

The minor in Data Analytics requires 18-23 semester credit hours.

Code	Title	Hours
Required Courses		
ANLY 2300	Introduction to Data Analytics	3
Statistics Courses		
Choose 3-4 hours from the following:		3-4
AG 3352	Quantitative Methods in Agricultural Economics	
CJ 3347	Statistics For Criminal Justice	
GEO 3301	Research Methods in Geography	
HDFS 2311	Statistics and Data Analysis for Human Development and Family Sciences	
HP 3325	Healthcare Statistics	
IE 3320	Engineering Statistics	
MATH 2328	Elementary Statistics	
MATH 3305	Introduction to Probability and Statistics	
PA 3311	Analytical Techniques	
PH 3315	Statistics in Public Health	
PS 3315	Quantitative Research in Political Science	
PSY 2301 & PSY 2101	Introduction to Statistics and Introduction to Statistics Laboratory	
SOCI 3307	Statistics for the Behavioral Sciences	
ANLY 2333	Business Statistics	
Computing/Programming Courses		
Choose 3-4 hours from the following:		3-4
AG 4371X	Data Analysis and its Application in Agriculture	
CS 1342	Programming for Scientists and Engineers	
CS 1428	Foundations of Computer Science I	
GEO 4420	GeoProgramming	
HIM 4331	Research and Data Analytics for HIM	
PHYS 2230	Introduction to Computational Modeling for Physics	
ANLY 3341	Computational Methods for Analytics	
Algorithms/Data Mining Courses		
Choose 3-4 hours from the following:		3-4
CS 4315	Introduction to Data Mining and Information Retrieval	
EE 4331	Introduction to Machine Learning for Engineering Applications	
GEO 4412	Digital Image Processing and Machine Learning	
IE 4340	Non-Linear Optimization Techniques	
IE 4342	Advanced Linear and Integer Programming	
PHYS 3418	Methods in Observational Astrophysics	
ANLY 3339	Data Mining and Visualization	
Prescribed Electives		
Choose 6-8 hours from the following:		6-8
ACC 3323	Data Analytics for Accounting	
AG 4382	Agricultural Price Analysis	
ARTC 4314R	Information and Data Visualization	
BIO 4425	Biometry	
BIO 4351K	R for Biologists	
CHEM 3276	Experimental Biochemistry	
CHEM 3380	Analytical Biochemistry	

CHEM 3381	Biochemistry Techniques
ISAN 3382	Computer Data Base Systems
ISAN 3389	Programming for Data Processing
ISAN 4349	Advanced Database Management Systems
ISAN 4399	Information Systems Internship
CS 4332	Introduction to Database Systems
CS 4346	Introduction to Artificial Intelligence
CS 4347	Introduction to Machine Learning
CS 4380	Parallel Programming
ECO 4313	Econometrics
ECO 4381G	Empirical Data Analysis
EE 3326	Numerical and Scientific Data Analysis Using Python
EE 4332	Introduction to Computer-Aided Engineering Simulation on HPC Systems
FCS 4303	Research Procedures in Family & Consumer Sciences
FIN 4380J	Introduction to Finance Analytics
FM 3330	Fashion Buying Principles I
FM 4331	Fashion Buying Principles II
GEO 2420	Introduction to Geographic Information Techniques
GEO 2426	Fundamentals of Geographic Information Systems
GEO 2427	Management and Implementation of GIS
GEO 3411	Maps and Mapmaking
GEO 3426	Advanced GIS
GEO 4356	Urban Infrastructure Management
GEO 4420	GeoProgramming
GEO 4424	GPS and GIS
HI 3311	Databases in Healthcare
HI 3310	Health Informatics
HI 4401	Advanced Health Informatics and Security
HIM 3311	
HIM 3380	Quality Management for HIM
HIM 4320	Principles of Information Governance
HIM 4331	Research and Data Analytics for HIM
IE 3305	Introduction to Data Analysis
IE 3330	Quality Engineering
IE 3340	Operations Research
IE 4310	Statistical Design of Experiments
IE 4330	Reliability Engineering
IE 4370	Probabilistic Operations Research
IE 4399D	Heuristic Optimization Techniques
IE 4399F	Introduction to Data-Intensive Analysis and Simulation
MATH 3305	Introduction to Probability and Statistics
MATH 3376	Applied Linear Algebra
MATH 3383	Numerical Analysis I
MATH 4305	Advanced Probability and Statistics
MC 4325	Coding and Data Skills for Communicators
MC 4337	Data Journalism
ME 4355	Autonomous Systems and Robotics
MKT 3370	Marketing Research

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MKT 4340	Marketing Analytics Foundations
NUTR 3303	Research Methods in Nutrition Science
PH 3370	Epidemiology
PHIL 4361F	Ethics of Artificial Intelligence and Big Data
PHYS 4305	Statistical Physics
PSY 4390R	Intermediate Statistics
ANLY 3334	Statistical Modeling
ANLY 4320	Analytics in Practice
ANLY 3314	Decision Analytics
SOCI 3318	Applied Data Analysis
SOCI 4308	Quantitative Research Methods
TECH 3364	Quality Assurance
Total Hours	18-23