

# DATA SCIENCE MINOR

Data science is broadly applicable to all fields of study, particularly in natural and social sciences. Combining domain knowledge of a particular field with the ability to work with and analyze data is invaluable to employers and researchers alike. This set of courses is designed to give students a basic foundation in statistics, programming, and data science that will be meaningful and marketable upon graduation. Students should work with their major advisor and mathematics program coordinator for direction on variable credit courses.

Requirement		Hours
<b>Minimum Credit Hours</b>		<b>18</b>
Code	Title	Credits
CIS S170	Programming Fundamentals	3
STAT S200	*Elementary Statistics	3
STAT S210	Introduction to Data Science	3
Choose 9 credits from the following: <sup>1</sup>		9
BA S373	Principles of Data Analytics	3
BIOL S355	Experimental Design and Data Analysis	4
CIS S235	Spreadsheet Concepts and Applications	3
CIS S430	Database Management Systems	3
ENVS S314	Data Visualization	2
ENVS S338	Introduction to Geographic Information Systems (GIS)	3
ENVS S406	Remote Sensing	3
ENVS S410	Advanced Geographic Information Systems	3
MATH S314	Linear Algebra	3
STAT S400	Statistical Computing with R	2
STAT S401	Regression and Analysis of Variance	4
A maximum of 3 elective credits may be from an internship, independent study, or research. <sup>2</sup>		3

<sup>1</sup> It is recommended 6-9 credits are taken from a single discipline (BIOL/ENVS, CIS, STAT) or 6 credits in one discipline and an additional 3 credits in another discipline or an independent study, research, or internship.

<sup>2</sup> Credits in an independent study, research, and/or an internship must be approved by the student's major advisor and the mathematics program coordinator. With approval, these may include but are not limited to BA S391, BA S397, BA S398, BIOL S391, BIOL S397, BIOL S398, CIS S391, CIS S397, CIS S398, ENVS S391, ENVS S397, ENVS S398, MATH S391, MATH S397, MATH S398, STAT S391, STAT S397, STAT S398.