Program Description

The Master of Science degree in Data Analytics (MSDA) is offered in on-campus, online, and blended formats. On-ground students will have the option of taking online or blended classes as well. The degree aims at providing an interdisciplinary approach to data analytics that covers both the foundational mathematical knowledge of data science and the computational methods and tools for preprocessing, interpreting, analyzing, representing, and visualizing data sets.

Admission Requirements

To be fully admitted to the Master of Science in Data Analytics program, students must have completed a bachelor’s degree with a minimum GPA of 3.0 on a 4.0 scale, and have completed all prerequisite courses (below) with a grade of B- or better.

- MAT 113 (Business Calculus) or MAT 115 (Calculus I)
- MAT 121 Applied Statistics
- CSC 302 Discrete Structures (4 hrs)
- CSC 225 Computer Programming Concepts I
- CSC 275 Computer Programming Concepts II
- CSC 385 Data Structures and Algorithms
- DAT 332-Matrix Analysis and Numerical Optimization (or MAT 332)

All applicants must provide written evidence of their ability to perform at a high academic level by submitting a personal and academic statement.

A GRE score is not required for admission to the Master of Science in Data Analytics program.

Students who have not yet completed all prerequisites may be granted conditional admission; this allows them to work on up to 12 hours toward the degree. Grades of B- or better must be earned in all courses.

Applicants to the online MSDA degree are accepted each fall semester. The Data Analytics program may, at its own discretion, accept new students in other semesters, and may consider accepting students under conditional admission; thereby, allowing students whose baccalaureate degrees are in disciplines other than Computer Science or Mathematics to complete program entrance requirements during spring and fall terms.
Degree Requirements

Students must complete all prerequisites and a minimum of 36 credit hours including 28 required credit hours, eight elective credit hours, and four credit hours capstone course to earn the MSDA degree while maintaining a minimum GPA of 3.0 on a scale of 4.0 as listed below.

- 28 required credit hours with a minimum grade of B-
- Eight elective credit hours with a minimum grade of B-
- Capstone Course- DAT 554

Required Courses:

- DAT 472 or CSC 472 Introduction to Database Systems
- DAT 502 Introduction to Statistical Computation
- DAT 550 Advanced Statistical Methods
- DAT 551 or CSC 573 Data Mining
- DAT 552
- DAT 553 or CSC 570 Advanced Topics in Computer Systems
- DAT 554

Electives (choose two):

- CSC 570 Advanced Topics in Computer Systems 1-4
- DAT 444 or MAT 444 Operations Research Methods
- DAT 565 or CSC 572 Advanced Database Concepts
- DAT 566 or CSC 570 Advanced Topics in Computer Systems
- DAT 569

Transfer Courses

Students are allowed to transfer a maximum of eight graduate semester hours with a grade of B or better. They will be evaluated on a case-by-case basis and approved by student petition. Transfer students will be required to take a minimum of 28 credit hours of MSDA core and elective course work at UIS.

Official degree requirements are available in the UIS catalog at www.uis.edu/uiscatalog

Program Contacts

Program Coordinator:

Tung Nguyen
Associate Professor
Dept. of Mathematics
217.206.8338
tnguy2@uis.edu
dat@uis.edu

Mathematical Sciences Department

WUIS Building, Office 13
University of Illinois Springfield
One University Plaza, MS WUIS 13
Springfield, IL 62703
217.206.8405
mat@uis.edu

UIS Admissions

Office of Admissions
University of Illinois Springfield
One University Plaza, MS UHB 1030
Springfield, IL 62703
888.977.4847 / 217.206.4847
admissions@uis.edu

Program URL: https://www.uis.edu/dataanalytics