

# DATA ANALYTICS

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## Program Guidelines

Global connectivity and innovative technologies generate vast amounts of information that contribute to our understanding and evaluation of nature, human behavior, institutions, society, and beyond. This explosion of evidence to present and address problems is informing major decisions in academe, government, and the private sector. Those with an ability to work with quantitative and qualitative data, big and small, to identify puzzles, consider probing questions, evaluate claims, make inferences, and posit answers will be well positioned to expand knowledge, influence policy, and to be decision makers of the future.

The major in data analytics will provide you with a solid core of mathematics and computer science, followed by specially designed data analytics courses. All of these courses are project-based, employing analytic methods, as well as ethics and interdisciplinary research skills, practiced in a variety of application domains. In addition, you will take the skills learned in the classroom and practice them in a research experience or internship in a professional setting, and then pursue a capstone project informed by this experience.

## Mission Statement

The Data Analytics Program prepares students to connect quantitative creative problem solving with the ability to disseminate results effectively and ethically. They learn how to acquire and handle various forms of data, to develop models that employ modern methods and algorithms to analyze and predict outcomes in data-rich environments that cover the myriad of disciplines in the liberal arts, and to communicate results through written, oral, and visual techniques to both professional and non-technical audiences. By engaging in active learning on interdisciplinary projects with an emphasis on problem solving, communication, and teamwork our students learn how to be good citizens in a rapidly changing, data-centric world. Our emphasis is on applying data analytics techniques to domain-specific data while recognizing the value of cultural knowledge and empathy that is best learned through broad exposure to the liberal arts.