



**Bachelor of Science in:
Data Science**

**For Students Following the:
2013-2014 catalog
2014-2015 catalog
2015-2016 catalog
2016-2017 catalog**

Name:
Student ID:
Catalog Year:

Version 1.3

SUPPORT COURSES (21 Hours)					
Course		Pre-req	Credits	Term	Grade
MAT 128	Calculus A	MAT 119 (≥ B-)	3		
MAT 227	Calculus B	MAT 128	3		
MAT 228	Calculus C	MAT 227	3		

OR

MAT 129	Calculus I	MAT 119 (≥ B-)	4		
MAT 229	Calculus II	MAT 129 or MAT 227	5		

AND

MAT 234	Linear Algebra	MAT 228 or MAT 229	3		
STA 250	Probability and Statistics I	MAT 129 or Co-req MAT 227	3		
STA 341	Statistics II	STA 250	3		
ECO 201	Principles of Microeconomics	Sophomore Standing & Completion of 1 MAT course	3		

OFFICE USE ONLY
Approved Exceptions

INFORMATICS CORE COURSES (9 Hours)					
Course		Pre-req	Credits	Term	Grade
INF 120	Elementary Programming (or placement)	MAHD099	3		
INF 128	Principles of Informatics		3		
INF 282	Introduction to Databases	MAHD099	3		

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BUSINESS INFORMATICS CORE COURSES (15 Hours)					
Course		Pre-req	Credits	Term	Grade
BIS 275	Business Process Analysis		3		
BIS 300	Management Information Systems	Junior standing; STA 212, STA 205 or STA 250 or BIS 275; & BIS 101 or equivalent transfer work or placement.	3		
BIS 330	IT Project Management	Junior Standing	3		
BIS 384	Business Analytics	STA 205 or STA 212 or STA 250	3		
BIS 430	Workflow Design and Management	Declared approved major or minor	3		

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COMPUTER SCIENCE CORE COURSES (15 Hours)					
Course		Pre-req	Credits	Term	Grade

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CSC 260	Object-Oriented Programming I	MAT 109 & INF 110 or INF 120	3		
CSC 360	Object-Oriented Programming II	CSC/INF 260 & MAT 119 (\geq B-)	3		
CSC 364	Data Structures and Algorithms	CSC 360	3		
CSC 450	Database Management Systems	CSC 360 & INF 282	3		
CSC 3xx - 4xx	(Guided Elective)	Variable	3		

DATA SCIENCE CORE COURSES (16 Hours)

	Course	Pre-req	Credits	Term	Grade
DSC 101	Introduction to Data Science	DSC Major	1		
DSC 311	Data Analytics	CSC 360 & STA 250	3		
DSC 321	Data Visualization	DSC 311	3		
DSC 411	Data Mining	CSC 364 & STA 250	3		
DSC 421	Big Data	DSC 411 & CSC 450	3		
DSC 496	Data Science Capstone	BIS 330 & DCS 321 & DSC 411	3		

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GUIDED ELECTIVES (9 Hours) - Choose 3

	Course	Pre-req	Credits	Term	Grade
BIS 310	Information Systems Analysis	INF 110 or INF 120	3		
BIS 382	Principles of Information Security	BIS 300	3		
BIS 420	Business Intelligence & Enterprise Applications	Junior Standing & Certified Major in BIS or Department Consent	3		
CSC 301	Web Programming	INF/CSC 260 or CIT 383 & INF 286 & INF 282	3		
CSC 362	Computer Systems	CSC 360	3		
CSC 402	Advanced Programming Methods	CSC 362 & CSC 364	3		
CSC 425	Artificial Intelligence	CSC 364	3		
CSC 464	Design & Analysis of Algorithms	CSC 364 & MAT 385	3		
CSC 482	Computer Security	CSC 362	3		
DSC 431	Network Analysis	CSC 364 & STA 250	3		
MAT 325	Differential Equations	MAT 228 or MAT 229	3		
MAT 329	Calculus III	MAT 228 or MAT 229	3		
MAT 375	Applied Mathematical Models	MAT 129 or MAT 227 & STA 205 or STA 212 or STA 250	3		
STA 316	Regression Analysis	STA 213 or STA 250	3		
STA 317	Introduction to Time Series Analysis	STA 213 or STA 316 or STA 341	3		
STA 340	Probability II	MAT 228 or MAT 229 & STA 250	3		

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Students must have a grade of C- or better to meet prerequisites for all courses unless otherwise indicated and must earn a grade of C- or better in all courses that apply to the major and have at least a major GPA of 2.0. Please consult with your advisor and the appropriate University Course Catalog for all other degree requirements.