

Data Analytics Bachelor of Science

Program Overview

Data Analytics is a joint program of the Zimpleman College of Business and the College of Arts and Sciences designed to develop analysts who can work with data to uncover practical insights and support sound and ethical decision-making. The foundation of the program is a core of computer science and statistics classes that build problem-solving skills. Each student also takes two elective courses.

Requirements for Major

The requirements below apply to the B.S. Data Analytics major within the College of Arts & Sciences. See the Zimpleman College of Business section for the requirements for the Bachelor of Science in Business Administration (B.S.B.A.) Data Analytics major (<https://catalog.drake.edu/archive/2024-2025/undergraduate/business/areas-study/data-analytics/data-analytics-bsba/>) within the Zimpleman College of Business.

Code	Title	Hours
Core Requirements		
CS 065	INTRODUCTION TO COMPUTER SCIENCE I	3
CS 066	INTRODUCTION TO COMPUTER SCIENCE II	3
CS 083	DIGITAL ETHICS	3
CS 167	MACHINE LEARNING	3
CS 178	CLOUD AND DATABASE SYSTEMS	3
IS 044	MICROSOFT OFFICE TOOLS FOR BUSINESS ANALYSIS	2
IS 160	DATABASE MANAGEMENT	3
MATH 050	CALCULUS I	3
MATH 070	CALCULUS II	3
STAT 040	INTRODUCTION TO R AND SAS	3
STAT 072	STATISTICS II	3
STAT 130	PROBABILITY FOR ANALYTICS	3
STAT 170	REGRESSION AND TIME SERIES	3
STAT 172	DATA MINING AND GENERAL LINEAR MODELS	3
CS/STAT 190	CASE STUDIES IN DATA ANALYTICS	3
Electives		
Select two of following:		6
BIO/CS 116	BIOINFORMATICS	
CS 137	ALGORITHM ANALYSIS	
CS 143	ARTIFICIAL INTELLIGENCE	
MATH 080	LINEAR ALGEBRA	
MATH 100	CALCULUS III	
MATH 120	APPLIED DIFFERENTIAL EQUATIONS I	
MATH 121	APPLIED DIFFERENTIAL EQUATIONS II	
MATH 125	MATHEMATICS MODELING	
MATH 127	INTRODUCTION TO GAME THEORY	
MATH 165	INTRODUCTION TO NUMERICAL ANALYSIS	
MATH 176	ADVANCED LINEAR ALGEBRA	
MKTG 113	MARKETING RESEARCH	
MKTG 130	MARKETING ANALYTICS	

ACTS 135	MATHEMATICAL STATISTICS
Total Hours	50

In addition to programmatic requirements, students are responsible for satisfying all requirements of the Drake Curriculum (<https://catalog.drake.edu/archive/2024-2025/undergraduate/academic-information/drake-curriculum/>), including Areas of Inquiry (AOI)

Student must also satisfy university graduation requirements (<https://catalog.drake.edu/archive/2024-2025/undergraduate/academic-information/graduation-requirements/>) for all undergraduate students..