

# APPLIED DATA SCIENCE, GRADUATE CERTIFICATE

**Credential:** Graduate Certificate  
**Field of Study:** Applied Data Science

## Program Overview

Data science is an area of specialization in the core fields of computer science, statistics and epidemiology. The transformations seen from data science advances have become so broad that they now cut across all areas of endeavor and are seeing transformative impact in a breadth of disciplines including science, engineering, medicine, and business.

Data science and its associated statistical and machine learning and artificial intelligence approaches are transforming research, science, and society, as can be seen by the impact of Digital Transformation and the beginning of the 4th industrial revolution, commonly referred to as Industry 4.0.

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With this broad reach, applicability, and utility of applied data science across all academic areas, the graduate certificate in applied data science is a lucrative way for students to demonstrate their knowledge of this skill set.

## Graduate Policies

For graduate policies and procedures, please review the School of Graduate Studies section of the General Bulletin.

## Program Requirements

This certificate provides an official and transcriptable acknowledgement of successful completion of applied data science courses. Additionally, a graduate certificate is a desirable accolade for working professionals to enhance and develop their credentials to advance their careers or to satisfy continuing education requirements for professional licenses and accreditations.

This will include five classes for the certificate:

- a. EPOM 405 Applied Engineering Statistics
- b. DSCI 451 Exploratory Data Science
- c. DSCI 453 Data Science: Statistical Learning, Modeling and Prediction
- d. DSCI 454 Data Visualization and Analytics
- e. DSCI 432 Spatial Statistics for Near Surface, Surface, and Subsurface Modeling
- f. DSCI 452 Applied Data Science Research

Students can begin their course of study by enrolling in EPOM 405 or DSCI 451.

All courses are taught at the graduate or professional level.

Students pursuing a certificate must complete all necessary coursework for their program and earn a minimum GPA of 3.0 in order for the graduate-level university certificate to be awarded. The courses and certificate will show up on their CWRU transcript.

The graduate-level university certificate program in applied data science is offered and managed through the School of Graduate Studies. If you have specific questions relating to the program, please contact the Case School of Engineering to learn more.

This graduate-level university certificate program in applied data science can be awarded to current CWRU graduate students and working professionals who apply to this certificate program.