

# MASTER OF SCIENCE IN DATA SCIENCE

#### **PROGRAM OVERVIEW**

The Online Master of Science in Data Science (MSDS) at Stevens Institute of Technology offers you a curriculum aligned with high-demand careers in fintech, business intelligence and analytics, academia and database management, as well as government positions requiring strong skills in data analysis. As a data science student, you will hone skills in:

- Python and R, SQL, Hadoop, Hive and Tensorflow
- Machine learning and deep learning
- Predictive modeling
- · Advanced statistical and optimization methods
- Supervised/unsupervised learning
- Neural networks
- Natural language processing (NLP)
- Data visualization

#### **ABOUT STEVENS**

Situated on the Hudson River, just 15 minutes from downtown Manhattan, Stevens is across the river from one of the world's most innovative cities and largest tech hubs. Our online degrees offer a groundbreaking curriculum influenced by the corporate headquarters and bustling tech startups right next door, no matter your location. Many of our graduates find opportunities with some of the biggest names in business and technology, including Google, Amazon, Microsoft and Bloomberg.

#### THE STEVENSONLINE ADVANTAGE

We designed our 100% online programs to provide the same quality as our highly ranked on-campus programs. We offer relevant courses, renowned faculty and individualized support to each student.

Additional benefits of our StevensOnline programs:

- · Global cohort of classmates to learn with and from
- Direct access to experienced faculty
- Flexibility for how and where you study

Through our online offerings, you will gain access to the same quality programs and distinguished faculty as on-campus students.



10

31

**CREDIT HOURS** 

COURSES

## PROGRAM STARTS

FALL, SPRING, SUMMER

**2 YEARS OR LESS** COMPLETION TIME\*

## NO GRE/GMAT REQUIRED

\*Completion time may vary based on the number of credits taken each semester.



#### OUR MSDS BY THE NUMBERS

#### **100%** Employment

Percentage of MSDS graduates in the Class of 2021 who accepted job offers within three months of graduation.\*

#### No. 1 In n.j.

No. 1 in New Jersey for Best Online Master's in Computer Information Technology Programs by *U.S. News* & World Report (2023).

#### 7x winner

21st Century Award for Best Practices in Distance Learning by the U.S. Distance Learning Association.

# No. 13

Stevens was named one of the Top 20 U.S. Private Schools for Best Career Placement by The Princeton Review (2022).

#### No. 15 For best value

Ranked No. 15 among Best Value Colleges by Payscale (2023).\*\*

\*Based on data from 50% of Spring 2021 full-time program graduates.

\*\*Based on the cost of a four-year bachelor's degree program.

## COURSEWORK

The Online MSDS program offers both **Traditional** and **Advanced** course sequences. Students will complete coursework in the following topics to develop skills as data scientists who can glean insights and aid in informed decision-making. All courses are three credit hours.

#### TRADITIONAL COURSEWORK

Term 1	Term 2	Term 3	Term 4	Term 5
Foundational Mathematics for Data Science	Statistical Methods	Optimization For Data Science	Deep Learning	Cognitive Computing
Probability	Numerical Linear Algebra for Big Data	Applied Machine Learning	Time Series Analysis	Big Data Technologies

#### ADVANCED COURSEWORK

Term 1	Term 2	Term 3	Term 4	Term 5
Statistical Methods	Optimization for Data Science	Deep Learning	Cognitive Computing	Natural Language Processing
Numerical Linear Algebra for Big Data	Applied Machine Learning	Time Series Analysis	Big Data Technologies	Web Mining

### **CAREER OUTLOOK**

Graduates of the Online MSDS program bring a blend of interpersonal and technical skills to a variety of data and information, analyst and leadership roles. Prospective occupations include:

JOB TITLE	EMPLOYED	MEDIAN ANNUAL EARNINGS
Computer and Information Systems Manager	557,400	\$164,070
Computer and Information Research Scientist	36,500	\$136,620
Computer Network Architect	180,200	\$126,900
Software Developer and Software Quality Assurance Analyst and Tester	1,795,300	\$124,200
Information Security Analyst	168,900	\$112,000
Data Scientist	168,900	\$103,500
Computer Systems Analyst	531,400	\$102,240

Source: U.S. Bureau of Labor Statistics, 2023.

#### **READY TO LEARN MORE?**

START YOUR APPLICATION

**Email our enrollment team** or call **551.277.2702** for a one-on-one consultation to discuss admissions requirements, financial aid and more.