Print Program Overview - Northeast Wisconsin Technical College



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# Web Development Associate Degree

Program Code 101522

Web developers design, implement, and maintain web applications and websites. As a graduate of the Web Development associate degree, you're prepared for such careers as web developer, web technical support specialist, and web analyst. You play a key role in internet-based business systems and websites using concepts in design and programming.

## **100%** Graduate Employment

With 50% Employed in Field

### Locations

Offered at the Green Bay campus. For information: (920) 498-5444. Toll-free: (888) 385-6982.

This program is fully eligible for financial aid.

### Follow Your Path

All credits from the following technical diploma(s) apply toward this associate degree: . IT-Web Programmer, 311526 . Web Design Technician, 311522 All credits from the following certificate(s) apply toward this associate degree: . Web Design, 901352 Some credits from the following certificate(s) apply toward this associate degree: . Web Programmer, 901522

### CURRICULUM

Students following the study plan below will complete the Web Development Associate Degree in the number of semesters shown.

Academic Year: 2020-2021

FIRST SEMESTER 10-890-101 College 101 10-152-185 Website Coding 10-111-101 Photoshop Fundamentals 10-801-136 English Composition 1 10-154-125 IT:Web:Database Development 10-804-133 Math & Logic 10-105-101 Career Planning <b>SEMESTER TOTAL</b>	1 3 3 3 3 3 1 1 <b>17</b>
SECOND SEMESTER 10-135-150 Web Graphic Design 10-152-184 IT:Web:Programming-SQL 10-135-115 Online Search Strategies 10-152-180 IT:Web:Scripting-JavaScript 10-801-196 Oral/Interpersonal Comm 10-809-198 Intro to Psychology SEMESTER TOTAL	3 3 3 3 3 3 3 <b>18</b>
THIRD SEMESTER 10-135-151 Website Design 10-152-182 IT:Web:Scripting-PHP 10-135-181 Web Content Management 10-105-103 Career Preparation 10-809-166 Intro to Ethics: Theory & App 10-152-173 IT:Program:Part 1 (C#) <b>SEMESTER TOTAL</b>	3 3 1 3 3 3 <b>16</b>
FOURTH SEMESTER 10-135-199 Web Dev Career Experience 10-135-156 Web Content Management Design 10-135-185 Web Emerging Technologies 10-152-183 IT:Web:Scripting-ASP.NET 10-809-172 Intro to Diversity Studies 10-809-195 Economics SEMESTER TOTAL	2 3 3 3 3 3 <b>16</b>
TOTAL CREDITS	67

Curriculum Note

The credit for 10-890-101, College 101 is an Institutional Requirement for graduation. Consequently, it is not part of the program requirements, but must be passed with a C.

### **Requirements for Program Entry**

Completed application.

 $\cdot$  High school transcript or equivalent. For a list of equivalents, go to www.nwtc.edu/gettingstarted.

- · Completed one year of high school algebra or equivalency.
- $\cdot$  Computer familiarity and ability to use a keyboard and mouse.
- Minimum typing speed of 30 wpm.

• To be admitted to this program, learners must achieve a prior cumulative high school or college grade point average of 2.6 or higher OR a satisfactory academic skills assessment score. College grade point average must be based on 15 credits or more. To learn more about starting this program, please contact an academic advisor at (920) 498-5444 or (888) 385-6982.

#### **Course Descriptions**

10-890-101 COLLEGE 101 ...Students will utilize digital tools and resources to assess, explore, practice, apply, and evaluate both employability and learning skills. By establishing NWTC cultural values as hallmarks of success in academic, career, and personal settings the course encourages reflective, personalized development of a growth mindset and emphasizes the importance of making wise choices. To maximize the return on investment, students should take this course in their first semester as it identifies key expectations (hidden rules) of higher learning and professional employment.

10-152-185 WEBSITE CODING ...create code for generating the structure, function, and design of static websites using standardsbased HTML5 and CSS3; validate code; test multi-browser and multi-device functionality.

