INFORMATICS AND ANALYTICS, M.S.

The Master of Science in Informatics and Analytics develops leaders and problem-solvers who possess the knowledge and skill to thrive in the data science industry.

The program includes six interdisciplinary courses that establish a strong foundation in data science principles. In addition to the core program, students specialize in a concentration of interest.

The hallmark of the UNC Greensboro program is a unique capstone experience that links knowledge-with-practice and equips graduate students with key skills for professional success.

For information regarding deadlines and requirements for admission, please see https://grs.uncg.edu/programs/.

In addition to the application materials required by the Graduate School, applicants must submit a statement of purpose that outlines their career goals, how the M.S. in Informatics and Analytics will advance their career goals, and how their background has prepared them to enter the program.

Degree Program Requirements

Required: 30 credit hours

Code	Title	Credit Hours
Interdisciplinary Foundational Core (18 credits)		
IAF 601	Introduction to Data Analytics-Methods and Approaches	3
IAF 602	Statistical Methods for Data Analytics	3
IAF 603	Preparing Data for Analytics	3
IAF 604	Machine Learning and Predictive Analytics	3
IAF 605	Data Visualization	3
IAF 606	Solving Problems with Data Analytics	3
Disciplinary Concentration (12 credits)		
Select 12 credits in one of the concentrations		12
Total Credit Hours		**30**

Advanced Data Analytics Concentration

Code	Title	Credit Hours
Required Courses (6 credits)		
IAA 621	Statistical Computing	3
IAA 622	Complex Data Analysis	3
Elective Course (3 credits)		
Select one course (3 credits) from the following:		3
IAA 623	Categorical Data Analysis	
IAA 624	Multivariate Analysis	
IAA 625	Survey Sampling	
Required Capstone (3 credits)		
IAA 689	Capstone Project in Advanced Data Analytics	3
Total Credit Hours		**12**

Bioinformatics Concentration

Code	Title	Credit Hours
Required Courses (12 credits)		
IAB 620	Introduction to Bioinformatics	3
IAB 621	Bioinformatics	3
IAB 622	Advanced Bioinformatics	3
IAB 689	Capstone Project in Bioinformatics	3
Total Credit Hours		**12**

Computational Analytics Concentration

Code	Title	Credit Hours
Required Courses (9 credits)		
IAC 620	Algorithm Analysis and Design	3
IAC 621	Data Science	3
IAC 622	Big Data and Machine Learning	3
Required Capstone (3 credits)		
IAC 689	Capstone Project in Computational Analytics	3
Total Credit Hours		**12**

Cultural Analytics Concentration

Code	Title	Credit Hours
Required Courses (12 credits)		
IAL 620	Text Mining and Natural Language Processing	3
IAL 621	Content Analysis for Social Network Data	3
IAL 622	The Internet of Things and Wearable Analytics	3
IAL 689	Capstone Project in Cultural Analytics	3
Total Credit Hours		**12**

Health Informatics Concentration

Code	Title	Credit Hours
Required Courses (12 credits)		
IAH 630	Fundamentals of Health Informatics	3
IAH 631	Artificial Intelligence in Health Care	3
IAL 632	Ethics and Intellectual Property for Informatics and Analytics	3
IAH 689	Capstone Project in Health Informatics	3
Total Credit Hours		**12**

Application and Admission

Undergraduate students at UNC Greensboro may apply for admission to the Accelerated Master's Program (AMP) and the M.S. in Informatics and Analytics if they have a cumulative undergraduate GPA of at least 3.5 in a related major and are in their junior year. Transfer students may apply if their cumulative GPA from their previous institution was at least a 3.0, or if they have earned a 3.0 (with a 3.5 in courses related to the major) at UNCG during their first semester.

All applicants must complete the Accelerated Master's Program information when applying for the M.S. in Informatics and Analytics. Applicants must provide three letters of recommendation, a resume, and a statement of purpose. It is strongly encouraged that those wishing to

enter the program have taken an introductory statistics course and have some programming experience.

Courses

Admitted students may apply up to 12 credits from the following graduate-level courses toward completion of both the undergraduate and graduate degree, provided that they earn a grade of B (3.0) or better in the course and fulfill graduate-level requirements:

Code	Title	Credit Hours
IAF 601	Introduction to Data Analytics-Methods and Approaches	3
IAF 602	Statistical Methods for Data Analytics	3
IAF 603	Preparing Data for Analytics	3
IAF 604	Machine Learning and Predictive Analytics	3
IAF 605	Data Visualization	3
IAF 606	Solving Problems with Data Analytics	3

Please consult with an advisor to determine how the course taken at the graduate level will meet requirements in the bachelor's degree program. All degree requirements for the M.S. in Informatics and Analytics remain the same.