

Data Mining

Many companies collect reams of data about their customers and their transactions, but must drill through these repositories of data to unearth crucial insights and knowledge about customer behavior and market trends.

This graduate certificate provides an introduction to data mining with an emphasis on large-scale databases as a source of knowledge generation and competitive advantage.

Who would be suited to take this program?

This certificate is designed for data analysts working with large organizations to design and use their data resources.

What will I learn?

In this program you'll gain 12 credits that can be applied to NJIT master's programs, and learn:

- The fundamentals of relational database technology, concurrency, and recovery
- Methods of database design and conceptual modeling
- The principles of information-retrieval system design
- Techniques essential for building text databases, document-processing systems, office automation systems, and other advanced information management systems
- And more in two elective courses

Why study Data Mining at NJIT?

The graduate certificate's narrow focus allows you to dig deep into this specific topic, and start applying your knowledge sooner. It's possible to earn the certificate entirely through online courses, so you can more easily fit it into your busy life. And whether you take courses online or on campus, you'll learn from NJIT's distinguished professors and instructors of the Department of Computer Science.

Prerequisites

NJIT's standard admission requirements apply to this graduate certificate. In addition, non-elective courses within the program require prior knowledge of C and data structures learned in these courses:

Note: Students lacking background relevant to NJIT's IS 513, IS 531 or IS 565 courses may need to take a placement exam, or take undergraduate bridge courses at NJIT or elsewhere. Please, contact the IS department for details. More information is found here (<http://is.njit.edu/academics/graduate/PlacementExam.php>).

- CS 113 Intro to Computer Science I
- CS 252 Comp Org & Architecture
- CS 114 Intro to Computer Science II
- CS 332 Principles of Operating Systems
- CS 356 Introduction to Computer Networks
- CS 431 Database System Design & Mgmt
- CS 506 Foundations of Computer Science
- Math 111 Calculus I
- Math 112 Calculus II
- Math 333 Probability and Statistics

Check the course descriptions for full details.

Related Degree Programs

All credits from the data mining graduate certificate can be applied toward these NJIT programs:

- M.S. Computer Science (<http://cs.njit.edu/academics/graduate/mscs.php>)
- M.S. Information Systems (<https://is.njit.edu/academics/graduate/msis/>)
- M.S. Business and Information Systems (<https://is.njit.edu/academics/graduate/msbis/>)

Take Note

Some courses have prerequisites, and must be taken in order.

Gainful Employment Disclosure

Click here (<http://www.njit.edu/graduatestudies/sites/graduatestudies/files/gainfulemployment/data-mining-cert-gainful-employment.html>) for the Gainful Employment Disclosure for this program

What are the Required Courses?

Code	Title	Credits
Core Courses (3)		
IS 601	Web Systems Development	3
IS 665	Data Analytics for Info System	3
CS 634	Data Mining	3
Electives		
Select one of the following:		3
CS 602	Java Programming	
IS 631	Enterprise Database Management	
or CS 631	Data Management System Design	
IS 634	Information Retrieval	
IS 687	Transaction Mining and Fraud Detection	
IS 688	Web Mining	
MGMT 635	Data Mining and Analysis	