

# The Graduate Certificate in Big Data Management and Mining



Department of Computer Science  
Department of Information Systems

College of Computer Science

**New Jersey Institute of Technology**

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## WHY PURSUE A GRADUATE CERTIFICATE IN BIG DATA MANAGEMENT AND MINING?

The Computer Science department, part of the College of Computing Sciences, is the largest at NJIT, comprising more than one fifth of the student population. It is also the largest computer science department among all research universities in the New York metropolitan area. You will have state-of-the-art courses in the latest web and computing technologies, analysis and design techniques, and enduring principles underlying the field. To advance your skills and your career.

## WHY STUDY AT NJIT?

One of the nation's leading public technological universities, New Jersey Institute of Technology (NJIT) prepares students to be leaders in the technology-dependent economy of the 21st century. The university's multidisciplinary curriculum and computing-intensive approach to education provides the technological proficiency, business know-how and leadership skills that future CEOs and entrepreneurs will need to succeed.

## GAINFUL EMPLOYMENT DISCLOSURE

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at: <http://adultlearner.njit.edu/programs/miningbigdata-cert-ge.php>

## WHAT WILL I LEARN?

Powerful programming techniques and algorithms to transform large quantities of information into business intelligence.

- Mathematical properties and usage of database programming languages.
- Methods of database design, conceptual modeling, and physical storage for database information.
- Fundamental notions of concurrency control and recovery in database systems.
- Current trends in data mining, and data mining for scientific, medical and engineering applications.

## WHAT COURSES ARE OFFERED?

*Required: Core Courses*

CS 631 Data Management System Design\*  
MATH 661 Applied Statistics\*

*Select two (2) from:*

CS 602 JAVA Programming\*  
CS 634 Data Mining\*  
CS 670 Artificial Intelligence\*  
CS 732 Machine Learning\*  
IS 634 Information Retrieval\*  
MGMT 635 Data Mining and 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?

Full credentials can be studied **online** and at NJIT's Newark campus.

## WHAT IS THE TUITION FOR GRADUATE COURSES?

Use the tuition calculator to see full costs, and the fuel saving calculator to figure how much gas money is saved by studying **online**, visit: <http://adultlearner.njit.edu/costs>. Studying ONLINE, but live out-of-state? Benefit from the new **online tuition rate** just for you, visit: <http://online.njit.edu>.

## IS FINANCIAL AID AVAILABLE FOR PART-TIME STUDENTS?

Yes, sources of financial aid or tax credits are available at: <http://adultlearner.njit.edu/costs>.

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

Courses in the Graduate Certificate program in Big Data Management and Mining can be applied to NJIT's MS in Business and Information Systems, MS in Information Systems, MS in Emergency Management and Business Continuity, and MS in Computer Science (partially).

## HOW DOES THE GRADUATE CERTIFICATE PROGRAM WORK?

Yearly, NJIT offers new Graduate Certificates, each in a specific area which is in a fast growing and employable profession. Each credential is a milestone in its own right and can be a 12-credit springboard to a matching Masters Degree program. The credential can be completed in as little as one year of part time study. 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, or on campus. For a complete list of available Graduate Certificates, please visit: <http://www.njit.edu/gradcert>.

## BRINGING A GRADUATE CERTIFICATE TO YOUR COMPANY

Arrangements can be made to bring a customized or pre-existing Graduate Certificate or Master's program on-site to your company or to a consortium of companies.

## 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://twitter.com/njitcpe>

## APPLY ONLINE:

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