Overview - Master of Science in Data Science (MSDS)

The Master of Science in Data Science is a thirty (30) credit interdisciplinary graduate program that combines the teaching of domain-specific and technical skills for analyzing large data sets. Students interested in data science tools will be able to focus on tool principles and tool development, and students interested in data science application domains will be able to focus on the application of data science tools with a selection of courses that develop skills in one of three application areas. The program also provides its students the option of doing an industrial internship, to acquire professional experience. The program is both academic and professional in nature, providing course that are true to a Master's level degree and courses that reflect the needs of the profession.

This innovative degree program exists through the collaboration of several UM units, including the College of Arts & Sciences, College of Engineering, School of Architecture, School of Communication, Rosenstiel School of Marine & Atmospheric Sciences (RSMAS), School of Education & Human Development, and the Institute for Data Science and Computing (iDSC). Core courses are taken in engineering, computer science, and statistics, and while selecting a track is not required, tracks are available through the participating schools and colleges.

Students from non-technical backgrounds are encouraged to apply. Summer prerequisite courses in linear algebra, statistics, and programming are available for applicants who may need additional coursework prior to the start of the program. Equivalencies will be considered by the admissions committee.

The following tracks are available for M.S. students.

- Technical Data Science (College of Arts & Sciences and College of Engineering)
- Smart Cities (School of Architecture)
- Data Visualization (School of Communication)
- Marine & Atmospheric Science (Rosenstiel School of Marine & Atmospheric Sciences)
- Educational Measurement & Statistics (School of Education & Human Development) - pending approval

Regardless of the focus track, all degrees are awarded by the College of Arts & Sciences.

For more information, please visit [http://msdatascience.miami.edu](http://msdatascience.miami.edu)

- M.S. in Data Science ([http://bulletin.miami.edu/graduate-academic-programs/arts-sciences/data-science/data-science-ms/](http://bulletin.miami.edu/graduate-academic-programs/arts-sciences/data-science/data-science-ms/))
- M.S. in Data Science with a track in Technical Data Science ([http://bulletin.miami.edu/graduate-academic-programs/arts-sciences/data-science/data-science-ms/](http://bulletin.miami.edu/graduate-academic-programs/arts-sciences/data-science/data-science-ms/))
- M.S. in Data Science with a track in Smart Cities ([http://bulletin.miami.edu/graduate-academic-programs/arts-sciences/data-science/data-science-ms/](http://bulletin.miami.edu/graduate-academic-programs/arts-sciences/data-science/data-science-ms/))
- M.S. in Data Science with a track in Data Visualization ([http://bulletin.miami.edu/graduate-academic-programs/arts-sciences/data-science/data-science-ms/](http://bulletin.miami.edu/graduate-academic-programs/arts-sciences/data-science/data-science-ms/))
- M.S. in Data Science with a track in Marine & Atmospheric Sciences ([http://bulletin.miami.edu/graduate-academic-programs/arts-sciences/data-science/data-science-ms/](http://bulletin.miami.edu/graduate-academic-programs/arts-sciences/data-science/data-science-ms/))
- M.S. in Data Science with a track in Educational Measurement & Statistics - ([http://bulletin.miami.edu/graduate-academic-programs/arts-sciences/data-science/data-science-ms/](http://bulletin.miami.edu/graduate-academic-programs/arts-sciences/data-science/data-science-ms/)) pending approval