The University of Wisconsin-Madison is an academic leader offering an outstanding education to our students and publishing world renowned research and scholarship. Research and education in data science follows the UW-Madison tradition of digging deep into new areas, offering a collaborative environment for scholars, connecting and collaborating with regional, national and global partners, educating the next generation of leaders and always working on the cutting edge.

Data Science Centers & Institutes

**American Family Data Science Institute (AFIDSI)**
Founded in 2019, the AFIDSI performs research in the fundamentals of data science and translates this research into practice. AFIDSI offers campus grants to foster data science research.

**Data Science Hub**
The Data Science Hub provides training and outreach across campus through facilitators who can recommend learning pathways and project strategies, community events and co-sponsored seminars, and regular training.

**Department of Biostatistics and Medical Informatics (BMI)**
A home of data science for medicine and public health, BMI’s machine learners, statisticians, computational biologists, bioinformaticists, clinical informaticians, computational image analysts, and others advance data science through collaboration with biomedical scientists.

**Institute for Foundations of Data Science (IFDS)**
The IFDS, funded by a grant from NSF's TRIPODS program, focuses on fundamental, theoretical issues in data science. IFDS faculty are involved in applications-focused projects in a variety of areas. IFDS also offers a summer school and a research workshop on fundamental data science each summer.

**Machine Learning and Optimization Research Consortium (MOR)**
MOR is committed to working with industry partners to solve machine learning and optimization challenges in data analytics, healthcare systems, manufacturing, transportation, signal/image processing, planning, logistics and other commercial applications.

**Machine Learning for Medical Imaging (ML4MI)**
The ML4MI initiative fosters interdisciplinary collaboration between machine learning (ML) experts and medical imaging researchers in order to develop and apply state-of-the-art ML solutions to challenging problems in medical imaging.
MADLab
The MADLab is a University Center of Excellence supported by the Air Force Office of Scientific Research (AFOSR) and the Air Force Research Lab (AFRL) to develop the next-generation of Machine Learning theory, algorithms, and applications.

School of Computer, Data & Information Science (CDIS)
CDIS brings together the departments of Computer Sciences, Statistics, and the Information School to serve the computing, data and information needs of our ever-changing society. CDIS collaborates across campus, regionally and nationally to produce cutting-edge, transformative research, educate leaders and critical thinkers, and accelerate innovation that tackles societal issues.

Wisconsin Institute for Discovery (WID)
WID’s expertise in data science spans cutting-edge fields across several disciplines, with the goal of developing end-to-end strategies for data collection, analysis, management, privacy, security, and decision-making.

Data Science Curricular Programs

Data Science Undergraduate Major
UW-Madison established an interdepartmental Data Science undergraduate major in 2019, which has become the fastest-growing major on campus. This is a joint offering of the Statistics, Computer Sciences, and Mathematics Departments and its curriculum was devised by a committee of members of all three departments. An undergraduate certificate (minor) was added for fall 2021.

Masters Programs in Data Science
Since 2015, the Statistics Department has offered both a one year and two year masters degree named-option in Data Science. The curriculum involves statistical thinking and courses on inferential methods, computational techniques, data analysis tools, and data science problem solving skills.

MS and Doctoral Programs in Biomedical Data Science
Housed in the UW-Madison School of Medicine & Public Health, the programs prepare graduates to apply key concepts and methodologies from computer science and statistics to computational problems in biomedicine.

Program in the Works
A new professional Masters in Data Science is planned as a joint effort of Statistics and Computer Sciences. The curriculum will require courses in both departments.

For more information on Data Science at UW-Madison visit:
www.datascience.wisc.edu