DATA ANALYTICS MINOR

This interdisciplinary minor prepares students to use data analysis within their careers. Students will develop their skills to evaluate and interpret data in order to make better-informed decisions. In addition, students will develop their visualization and communication skills. The minor's selective elective courses provide an opportunity to apply the data analytic skills in a specific area of related interest.

Code	Title	Credits	Completed
Minor Requirements (22 credits)			_____
Foundational Statistics Course			_____
Select **one** of the following:		4	_____
MATH-141	Introductory Statistics		_____
MGT-140	Quantitative Decision-Making		_____
PSYC-251	Psychological Statistics		_____
Data Analytics Core Course			_____
IIPHYS-342	Data Analysis for Scientists (a C or higher is required)	4	_____
ISMGT-383	Applied Data Analysis & Vis (a C or higher is required)	4	_____
Select one from each cluster: (please note some courses have prerequisites)			_____
Methods and Tools Cluster:		*4*	_____
These courses develop a deeper understanding of techniques and methodologies used in various disciplines for computational background, data acquisition and preliminary analysis.			_____
BIO-313	Population and Community Ecology		_____
COMM-472	Quantitative & Qualitative Methods		_____
ECON-370	Financial Economics		_____
ISCS-210	Python Programming		_____
HLSC-305	Epidemiology		_____
PSYC-252	Research Methods in Psychology		_____
SOC-301	Sociological Research Methods		_____
Active Experimentation Cluster:		*4*	_____
These courses use data analysis techniques to focus on problem solving, interpretation, and implementation of scientific decision making.			_____
CS-480	Machine Learning		_____
ECON-420	Econometrics		_____
HP-460	Research Methods in Human Movt		_____
MATH-341	Applied Statistics		_____
MATH-381	Math Modeling		_____
MGT-335	Strategic Digital Marketing		_____
MGT-434	Marketing Research		_____
SOC-303	Sociological Quantitative Analysis		_____
SPDI-410	Mechatronics and Automation		_____
Portfolio & Career Course			_____
MGT-384	Data Analytics Portfolio Plus	2	_____
Total Credits		**22**	_____

Upon completion of the Data Analytics minors students will:

- Gain introductory data analytics skills, including a basic understanding of statistical testing, computer programming and the ability to explore and analyze concepts. The elective courses provide an opportunity to apply the skills in a specific area of interest.
- Analyze data, test claims and draw valid conclusions using appropriate statistical methodology.
- Recognize relationships between data and specific areas of practice such as biology, business, economics, criminal justice, etc.
- Retrieve, organize and visualize data using a variety of analytical tools.
- Recognize patterns, ask intelligent questions and generate insights from different data sets.
- Tell the story with the data - visually, orally, and in writing.
- Develop students' data analytic identity by creating their data analytics portfolio and experiences using present day tools.