10-111-101 PHOTOSHOP FUNDAMENTALS ...perform raster Image Editing. Course content covers functions of Adobe Photoshop. Create image selections, extractions and composite files using Adobe software, and apply common photo adjustments using fundamental design solutions, creating composite images.

10-801-136 ENGLISH COMPOSITION 1 ...learners develop knowledge/skills in planning, organizing, writing, editing. Students will also analyze audience/purpose, use elements of research, format documents using standard guidelines, and develop critical reading skills. (Prerequisite: Accuplacer Rdg score greater/equal to 55 AND Sentence Skills greater/equal to 75; OR ACT Rdg score greater/equal to 16 AND Eng greater/equal to 18; OR preparatory courses-contact academic advisor at 920-498-5444)

10-154-125 IT:WEB:DATABASE DEVELOPMENT ...database uses, database terminology, analyzing information requirements, data models, database design phases, entity relationships, normalization processes, database management systems, database objects, development environments, creating tables, writing queries using SQL, testing.

10-804-133 MATH & LOGIC ...Students will apply problem solving techniques from discrete mathematics. Topics include symbolic logic, sets, algebra and base number systems (Prerequisite: Accuplacer Arith score greater/equal to 65 AND Rdg score greater/equal to 55; OR ACT Math score greater/equal to 15 AND ACT Rdg score greater/equal to 16; OR prep courses-contact academic advisor 920-498-5444).

10-105-101 CAREER PLANNING ...experiential learning introduction. Learn how personal branding allows candidates to differentiate themselves from the competition through appearance, personality, and marketing competency. Career portfolio introduced. (Corequisite: 10-890-101, College 101)

10-135-150 WEB GRAPHIC DESIGN ...(Adobe Photoshop) design and prepare graphics for the web including graphics for backgrounds, rollover effects, navigation, and badges. Also includes techniques for optimization and transparency. (Prerequisites: 10-111-101, Photoshop Fundamentals; 10-152-185, Website Coding)

10-152-184 IT:WEB:PROGRAMMING-SQL ...write queries in a relational database: creating tables, setting primary/foreign keys, populating tables, manipulating data and reporting. Explore join types, stored procedures, functions, and database administration SQL statements. (Prerequisite: 10-154-125, IT:Web:Database Development)

10-135-115 ONLINE SEARCH STRATEGIES ...understanding of how search engines relate to the success of a website or web-based business by investigating the primary search engines and the tactics that can be used to increase visibility within search engines.

10-152-180 IT:WEB:SCRIPTING-JAVASCRIPT ...integrate JavaScript into interactive HTML5 pages, create user-defined functions, complete form validation, use objects within the Document Object Model, debug code, and test browser compatibility. (Prerequisite: 10-152-185, Website Coding)

10-801-196 ORAL/INTERPERSONAL COMMUNICATION ...the communication process, perception and self-concept, language, listening, nonverbal communication, interpersonal relationships, communication in groups and public communication; prepare and deliver an oral presentation. (Prerequisite: Accuplacer Rdg score greater/equal to 55 AND Sentence Skills score greater/equal to 60; OR ACT Rdg score greater/equal to 16 AND English score greater/equal to 16; OR preparatory course-contact an academic advisor at 920-498-5444)

10-809-198 INTRODUCTION TO PSYCHOLOGY ...survey of theoretical foundations of human behavior such as sensation and perception, motivation, emotions, learning, personality, psychological disorders, therapy, stress, and human diversity in personal, social and vocational settings. (Prerequisite: Cumulative GPA of 2.6 or greater OR satisfactory reading and writing assessment scores OR 10-831-107, College Reading and Writing 1 with "B" or better OR Corequisite: 10-831-102, English Comp Prep)

10-135-151 WEBSITE DESIGN ...(Adobe Dreamweaver) use standards based HTML5 and CSS3 to design, develop and deploy websites; including: browser compatibility, FTP, forms, multi-media, RSS, and site management. (Prerequisite: 10-135-150, Web Graphic Design; 10-804-133, Math & Logic)

