COMPUTER INFORMATION SCIENCE WITH DATA SCIENCE CONCENTRATION, BS

The Bachelor of Science with a concentration in Data Science is a variation of the Bachelor of Science degree with courses designed to train students in the field of big data and analytics. In this program you'll earn our flagship computer information science degree and add specialization in data science.

Degree Requirements

In addition to the requirements stated below, students must complete 34-35 hours of General Education (https://catalog.washburn.edu/undergraduate/programs-degrees-graduation-requirements/general-education-requirements/), all requirements for a Bachelor of Science (https://catalog.washburn.edu/undergraduate/college-arts-sciences/degrees/bachelor-science/) degree, and any additional hours needed to reach the minimum 120 credit hours required for graduation. Some of the courses below may also fulfill general education or other degree requirements. Please see your advisor for more information.

Code	Title	Hours
Required Courses Inside Department		
CM 111	Introduction to Structured Programming	4
CM 231	Computer Organization/Assembler Language	3
CM 245	Contemporary Programming Methods	3
CM 261	Networked Systems	3
CM 307	Data Structures & Algorithmic Analysis	3
CM 322	Operating Systems	3
CM 331	Artificial Intelligence	3
or CM 332	Data Mining	
CM 333	Software Engineering	3
CM 334	Modeling with VBA/Excel	3
CM 336	Database Management Systems	3
CM 465	Computer Information Science Capstone Project	3
CM XXX	Any CM electives	6
CM 3XX	Upper Division CM electives	6
Subtotal		46
Required Courses Outside Department		
BU 342	Organization & Management	3
or BU 346	Organizational Behavior	
CN 340	Interviewing	3
or CN 341	Persuasive Speaking	
or CN 342	Communication-Teams and Groups	
EC 200	Principles of Microeconomics	3
or EC 201	Principles of Macroeconomics	
MA 140	Statistics	3
MA 151	Calculus & Analytic Geometry I	5
MA 206	Discrete Mathematics for Computing	3
PH 220	Symbolic Logic	3
Choose three from the following:		9
MA 301	Linear Algebra	
MA 307	Discrete Mathematics	
MA 340	ANOVA/Design of Experiments	
MA 341	Nonparametric Tests/Quality Control	
MA 342	Statistical Computing	
MA 344	Mathematical Statistics I	
MA 346	Regression Analysis	
MA 348	Time Series Analysis	
Subtotal		32
Total Hours		**78**