# **Web Systems Development**

The Internet and the World Wide Web are the most transformative inventions of our time, and NJIT's graduate certificate in Web Systems Development provides a core set of knowledge and skills to develop Web-based application systems. This certificate provides a foundation and knowledge to allow competition in an ever changing technical world.

Who is suited for this program?

This certificate is designed for web system designers and developers, or those looking to move into this field, for career and knowledge advancement in the web development community.

What will I learn?

The program focuses on java programming and other object-oriented software development which are used in the construction of web systems. Various media such as text, images, video and audio are covered in order to produce a rich and rewarding web experience. Techniques essential for building databases, document processing, and information management systems are covered so that the web system is dynamic and data driven. Topics covered include information retrieval, multimedia systems, open source web design, web mining, web services, middleware, and authentication.

Why study Web Systems Development at NJIT?

With one of the most computing intensive campuses in the world, NJIT is a pioneer in the application of new technologies as learning tools. The College of Computing Sciences educates one of the largest groups of computing students in the nation and has outstanding faculty dedicated to preparing students for exciting careers in this field. The university educates one of the largest groups of information technology students in the nation. New Jersey is one of the leading states for computing and high technology businesses. Thirty of the nation's fastest growing technology companies are based in the state.

#### Prerequisites

NJIT's standard admission requirements apply to this graduate certificate. In addition, non-elective courses within the program require:

- · Advanced web-based programming skills
- An understanding of object-oriented programming concepts
- Experience with C++ or knowledge of a higher-level programming language
- Mathematics
- Accounting

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).

#### Related Degrees

Courses in the Graduate Certificate program in Web Systems Development can be wholly applied to NJIT's MS in Information Systems (http://catalog.njit.edu/graduate/computing-sciences/information-systems/ms/), and partially to the MS in Computer Science (http://catalog.njit.edu/graduate/computing-sciences/computer-science/ms/).

### Take Note

Check the course descriptions for more information. Some courses have prerequisites and must be taken in order. Complete course descriptions can be found in the NJIT Online Catalog. (http://catalog.njit.edu/graduate/)

### Gainful Employment Disclosure

Click here (http://www.njit.edu/graduatestudies/sites/graduatestudies/files/gainfulemployment/web-systems-development-cert-gainfulemployment.html) for the Gainful Employment Disclosure for this program

What are the Required Courses?

Code	Title	Credits
Core Courses		
IS 601	Web Systems Development	3
IS 631	Enterprise Database Management	3
Electives		

## 2 Web Systems Development

Select two of the following:		6
CS 602	Java Programming	3
S 634	Information Retrieval	3
S 688	Web Mining	3
S 690	Web Services and Middleware	3