

Data Analytics Engineering, MS—Online

Prepare for a career on the frontier of data analytics, with the Online Master of Science in Data Analytics Engineering. Whether you're an experienced engineer or brand-new to data analytics, this program will immerse you in specializations such as data visualization, database design, and data mining, giving you the opportunity to obtain the skills to bridge the gap between raw data and actionable insights.

Once you've mastered essential data analytics techniques such as data normalization and data mapping—and become proficient in multiple programming languages such as R, SQL, and Python—you'll be ready to take on roles like predictive modeling analyst, advanced software engineer, data integration engineer, and more to help shape the evolution of data as a transformative force in modern society.

Program Requirements

Complete all courses and requirements listed below unless otherwise indicated.

Core Requirements

| Code | Title | Hours |
|---------|---|-------|
| IE 6400 | Foundations for Data Analytics Engineering | 4 |
| IE 6600 | Computation and Visualization for Analytics | 4 |
| IE 6700 | Data Management for Analytics | 4 |
| IE 7275 | Data Mining in Engineering | 4 |
| OR 6205 | Deterministic Operations Research | 4 |

Additional Requirements

| Code | Title | Hours |
|--|--|-------|
| Complete 12 semester hours from the following: | | 12 |
| IE 6750 | Data Warehousing and Integration | |
| IE 7300 | Statistical Learning for Engineering | |
| IE 7500 | Applied Natural Language Processing in Engineering | |
| IE 7615 | Neural Networks and Deep Learning | |

Program Credit/GPA Requirements

32 total semester hours required

Minimum 3.000 GPA required