

# The Graduate Certificate in Applied Statistical Methods



Department of Mathematical Sciences

College of Science and Liberal Arts

**New Jersey Institute of Technology**

## WHY PURSUE A GRADUATE CERTIFICATE IN APPLIED STATISTICAL METHODS?

In our information-dependent society, data is a crucial commodity and the presence of noise and uncertainty is often an underlying salient feature of such data. Statisticians are experts in gathering trustworthy data by sampling, and in their modeling and analysis allowing for effects of uncertainty, with a view to drawing meaningful and practical conclusions. Accordingly, statisticians are in demand in diverse fields such as medicine and genetics, pharmacology, environmental sciences, service industries, manufacturing, insurance, financial industry, government, and market research.

## WHY STUDY APPLIED STATISTICAL METHODS AT NJIT?

The Certificate in Applied Statistical Methods is a program of NJIT's Department of Mathematical Sciences, which is nationally recognized for quality education and applied research. Active participation by more than 40 NJIT mathematical sciences faculty produces a stimulating learning environment. The department's 20 active research projects have more than \$1 million in funding from public and private sources including National Science Foundation, National Institute of Health, NASA, the US Department of Energy, the Air Force Office of Science and Research, and the Whitaker Foundation. Program faculty members have earned international reputations as a result of the breadth and depth of their accomplishments.

### WHAT WILL I LEARN?

This certificate is designed for data analysts, production engineers, financial analysts, information specialists, and technical supervisors. Topics covered:

- How to collect data
- How to analyze and summarize data
- How to interpret the results

The techniques learned in this certificate can be applied to quality control, production design and analysis, telecommunications, financial, and risk analysis. This certificate will help in conducting appropriate statistical analyses of data and help technical supervisors understand the results of statistical analyses conducted by others.

### WHAT COURSES ARE OFFERED?

*Required: Core Courses*

Math 661 Applied Statistics  
Math 644 Regression Analysis Methods

*Select two (2) from:*

Math 698 Sampling Theory  
Math 699 Design and Analysis of Experiments  
Math 664 Methods for Statistical Consulting  
Math 646 Time Series Analysis

*Complete course descriptions can be found in the NJIT Online Catalog at <http://catalog.njit.edu/graduate>.*

\*Now or shortly available online.

Courses are subject to change.

√ Take care to select courses in proper order. Check course descriptions, because they state if one course must be taken before (i.e.; is a prerequisite to) another.

### WHERE ARE THE CLASSES OFFERED?

Courses are available at NJIT's Newark campus. Customized NJIT degrees and academic certificates can be brought on-site at your company or customized and conducted at a location convenient to a consortium of companies.

### IS FINANCIAL AID AVAILABLE

There may be sources of financial aid or tax credits available:  
<http://adultlearner.njit.edu/admissions/financialaid/index.php>

### WHAT IS THE TUITION FOR GRADUATE COURSES?

Use the tuition calculator to see the cost of your education quickly and easily. Visit:

<http://adultlearner.njit.edu/admissions/financialaid>

### CAN THE GRADUATE CERTIFICATE CREDITS BE APPLIED TO AN ADVANCED DEGREE?

Courses in the Graduate Certificate program in Applied Statistical Methods can be fully applied to NJIT's MS in Applied Statistics.

### HOW DOES THE GRADUATE CERTIFICATE PROGRAM WORK?

In any given year, NJIT offers a new slate of Graduate Certificates, each in a specific area which is in a fast growing and employable profession. Each stand-alone credential is a milestone in its own right and can be a 12-credit springboard to a matching Masters Degree program at NJIT or elsewhere. The credential can be completed in as little as one academic year of part-time study. Many can be studied in whole or in part online. The straightforward and rapid admissions process requires possession of an undergraduate degree with a satisfactory grade point average. A GRE or GMAT score is not a pre-requisite. Depending on the program, courses can be taken online, on campus, or at NJIT extension sites around New Jersey. For a complete list of available Graduate Certificates, please <http://www.njit.edu/gradcert>.

### BRINGING A GRADUATE CERTIFICATE TO YOUR COMPANY

Arrangements can be made to bring a Graduate Certificate or Master's program on-site to your company. A customized Graduate Certificate can also be offered to match your company's area of technological and managerial specialty. For more information about Company Collaborative Graduate Certificates or enrollment in any of our Graduate Certificates, please contact Continuing Professional Education.

### FOR FURTHER INFORMATION:

Division of Continuing Professional Education  
1-800-624-9850 (Toll Free)  
1-973-596-3060 (New Jersey)  
Email: [cpe@njit.edu](mailto:cpe@njit.edu)

### ON THE WEB:

<http://www.njit.edu/gradcert> / <http://cpe.njit.edu/mobi>

### APPLY ONLINE:

<http://adultlearner.njit.edu/admissions>