

DATA SCIENCE AND ANALYTICS, M.S.

MS-AS DSA

Science and Math Complex 379
(716) 878-6423

The M.S. in Data Science and Analytics offers advanced practical training for in-demand modern skills to manipulate, organize and present data essential for informed, evidence-based decision-making and planning across industries. This program is open to students with basic programming and statistical skills from all undergraduate majors. Courses cover highly marketable techniques using data analytics tools, computer coding, machine learning, geospatial programming, data design, visualization, and analysis. Students will develop professional skills in project management, communications, data governance, and creative problem-solving for effective collaboration. Unique components of the program include workshops with local experts and an applied-skills internship with industry partners.

1. A bachelor's degree from an accredited college or university with a minimum cumulative GPA of 2.5 (4.0 scale).
2. A two- to three-page statement of intent (essay) that includes the following:
 - educational and professional objectives; and
 - an explanation of the reasons for interest in data science and analytics
3. An interview with the program coordinator. The program coordinator will contact the student for an appointment after the completed application is received.

In addition, all applicants must review the Admission to a Graduate Program (<http://ecatalog.buffalostate.edu/graduate/admission-graduate-program/>) section in this catalog.

Code	Title	Credit Hours
Required Courses (18 credit hours)		
CIS 512	INTRODUCTION TO DATA SCIENCE AND ANALYTICS	3
CIS 600	MACHINE LEARNING FOR DATA SCIENCE	3
MAT 616	ELEMENTS OF MATHEMATICS, PROGRAMMING AND COMPUTER SCIENCE FOR DATA SCIENCE	3
MAT 646	INTRODUCTION TO STATISTICS FOR DATA SCIENCE	3
SPF 689	METHODS AND TECHNIQUES OF EDUCATIONAL RESEARCH	3

XXX 690 Master's Project 3
(where XXX is the department of the student's Master's Project Adviser)

Elective Courses (12 credit hours) 12

Choose four courses by advisement from the following (each course is 3 credit hours)

BUS 519	COMMUNICATION FOR LEADERS AND MANAGERS
DSA 501	DATA ORIENTED COMPUTING AND ANALYTICS
DSA 650	DATA STRATEGY AND GOVERNANCE
GEG 584	GEOSPATIAL PROGRAMMING
PSM 601	PROJECT MANAGEMENT FOR MATH AND SCIENCE PROFESSIONALS

Or additional elective courses by advisement

Total Credit Hours 30