

Master of Science: Applied Data Science 2019-2020 Advising Check Sheet

Offered jointly by the School of Information Studies and the Martin J. Whitman School of Management, the 36-credit MS-ADS curriculum includes an 18-credit common core requirement, a 3-6-credit analytics application core requirement, 12-15 credits of electives, and a portfolio milestone exit requirement. The MS-ADS program is typically completed within two years and gives students a strong data science and analytics foundation with a secondary focus of their choosing.

Common Core: 18 credits

The Common Core includes foundational knowledge in databases, data analysis and business analytics. Students will complete Common Core courses in an order which builds foundational knowledge and skills in preparation for more advanced work.

| Class # | Course Title | Completed |
|----------------|--|------------------|
| IST 659 | Data Administration Concepts and Database Management | |
| IST 687 | Introduction to Data Science | |
| IST 707 | Data Analytics | |
| IST 718 | Big Data Analytics | |
| MBC 638 | Data Analysis & Decision Making | |
| SCM 651 | Business Analytics | |

Analytics Applications Core: 3-6 credits

The Analytics Applications Core provides an opportunity for the student to choose one or two functional area specializations in accounting analytics, financial analytics, marketing analytics, and supply chain analytics, as a way to develop deeper exploration of particular application area(s) for data science techniques.

| Class # | Course Title | Completed |
|----------------|----------------------------------|------------------|
| ACC 652 | Accounting Analytics | |
| MAR 653 | Marketing Analytics | |
| FIN 654 | Financial Analytics | |
| SCM 702 | Principles of Management Science | |

Electives: 12-15 Credits

The Electives include coursework in linear models, time series, scripting for data analysis, natural language processing, information visualization, data warehouse, text mining, information policy, and advanced database management.

| Class # | Course Title | Completed |
|----------------|---|------------------|
| MAS 766 | Linear Statistical Models I: Regression Models | |
| MAS 777 | Times Series Modeling and Analysis | |
| IST 615 | Cloud Management | |
| IST 618 | Information Policy | |
| IST 623 | Introduction to Information Security | |
| IST 652 | Scripting for Data Analysis | |
| IST 664 | Natural Language Processing | |
| IST 719 | Information Visualization | |
| IST 722 | Data Warehouse | |
| IST 736 | Text Mining | |
| IST 769 | Advanced Data Administration Concepts & Database Management | |
| IST 772 | Quantitative Reasoning for Data Science | |

Exit Requirement: Portfolio Milestone

In their final term, students are required to complete a Portfolio to provide an assessment of learning for their program. Students will choose assignments and projects worked on in courses during the course of study which demonstrate full competency of the program learning outcomes. A panel of faculty who teach the courses included in the program will review the portfolios of graduates during the student's final term. The panel will approve the portfolio for each student as a transcript milestone required for the degree. All students will be given access to a Portfolio Milestone Course shell on 2SU (2su.datascience.syr.edu), where they can find the portfolio milestone project details.

Guidelines for Credit Reductions and Substitutions

We do not offer credit reductions for work experience for this program. If students feel that their work experience or prior knowledge qualifies them for a waiver of a particular course requirement, they must complete a *Petition to Faculty* form with the request and include a resume. Students will still be required to take another course in its place to fulfill the 36-credit requirement. For more information, campus students can contact *iAdvising@syr.edu* and online students can contact their online student success advisor.