum advantage of this accelerated option. Qualified students who elect the Combined Degrees: Data Analytics B.S./Data Analytics M.S. program as an undergraduate student must fulfill all admissions requirements for entrance into the intended graduate program and complete a graduate program application.

Data Analytics

A four-year program leading to the bachelor of science degree

Major Courses

CSIS1010	Problem Solving for Computing	3
CSIS1101	Computer Science I	3
CSIS2030	Database Concepts	3
CSIS2080	Database Design	3
DMSM2025	Introduction to Data Visualization	3
DMSM2050	Spreadsheets for Data Analysis	3
FIT1040	Spreadsheet Design for Business Solutions	3
MATH2220	Linear Algebra	3
MATH4900	Applied Statistics	3

Major Electives

Choose 15 credits from the following courses or declare a minor: **, **		15
CYB3038	HCI/Usable Security	
ITEC3050	Information Security with Cryptography	
Choose three of the following:		
CSIS1112	Computer Science II	
ENG2010	Introduction to Technical Communication	
MATH2020	Discrete Mathematics	
PRMG2010	Introduction to Project Management & Project Membership	

Applied/Experiential Learning

Choose 9 credits from the following:		9
ASCI4799	College of Arts & Sciences Internship ^{1c}	
DEE3999	Directed Experiential Education ^D	
RSCH3830	Undergraduate Research Experience	
RSCH4020	Honors Directed Academic Experience	
Study Abroad ^{5a}		

University Core Curriculum

Communicating		9
ENG1020	Rhetoric & Composition I	
ENG1021	Rhetoric & Composition II	
ENG1030	Communication Skills	
Connecting		6
Two courses with the Connecting attribute (ECNG), one at the 2000 level, one at the 4000 level		
Experiencing		6
PHIL3240	Ethics: A Global Perspective	
Additional course with the Experiencing attribute (EEXP) in a different discipline		
Measuring		6
MATH1035	Quantitative Analysis I (or higher, based on student's placement) ***	
MATH2035	Quantitative Analysis II	
Exploring		3
One course with the Exploring attribute (EEPL)		
Interacting		6
ECON1001	Macroeconomics	
Additional course with the Interacting attribute (EINT) in a different discipline		

A&S Electives		6
MATH2001 or MATH2010	Statistics I Introduction to Biostatistics	
MATH2002	Statistics II	
Free Elective [#]		
15 credits selected from 1000-4999 numbered offerings within the university		15
Graduate Courses ****		
DATA5025	Tools for Data Analytics	3
DATA5100	Statistical Analysis	3
DATA5400	Introduction to Predictive Modeling	3
DATA5600	Research Methods in Data Analytics	3
Total Credits		120.0

*

Students are responsible for meeting prerequisites.

**

Students should consult with their advisor when selecting a minor.

Students that do not place in MATH1035 Quantitative Analysis I, must take an extra course, MATH1020 Fundamentals of Algebra, as a prerequisite. If needed this counts as a free elective.

Students use 3 credits from Applied/Experiential Learning and 9 free elective credits for graduate-level courses in the Data Analytics M.S. during their fourth year.

^{1c}Typically, internships require a minimum of six credits. Students interested in a 9 or 12-credit internship can apply additional experiential learning and free elective credits, if available. Students are strongly encouraged to contact a faculty advisor before scheduling internship and free elective credits.

^D Directed Experiential Education (DEE) opportunities are based on project availability with community partners and student eligibility. For more information, visit Experiential Education & Career Services (EE&CS).

^{5a}To be eligible to count toward Applied/Experiential Learning, a Study Abroad offering must meet certain requirements. Contact JWU Global to discuss eligible Study Abroad options for this degree program.

[#] In addition to classes, free elective credits may be applied to a number of options such as internship, study abroad, Directed Experiential Education courses and courses in a specialization or minor as relevant. For students who qualify for the J2 program, up to four graduate courses may apply. Students are strongly encouraged to contact a faculty advisor before scheduling free elective credits.

Data Analytics

Master of Science

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

[†]

These graduate courses will fulfill the bachelor of science requirements in the 4th year. Please note: The bachelor of science is not awarded until all graduate-level courses applying to the undergraduate degree have been successfully completed.

Note: Students must pass MATH0010 Pre-Algebra or have equivalent placement scores to enroll in required math courses.

Note: Students must pass ENG0001 Writing Workshop or have equivalent placement scores to enroll in ILS 2000-level courses.

In collaboration with academic colleges Study Abroad offer several options, direct enroll with international universities, domestic and digital options meet with a Study Abroad Advisor to learn more about how your major, minor, free electives, experiential learning and transferable courses would benefit by a Study Abroad program. There are many options for students during a semester, spring and/or summer breaks. Faculty-led, exchange, and direct-enroll programs range in duration from one week to a full semester or full year. Financial aid may be applied, and some partners offer external scholarships. Visit the study abroad website for information, program descriptions and online applications. Where will you go? Wherever you decide, make the best of your educational journey!

Admissions Requirements

Undergraduate

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

For first-year applicants, a completed application and high school transcript(s) are required. For transfer applicants, a completed application and high school and/or college transcript(s) are required. Completion of optional materials is encouraged.

Successful candidates for first year admission have taken a high school, college preparatory academic program including English, mathematics, science, social science and foreign language. Admissions decisions may also consider individual experiences and particular circumstances unique to each student. Other considerations are made based upon recommendations, writing ability and extracurricular activities.

Visiting campus, both in-person or virtually, and interacting with admissions staff are all valuable ways of assuring that JWU is the right university for you.