

DATA ANALYTICS, MASTER OF SCIENCE (M.S.)

In a world where data shapes decisions, the M.S. in Data Analytics at Virginia State University empowers you to harness the power of data for real-world change. Whether you aim to drive business innovation or solve complex global problems, this program equips you with the advanced skills to lead in a rapidly evolving, data-driven world.

Program Overview

At VSU, the M.S. in Data Analytics program isn't just about numbers—it's about using data to solve challenges that matter. In partnership with the Departments of Engineering, Computer Science, and Mathematics, you'll gain the technical expertise and practical experience to make meaningful contributions across industries. This interdisciplinary program is located in the Department of Engineering within the College of Engineering Technology at VSU, ensuring you receive a well-rounded education that blends theory with hands-on practice.

Key Areas of Study:

- **Data Mining:** Uncover patterns in data to inform better decision-making.
- **Machine Learning:** Harness algorithms to predict trends and behaviors.
- **Data Visualization:** Transform complex data into clear, actionable insights.
- **Business Analytics:** Use data to drive business strategy and performance.
- **Data Ethics:** Encompass the moral obligations of gathering, protecting, and using Information
- **Advanced Statistical Methods:** Apply cutting-edge techniques to solve real-world problems.

Code	Title	Credit Hours
Core Courses (18 credit hours)		
DAAN 500	Advanced Prog. for Data Analyt	3
DAAN 510	Data Analytics I	3
DAAN 511	Data Analytics II	3
DAAN 520	Advanced Info Visualization	3
DAAN 530	Ethics in Data Analytics	3
STAT 562	Mathematical Statistics IV	3

Code	Title	Credit Hours
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Restricted Electives Courses (9 credit hours):

Students will select 9 credits hours from the list of courses. Selected coursework must be approved by an advisor.

DAAN 545	Big Data Analytics	3
DAAN 560	Sport Data Analytics	3
DAAN 562	Financial Analytics	3
DAAN 640	Spec.Topics in Data Analytics	3
CSCI 503	Introduction to Machine Learni	3
CSCI 602	Adv Artificial Intelligence	3
CSCI 695	Data Mining	3

CSCI 810	Machine Learning with Big Data	3
CSCI 830	Introduction to Blockchain	3
STAT 601	Introduction to Predictive Ana	3
STAT 610	Bayesian Statistics	3

Career Outcomes

Graduates of the M.S. in Data Analytics program are prepared to step into high-impact roles, such as data scientists, business intelligence experts, and analytics leaders. Whether working in finance, healthcare, technology, or government, your skills will be crucial in solving pressing challenges and driving success.

Flexible Delivery Options – Fully Online or Traditional Face to Face

We know life can be busy, so the M.S. in Data Analytics program offers maximum flexibility to fit your schedule. Choose the format that works for you, fully online or in-person classes.

The fully online degree program utilizes Canvas, our Learning Management System (LMS). Faculty are trained to teach online and the online courses meet the Quality Matters standards for instructional design.

Admission Requirements

Prospective students must meet the Graduate Office admission requirements (<https://www.vsu.edu/admissions/apply/graduate-apply/>) and maintain a minimum 3.0 GPA throughout the program. In addition to the Graduate Office admission requirements, criteria for non-conditional admission to the program will be set by the Departmental Computer Science Graduate Committee. Any student failing to maintain a 3.0 cumulative grade point average (GPA) in a 4.0 scale will be on academic probation for one semester. If the student's cumulative average does not return to 3.0 at the end of the probation semester, the student will be required to leave the program.

Start Dates: Applications are accepted on a rolling basis, and students can start in August (Fall term) or January (Spring term).

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