

School of Data Science

The School of Data Science is designed to organize data science academic and research activities (with degrees and certificates tailored to regional workforce needs) while leveraging research partnerships with nearby national labs (Jefferson Lab, NASA Langley, and Wallops Flight Facility) to develop a targeted scientific focus in data science. The School's objectives include developing high-impact, cross-disciplinary research initiatives that center on data science and conducting outreach and community engagement, being a source of data science expertise to the community, the Hampton Roads region, the Commonwealth of Virginia, and the nation.

Programs

Master of Science Programs

- Data Science and Analytics with a Concentration in Artificial Intelligence and Machine Learning (MS) (<http://catalog.odu.edu/graduate/data-science/data-science-analytics-artificial-intelligence-machine-learning-ms/>)
- Data Science and Analytics with a Concentration in Business Intelligence and Analytics (MS) (<http://catalog.odu.edu/graduate/data-science/data-science-analytics-business-intelligence-ms/>)
- Data Science and Analytics with a Concentration in Engineering and Big Data Analysis (MS) (<http://catalog.odu.edu/graduate/data-science/data-science-analytics-engineering-big-ms/>)
- Data Science and Analytics with a Concentration in Geospatial Analytics (MS) (<http://catalog.odu.edu/graduate/data-science/data-science-analytics-geospatial-ms/>)
- Data Science and Analytics with a Concentration in Physics (MS) (<http://catalog.odu.edu/graduate/data-science/data-science-analytics-physics-ms/>)

Courses

Data Science (DASC)

DASC 596 Topics in Data Science (3 Credit Hours)

The advanced study of selected topics designed to permit small groups of qualified students to work on subjects of mutual interest which, due to their specialized nature, may not be offered regularly. These courses will appear in the course schedule and will be more fully described in information distributed to academic advisors.

DASC 597 Independent Study (1-3 Credit Hours)

Independent reading and study on a topic to be selected under the direction of an instructor. Conferences and papers as appropriate.

Prerequisites: approval of the program coordinator

DASC 620 Introduction to Data Science and Analytics (3 Credit Hours)

This course will explore data science as a burgeoning field. Students will learn fundamental principles and techniques that data scientists employ to mine data. They will investigate real life examples where data is used to guide assessments and draw conclusions. This course will introduce software and computing resources available to a data scientist to process, visualize, and model different types of data including big data. Cross-listed with CS 620.

DASC 690 Data Science Capstone Project (3 Credit Hours)

The culminating course in the proposed MS in Data Science and Analytics degree program will bring students together with faculty and external partners. In consultation with a faculty advisor and a business or industry or government representative, students will be required to develop a project that aims to solve a data science/analytics problem in a real-world business, industry, or government setting. Faculty and business/industry/government representatives will serve as external mentors for the students during this experience. Note that an external mentor is not mandatory but encouraged.

Pre- or corequisite: DASC 620/CS 620, CS 624, CS 625, STAT 603, and STAT 604