Empowering Innovation Through Data Science
The UCI Master of Data Science (MDS) provides you with foundational skills to compete in the high-demand fields of data science, machine learning, and artificial intelligence across various industries and across the globe.

This intensive 15-month, full-time program is taught by renowned leaders in the field of statistics and computer science. As an MDS student, you will learn from a balanced curriculum and receive the tools necessary to identify relevant datasets, apply the appropriate statistical and computational tools to answer questions posed by any organization, evaluate analytical procedures, and implement these efficiently over large heterogeneous data sets in a modern computer environment.

“We are taking the helm of generating a robust Data Science program to innovate and be leaders in the industry. Our balanced approach makes us a unique catalyst where students can learn and make an impact on society.”

Bin Nan, Professor and Faculty Director
UCI Master of Data Science
Department of Statistics
## Balanced Curriculum

### Fall
- Intermediate Probability and Statistical Theory I
- Fundamentals of Algorithms with Applications
- Machine Learning and Data Mining

### Winter
- Intermediate Probability and Statistical Theory II
- Statistical Methods I (Regression Modeling Strategies)
- Databases and Data Management

### Spring
- Statistical Methods II (Modeling and Data Visualization)
- Introduction to Artificial Intelligence
- Neural Networks and Deep Learning

### Summer
- Summer Internship (or)
- Summer Electives

### Fall
- Bayesian Data Analysis
- Capstone I: Professional Writing and Communication for Data Science Careers
- Capstone II: Design Project for Data Science

### Sample Electives:
- Principles of Data Management
- Transaction Processing and Distributed Data Management
- Big Data Management
- Data Structures with Applications
- Graphical Models and Statistical Learning
- Multivariate Statistical Methods
- Time series Analysis
- Theory and Practice of Sample Survey
- Stochastic Processes
- Computer Security
Career Advising

Our Career Services are part of our structured program and follow the philosophy of focusing on the individual in career coaching to searching for employment. Our team provides a wrap-around service, from building a compelling resume to landing and negotiating a job offer. Some students enter the MDS program with career objectives in mind, while others do not. Regardless of the starting point, our team will be your partner to achieve your professional goals.

Capstone Project

The Capstone Project provides students the opportunity to work on real-life data science problems with industry partners. The projects are comprehensive in scope, allowing students to demonstrate the breadth and depth of their knowledge in data science. The Capstone Project will develop an empirically-driven solution to sponsoring organizations and will cover the full spectrum of the analytic process, from data gathering, organizing, visualization, analysis, and interpretation of results. Students will work in small groups to put concepts and techniques together and put them in action.
Admissions

Applicants may apply online and must meet all prerequisite requirements at the time of matriculation into the program.

Admissions to graduate standing in the UCI Donald Bren School of Information and Computer Sciences is accorded to those possessing an undergraduate degree with an acceptable level of scholarship from an institution of recognized standing.

Applicants for admissions will be evaluated on their academic record and potential as demonstrated in submitted application materials including:

**Prerequisite Courses:**
One Computer Programming Course - Preferably C++ or Python
Three Semesters or Four Quarters of Calculus, Linear Algebra, and Introductory Probability and Statistics.

**Unofficial Transcripts** from each college or university attended. For application review purposes only, scan and upload copies of transcripts for all institutions attended since high school. Official transcripts will be requested if you have been admitted and accept our admissions offer. Do not send official transcripts until this time.

**Three Letters of Recommendation** from people who can evaluate your academic and professional achievement, describe your strengths and weaknesses, and comment on your character, integrity and motivation. Letters which speak to your ability to perform in a postgraduate academic program are especially useful. Letters may be from professors, work supervisors, or others. Family members are not allowed.

**Personal Statement** demonstrating your writing and communication ability. The personal statement should include: a personal history describing your previous professional and academic achievements.

**Statement of Purpose** providing a statement of your personal, academic, and professional goals, as well as why and how the MDS program will help you achieve these goals.

**GRE is required of ALL applicants.** Official test scores should be sent from the testing agency to UC Irvine. UCI’s institution code is 4859.

**TOEFL or IELTS** (Test of English as a Foreign Language) if you are an international student and your primary language is not English, you need to take a test of English language proficiency. For complete information, please see Graduate Division’s English Proficiency site.

**Application Fee:** Information may be found on the embedded link.
Industry is learning quickly that people can scrape and analyze data, but to do something truly meaningful with data - to make decisions that will drive the industry forward you need the foundations of data science and understanding the statistics and computing methods.

Dan Gillen
Professor and Chair
Department of Statistics

The MDS program has rolling admissions and it is your responsibility to ensure all parts of your application are completed by the stated deadline.

December 15th
Early Deadline

April 15th
Final Deadline for ALL Applicants

Next Steps
- Schedule a Personal Consultation
- Attend a Webinar
- Apply