

# MULTIDISCIPLINARY STUDIES, B.S., DATA SCIENCE OPTION

Millersville University's new MDST concentration, Data Science, is a program of study that provides students with a solid foundation of skills in data science by combining knowledge and methodology from computer science, mathematics, and design. In addition, students are required to complete a minor of their choosing to acquire an area of domain knowledge to which they can apply their data science skills. Data Scientists finds success in a wide variety of industries due to their astute problem-solving skills. From engineering, aeronautics, and finance to criminal justice and information technology, the demand for data scientists continues to grow.

## PROGRAM ADVISORS

Dr. Stephanie Schwartz, Computer Science

For more information visit: <https://www.millersville.edu/mdst/approved-programs/data-science.php>

## Multidisciplinary Studies(BS)-SCTE Science & Tech

Code	Title	Hours
<b>DATA SCIENCE - CORE 1 (COMPUTER SCIENCE)</b>		
CSCI 161	Introduction to Programming 1	4
CSCI 162	Introduction to Programming 2	4
CSCI 362	Data Structures	4
CSCI 366	Database Systems	4
CSCI 450	Artificial Intelligence	4
CSCI 452	Data Mining	4
CSCI 453	Large-Scale Data Analytics and Visualization	4
<b>DATA SCIENCE - CORE 2 (MATHEMATICS AND DESIGN)</b>		
CSCI 140	Discrete Structures	4
MATH 161	Calculus 1	4
MATH 211	Calculus 2	4
MATH 235	Survey of Statistics	3
MATH 236	Elements of Statistics 2	3
MATH 304	Matrix Algebra & Applications	4
DESN 144	Digital Theory and Skills	3
DESN 349	Information Design	3
<b>REQUIRED CAPSTONE</b>		
A 2.0 GPA must be maintained in the overall major block and in each of the two Core areas		
Co-op/Research/Thesis - Choose 1 of the following:		3-12
CSCI 300	Co-Op Ed Experience in CSCI	
CSCI 400	Co-Op Ed Experience in CSCI	
CSCI 498	Independent Study	
CSCI 499	Departmental Honors	
MATH 300	Co-Op Ed Experience in Math	
MATH 400	Co-Op Ed Experience in Math	
MATH 498	Independent Study	
MATH 499	Departmental Honors	
<b>Total Hours</b>		<b>59-68</b>

## Req Related for Multidisciplinary Studies - SCTE

Code	Title	Hours
A Minor is Required. Please consult advisor		
A minor in a field other than Mathematics or Computer Science is required. Discuss options with your academic advisor.		
Minor Requirements - See separate block		
<b>Total Hours</b>		<b>0</b>