10-152-182 IT:WEB:SCRIPTING-PHP ...use PHP, MySQL, HTML5, CSS3 and Apache to create standards based websites. PHP is used to connect to a MySQL database and retrieve site content. PHP is also used to organize the HTML5. (Prerequisites: 10-154-125, IT:Web:Database Development; 10-152-185, IT:Web:Website Coding)

10-135-181 WEB CONTENT MANAGEMENT ...build, execute, analyze and report upon web campaigns with the use of databases. Explore techniques and tools to monitor campaigns. Execute post-campaign measurements and ROI analysis.

10-105-103 CAREER PREPARATION ...create professional resume and cover letter, prepare for interviews, understand interviewing techniques, participate in a mock interview. (Prerequisites: 10-105-101, Career Planning; 10-801-136, English Composition 1)

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10-809-166 INTRO TO ETHICS: THEORY & APP ...basic understanding of theoretical foundations of ethical thought; analyze/compare relevant issues using diverse ethical perspectives; critically evaluate individual, social/professional standards of behavior--applying a systematic decision-making process. (Prerequisite: Accuplacer Rdg score greater/equal to 55 AND Sentence Skills greater/equal to 60; OR ACT Rdg score greater/equal to 16 AND English greater/equal to 15; OR 10-831-107, College Reading and Writing with a B or better)

10-152-173 IT:PROGRAM:PART 1 (C#) ...provides a foundation of syntax/semantics of C# .NET programming language to develop Windows-based/ Web-based applications. Covers the architecture of Microsoft's .NET platform where C# is the native language.

10-135-199 WEB DEVELOPMENT CAREER EXPERIENCE...Students can select any hands on experience related to: Internship, Field Research, Service Learning, Simulations, Capstone, Industry Related, or International. Instructor approval required. (Prerequisite: 10-105-103, Career Preparation)

10-135-156 WEB CONTENT MANAGEMENT DESIGN ... (WordPress CMS) install, configure and customize using themes and plugins. Analyze security, user management, blog usage and mobile development. Develop using HTML5, CSS3, PHP and MySQL. (Prerequisite: 10-135-150, Web Graphic Design)

10-135-185 WEB EMERGING TECHNOLOGIES ... review upcoming web technologies. Learn strategies to remain current in web technology trends. Explore a variety of trusted sources for trend information. (Prerequisites: 10-135-151, Website Design; 10-801-136, English Composition 1)

10-152-183 IT:WEB:SCRIPTING-ASP.NET ...build interactive, database-driven websites with ASP.NET and C# with Visual Studio, handling web form events, using ASP.NET controls, designing master pages, managing state, and interacting with databases with ASP.NET data-bound controls. (Prerequisites: 10-154-125, IT:Web:Database Development; 10-152-180, IT:Web:Client Script-JavaScript; 10-152-173, IT:Program:Part 1 (C#))

10-809-172 INTRO TO DIVERSITY STUDIES...basic American values of justice and equality by teaching vocabulary, history of immigration/conquest, transcultural communication, legal liability, multicultural majority/minority relations, ageism, sexism, gender, sexual orientation, the disabled/ADA. (Prerequisite: Accuplacer Rdg score greater/equal to 55 AND Sentence Skills greater/equal to 60; OR ACT Rdg score greater/equal to 16 AND English greater/equal to 15; OR 10-831-107, College Reading and Writing with a B or better)

10-809-195 ECONOMICS ...scarcity, resources, alternative economic systems, growth, supply and demand, monetary and fiscal policy, inflation, unemployment, and global economic issues. (Prerequisite: Accuplacer Rdg score greater/equal to 55 AND Sentence Skills greater/equal to 60; OR ACT Rdg score greater/equal to 16 AND English greater/equal to 15; OR 10-831-107, College Reading and Writing with a B or better)