Data Analytics
Division of Science and Mathematics

- **BA or BS: 58 credit hours**
- **Major GPA required for graduation: 2.25**
- **All courses for the major must be completed with a grade of D or better**

PROGRAM REQUIREMENTS:
- **Complete core requirements**
- **Capstone: Internship in Mathematics (MTH 470) or Data Analytics Capstone (MTH 485)**

Description of Major: Data analytics is a major that focuses on the analysis of large, complex data sets. Students utilize skills from the areas of mathematics, statistics, and computer science to analyze large data sets. They will use specific subject domain knowledge and professional writing skills to present their analysis to a broad audience.

Student Learning Outcomes
Students will:

- Effectively manage and organize data sets and create solutions to analytical problems.
- Communicate analytics problems, methods, and findings: orally, visually, and in writing.
- Critically evaluate solutions to analytical problems.
- Develop subject area knowledge in a selected area.

Preparation: The data analytics degree builds a broad base in the areas of mathematics and data management. Students will also develop their communication skills and subject knowledge in a selected area. Students will be prepared for a position in industry.

To major in data analytics, students must complete the core requirements, plus additional requirements in one of the following tracks: social science or business.

DATA ANALYTICS
MAJOR CORE REQUIREMENTS — 40 crs.

Course	Title	Crs.
MTH 210	CALCULUS I	4
MTH 211	CALCULUS II	4
MTH 340	PROBABILITY	3
MTH 341	APPLIED STATISTICS	4
MTH 344	STATISTICAL LEARNING	3
MTH 360	LINEAR ALGEBRA	3
MTH 470	INTERNSHIP IN MATHEMATICS	3
or		
MTH 485	DATA ANALYTICS CAPSTONE	3
CSI 130	INTRODUCTION TO COMPUTING I	5
CSI 230	INTRODUCTION TO COMPUTING II	5
CSI 330	DATA STRUCTURES AND ALGORITHMS	3
ENG 360	INTERDISCIPLINARY PROFESSIONAL AND TECHNICAL WRITING (W)	3

BACHELOR OF ARTS:
SOCIAL SCIENCE TRACK — 18 crs.

Complete the core requirements, plus the following:

Course	Title	Crs.
PSY 153	INTRODUCTION TO PSYCHOLOGY	3
PSY 301	PSYCHOLOGICAL STATISTICS	3
PSY 396	RESEARCH METHODS	3
SOC 150	INTRODUCTION TO SOCIOLOGY	3
SOC 400	SOCIOLOGICAL THEORY	3
SOC 496	METHODS OF SOCIAL RESEARCH	3

BACHELOR OF SCIENCE: BUSINESS TRACK — 21 crs.

Complete the core requirements, plus the following:

Course	Title	Crs.
BUS 324	BUSINESS ETHICS AND CORPORATE SOCIAL RESPONSIBILITY (W)	3
ECO 211	PRINCIPLES OF MICROECONOMICS	3
ECO 212	PRINCIPLES OF MACROECONOMICS	3
ACC 205	PRINCIPLES OF FINANCIAL ACCOUNTING	3
FIN 308	PRINCIPLES OF BUSINESS FINANCE	3
MGT 204	PRINCIPLES OF MANAGEMENT	3
MKT 205	PRINCIPLES OF MARKETING	3