

# DATA ANALYTICS GRADUATE CERTIFICATE

**Banner Code: VS-CERG-DNIC**

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This graduate certificate provides a broad overview of the end-to-end value chain for Big Data Analytics, from the capture and management of the data, through the analytics that harness the data to create value. The certificate is designed to provide a framework for the methodologies for organizing and integrating disparate data, analyzing and visualizing the integrated data, and determining what decisions or actions should be taken to generate value from the data.

This certificate is intended for students who are interested in addressing the challenge of transforming the massive data arising in applications such as business analytics, cyber defense/forensics, energy, finance, genomics, healthcare, intelligence, law enforcement, or transportation, into meaningful information. The certificate is intended for graduate students in areas where applications of big data may arise.

The graduate certificate may only be pursued on a part-time basis.

## Admissions & Policies

### Admissions

Applicants should have an undergraduate degree from an accredited institution, with a GPA of at least 3.00 in their last 60 credits of study. While no specific undergraduate degree is required, a background in engineering, business, computer science, math, or information technology is desirable; alternatively, strong work experience with data or analytics may be used. Current graduate students in the Volgenau School of Engineering and the School of Business can elect this certificate with the Graduate Secondary Certificate Program Application from the Office of the University Registrar (<http://registrar.gmu.edu>).

## Requirements

### Certificate Requirements

Total credits: 12

#### Coursework

Students must achieve a total GPA of at least 3.00, with no more than three credits of a grade of C from the following courses.

AIT 580	Analytics: Big Data to Information	3
CS 504	Principles of Data Management and Mining	3
OR 531	Analytics and Decision Analysis	3
STAT 515	Applied Statistics and Visualization for Analytics	3
Total Credits		12