



UNIVERSITY OF WISCONSIN  
DATA SCIENCE

# FIND YOUR FUTURE IN DATA

Earn a University of Wisconsin Master of Science in Data Science Online

## MASTER'S DEGREE OVERVIEW

The world generates data at an astonishing rate—about 2.5 quintillion bytes each day. Across the country, employers are racing to hire professionals who know how to interpret and extract meaning from data. With this in mind, we created the University of Wisconsin Master of Science in Data Science. The degree's online format is ideal for busy adults like you, who want to enter or advance in the data science field, but don't have the time for on-campus courses.

In this 12-course, 36-credit master's program, you will learn the latest tools and analytical methods to clean, organize, analyze and interpret unstructured and

structured data. You'll also learn how to communicate your discoveries clearly to stakeholders using sophisticated visualization techniques and other means.

The Master of Science in Data Science isn't a niche degree. We understand that well-rounded data professionals are the ones who remain in high demand as new challenges and business needs arise. That's why you will leave the program with a respected UW graduate degree that applies to any area of data science and provides valuable skills in strategic thinking, communication, and management.

### AN INTEGRAL ADVISORY BOARD

The UW Data Science program partners with an advisory board of industry professionals dedicated to helping students bridge the gap between classroom learning and real-life data science challenges. Their continual input helps ensure course content meets today's employer needs in this rapidly evolving field—and that graduates make a smooth transition into the workforce. Our advisory board is made up of professionals from organizations such as American Family Insurance, the State of Wisconsin Department of Children and Families, CUNA Mutual Group, Mayo Clinic, Kohl's, and more.



# A UNIVERSITY OF WISCONSIN EDUCATION

---

## **GAIN SKILLS YOU CAN USE EVERY DAY**

Working with data is highly technical. The UW Data Science curriculum provides expertise in specialized technical areas such as data mining and warehousing, predictive analytics, statistical modeling, database infrastructures and data management, machine learning, and analytics-based decision making. Our curriculum also incorporates data ethics, communication, and management techniques—skills that can apply to any industry and help you advance and succeed in leadership positions.

## **LEARN FROM EXPERT UW FACULTY**

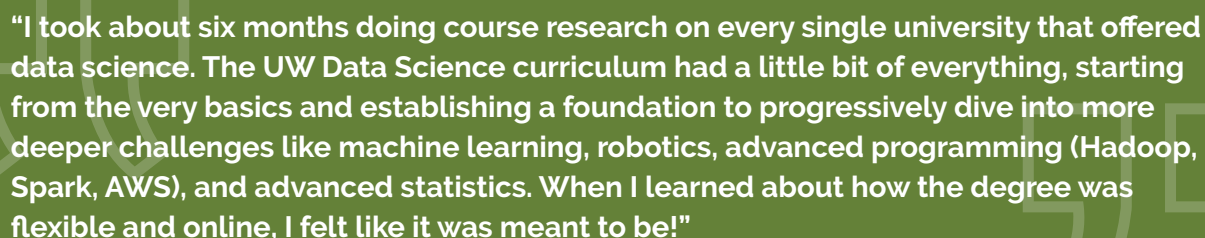
All UW Data Science master's courses are developed and taught by the best and brightest faculty from across the UW System. Their diverse yet complementary specialties—in statistics, computer science, philosophy, business management, marketing, economics, and more—have been infused into courses. The result is a truly multidisciplinary curriculum.

## **STAND OUT WITH AN IMPRESSIVE CREDENTIAL**

Where you earn your degree matters. University of Wisconsin institutions are among the most recognized and respected in the country. Upon graduation, you will receive your Master of Science from one of six University of Wisconsin campuses: UW-Eau Claire, UW-Green Bay, UW-La Crosse, UW-Oshkosh, UW-Stevens Point, or UW-Superior. Your degree and transcripts will be identical to those earned by on-campus students.

## **ENJOY A FLEXIBLE EDUCATION**

Though this is an online program, UW Data Science advisers and faculty are just an email or phone call away. You never have to set foot on campus, but you're free to use campus resources such as career services and the online library resources. For our working adult students, an online format is a natural fit and a big factor in their ability to earn a degree while balancing work and family responsibilities.



