

# DATA ANALYTICS MINOR

A minor in Data Analytics is offered to those who wish to complement study in another discipline. This minor allows students to have the skills to work in cross disciplinary teams to solve challenging scientific problems.

Specializations are available in the following:

- Biology: Environmental Science
- Biology: Genetics
- Business
- Chemistry
- Finance
- Physics
- Psychology
- Sports Science

This minor is not available to students who earn a major in Information Systems.

Code	Title	Units
<b>Lower-Division Requirements</b>		
CSC 1043 and CSC 1043L	Introduction to Computer Programming and Introduction to Computer Programming Lab	3
Choose one (1) sequence from the following:		3-4
MTH 1044	Calculus with Applications (FE)	
MTH 1064 and MTH 1064L	Calculus I (FE) and Calculus I Lab (FE)	
MTH 1073	Business Calculus (FE)	
Choose one (1) course from the following:		3
MTH 2003	Introduction to Statistics	
MTH 3063	Calculus Based Statistics with R	
MTH 3083	Mathematical Probability and Statistics	
<b>Upper-Division Requirements</b>		
CSC 3003 or EGR 3003	Python and UNIX Python and UNIX	3
CSC 3011 or CSC 3031	Machine Learning and Multivariate Modeling in R Data Visualization and Communication with R	1
CSC 3022 or ISS 4014	Data Management for Data Analytics Data Base Systems and Web Integration	2-4
Choose one (1) sequence from the following:		3
CSC 4133	Service Learning in Computer Science	
HON 4098 and HON 4099	Honors Project I and Honors Project II	
KIN 4084	Practicum in Kinesiology	
MTH 4142 and MTH 4151	Data Science Project I and Data Science Project II	
MTH 4133	Service Learning in Mathematics	
MTH 4162 and MTH 4171	Project for Data Analytics Minors I and Project for Data Analytics Minors II	
<b>Specialization Courses</b>		
Choose one (1) of the following areas of specialization:		8-16
<i>Biology: Environmental Science</i>		

BIO 2011  
and BIO 2011L

Ecological and Evolutionary Systems (FE)  
and Ecological and Evolutionary Systems  
Laboratory (FE)

BIO 3063  
and BIO 3063L

Conservation Ecology  
and Conservation Ecology Laboratory

### *Biology: Genetics*

BIO 2010  
and BIO 2010L

Cell Biology and Biochemistry (FE)  
and Cell Biology and Biochemistry Laboratory (FE)

BIO 3045  
and BIO 3045L

Genetics  
and Genetics Laboratory

### *Business*

MGT 2012

Principles of Management

MKT 3032

Principles of Marketing

Choose one (1) course from the following:

BUS 4080

International Business

MGT 3020

Organizational Behavior

MGT 4012

Leadership Theory and Practice

### *Chemistry*

CHE 1052  
and  
CHE 1052L

General Chemistry I (FE)  
and General Chemistry I Lab (FE)

CHE 1053  
and  
CHE 1053L

General Chemistry II  
and General Chemistry II Lab

CHE 2013

Analytical Chemistry

CHE 3025  
and  
CHE 3025L

Physical Chemistry I  
and Physical Chemistry I Lab

### *Finance*

ACC 2001

Principles of Financial Accounting

ACC 2002

Principles of Managerial Accounting

FIN 3035

Business Finance

### *Physics*

PHY 2044  
and  
PHY 2044L

University Physics I (FE)  
and University Physics I Lab (FE)

PHY 2054  
and  
PHY 2054L

University Physics II  
and University Physics II Lab

PHY 3004  
and  
PHY 3004L

Modern Physics  
and Modern Physics Lab

### *Psychology*

PSY 1003

General Psychology (FE)

PSY 3020

Social Psychology

PSY 4009

Psychology of Cognition and Learning

### *Sports Science*

KIN 2080

Care and Prevention of Athletic Injuries

Choose six (6) units from the following:

KIN 2050

Medical Terminology

KIN 2080L

Care and Prevention of Athletic Injuries Lab

KIN 3027

Applied Biomechanics<sup>1</sup>

KIN 3027L

Biomechanics Laboratory

2 Data Analytics Minor

KIN 3070 Praxis of Strength Training and Conditioning

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**Total Units** **26-37**

<sup>1</sup> Prerequisite KIN 3025 waived with KIN 2080.