

# COMPUTER INFORMATION SYSTEMS, WEB PROGRAMMING FUNDAMENTALS, SHORT-TERM TECHNICAL CERTIFICATE

Curriculum Code #6622

Effective May 2026

Division of Engineering, Business and Information Technologies (<http://catalog.lorainccc.edu/academic-programs/engineering-business-information-technologies/>)

The short-term technical certificate web programming fundamentals represents the successful completion of select web development courses that prepare the student to develop web sites, including database-driven websites. The topics in the coursework include: HTML, XHTML, CSS, XML, JavaScripts, server side scripting languages (PHP, ASP.NET or equivalent), database design, SQL, creation of database-driven websites, Web 2.0 technologies - such as AJAX, basic programming logic, basic web design principles, basic Flash animation, basic image editing, basic audio editing and basic video editing. Completion of this certificate prepares the student for entry-level web design positions or for further study leading to an associate degree in web development. It is also especially well-suited for those individuals with professional experience and/or a degree, especially IT-related, that may want to upgrade their skills to include web design.

| Code               | Title                                                   | Hours     |
|--------------------|---------------------------------------------------------|-----------|
| CISS 121           | MICROCOMPUTER APPLICATIONS I                            | 3         |
| CISS 143           | DATABASE DESIGN AND IMPLEMENTATION <sup>1</sup>         | 3         |
| CISS 160           | INTRODUCTION TO PROGRAMMING IN C#<br><sup>1</sup>       | 4         |
| CISS 215           | MULTIMEDIA FUNDAMENTALS <sup>1</sup>                    | 3         |
| CISS 216           | WEB DEVELOPMENT <sup>1</sup>                            | 3         |
| CISS 232           | SCRIPTING IN THE CLIENT SERVER ENVIRONMENT <sup>1</sup> | 3         |
| CISS 243           | WEB DATABASE INTEGRATION <sup>1</sup>                   | 4         |
| <b>Total Hours</b> |                                                         | <b>23</b> |

<sup>1</sup> Indicates that this course has a prerequisite.

While completion of this certificate may aid in obtaining employment, many employers recommend the minimum completion of a computer information systems degree program to gain employment in an IT-related field.

Program Contact(s):

**Mark Harms**  
440-366-7023

[jharms@lorainccc.edu](mailto:jharms@lorainccc.edu)

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (<https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/>).

**More program information can be found on our website. (<https://www.lorainccc.edu/it/web-development/computer-information-systems-web-programming-fundamentals-short-term-certificate/>)**

Credit for Prior Learning (PLA) options may be available for your program. For more information, please visit our website: [www.lorainccc.edu/PLA](http://www.lorainccc.edu/PLA) (<http://www.lorainccc.edu/PLA>)

Program Learning Outcomes

1. Produce front end user interfaces for web applications
2. Produce back end code for web applications
3. Implement sound software development strategies.