**"I took about six months doing course research on every single university that offered data science. The UW Data Science curriculum had a little bit of everything, starting from the very basics and establishing a foundation to progressively dive into more deeper challenges like machine learning, robotics, advanced programming (Hadoop, Spark, AWS), and advanced statistics. When I learned about how the degree was flexible and online, I felt like it was meant to be!"**

– Venmathi Shanmugam, UW Data Science graduate





## CURRICULUM

The UW Data Science Curriculum is designed and taught by expert UW faculty from diverse disciplines across the UW campuses. You will take 11 courses, plus a final capstone course giving you an opportunity to apply everything you've learned in a real-world setting, at a real workplace. As part of your degree, you will receive access to a Virtual Lab, which lets you remotely access dozens of tools such as R, Python, SQL Server, and Tableau. The course list is outlined below. For course descriptions, visit [datasciencedegree.wisconsin.edu](https://datasciencedegree.wisconsin.edu).

- Foundations of Data Science
- Statistical Methods
- Programming for Data Science
- Data Warehousing
- Big Data: High-Performance Computing
- Communicating about Data
- Data Mining
- Visualization and Unstructured Data Analysis
- Ethics of Data Science
- Prescriptive Analytics
- Data Science and Strategic Decision Making
- Capstone



## CAPSTONE

For the final course, the capstone experience, you will have the opportunity to apply everything you have learned in the program to a real business problem. This hands-on experience can be tailored to your interests and career goals. Often, students find that their capstone experience leads to job opportunities and professional connections.



## CAREERS

Data scientists work in virtually every industry, including healthcare, computer science, marketing, manufacturing, education, insurance, and finance among others. Companies such as Facebook, Amazon, IBM, Kayak, Capital One, and *The New York Times* clamor for those who can drive business intelligence using vast and complex data.

And yet, there is a shortage of data science professionals. According to a 2018 LinkedIn report, over 151,000 data science jobs are going unfilled across the nation. On the job site Indeed, data science job postings have more than tripled, jumping 256% since December, 2013. However, searches for data science jobs are increasing at a much slower rate. Because of this, the career outlook for data professionals is bright.

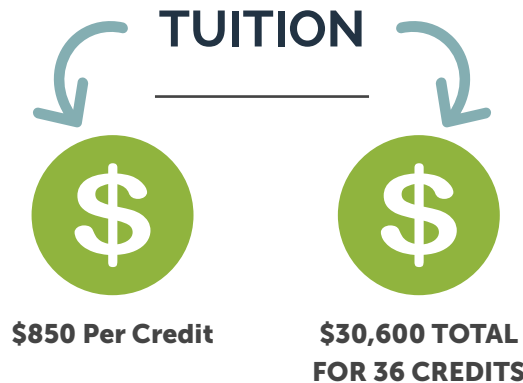
Many who work with big data are known as data scientists, although they may also be called data analysts. The national average salary for data scientists is \$114,892 according to SalaryExpert.

## ADMISSION REQUIREMENTS

---

- ✓ A bachelor's degree and a cumulative GPA of 3.0
- ✓ Official college transcripts
- ✓ Prerequisite coursework in elementary statistics, introductory computer programming, and introduction to databases
- ✓ Your resume
- ✓ Two letters of recommendation
- ✓ A personal statement of up to 1,000 words

*The GMAT and GRE are not required. Campuses may waive some of these requirements as part of the comprehensive application process. For details about admission requirements and how to apply, visit the [admission page](#).*



Financial aid may be available to you and is awarded by your campus.  
Find out more about [tuition and financial aid](#).

**i** Note: tuition is increasing to \$875 per credit as of the Fall 2022 semester.

## GET MORE INFO

Visit [datasciencedegree.wisconsin.edu](https://datasciencedegree.wisconsin.edu)  
Call 1-877-895-3276  
Email [learn@uwex.edu](mailto:learn@uwex.edu)

