



Bachelor of Science in: Data Science

For Students Following the:
2017-2018 catalog

| |
|---------------|
| Name & ID: |
| Catalog Year: |

| 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 | Completion of one college-level MAT course | 3 | |

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 (C) | 3 | |

BUSINESS INFORMATICS CORE COURSES (15 Hours)

| Course | Pre-req | Credits | Term | Grade |
|---------|-----------------------------------|--|------|-------|
| BIS 275 | Introduction to Business 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 | BIS 275 or BIS 300 | 3 | |
| BIS 384 | Business Analytics | BIS 380 or DSC 311 | 3 | |
| BIS 430 | Workflow Design and Management | Declared BIS minor or certified business major or College of Informatics major | 3 | |

COMPUTER SCIENCE CORE COURSES (15 Hours)

| Course | Pre-req | Credits | Term | Grade |
|------------------|--------------------------------|---------------------------------|------|-------|
| CSC 260 | Object-Oriented Programming I | MAT 109 & INF 110 or INF 120 | 3 | |
| CSC 360 | Object-Oriented Programming II | CSC 260 & MAT 119 (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 |
|--------|---------|---------|------|-------|
|--------|---------|---------|------|-------|

| |
|------------------------|
| OFFICE USE ONLY |
| Approved Exceptions |
| |
| |
| |

| |
|---------------------------------|
| Successful MAT 129 CLEP Exam |
| |

| |
|---------------------------------|
| |
| |
| |
| Successful ECO 201 CLEP Exam |

| |
|----------------------------|
| OFFICE USE ONLY |
| Approved Exceptions |
| Successful INF 120 CPLE |
| |
| |

| |
|---------------------------------|
| OFFICE USE ONLY |
| Approved Exceptions |
| |
| Successful BIS 300 DSST Exam |
| |
| |

| |
|----------------------------|
| OFFICE USE ONLY |
| Approved Exceptions |
| Successful CSC 260 CPLE |
| |
| |
| |

| |
|------------------------|
| OFFICE USE ONLY |
| Approved Exceptions |

| | | | |
|---------|------------------------------|--|---|
| DSC 101 | Introduction to Data Science | Declared DSC Major | 1 |
| DSC 311 | Data Analytics | STA 250 & BIS 305, CIT 383, CSC 260, CSC 270, EGT 267, or STA 360 | 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 |

OFFICE USE ONLY

| | | Pre-req | Credits | Term | Grade | Approved Exceptions |
|---------|--|---|---------|------|-------|------------------------|
| BIS 310 | Information Systems Analysis | INF 110 or INF 120 & Junior Standing | 3 | | | |
| BIS 382 | Principles of Information Security | BIS 300 or equivalent | 3 | | | |
| BIS 420 | Business Intelligence & Enterprise Applications | Junior Standing & Certified Major in BIS or Department Consent | 3 | | | |
| CSC 301 | Web Programming | 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 | | | | | | |