**Computer and Web Programming Certificate - 30 credits**

Program Area: Computer Information Systems (Fall 2022)

***REMEMBER TO REGISTER EARLY***

**Program Description**
Students are prepared to provide technical skills necessary to develop and maintain effective web sites. Students will be taught the elementary skills to create web-based or Windows application/ software.

The Computer and Web Programming Certificate transfers seamlessly into LSC’s Computer and Web Programming Diploma (57 credits), and Computer and Web Programming AAS Degree (72 credits).

**Program Outcomes**
- Plan, create, and host a website that incorporates appropriate use of visual elements, graphics, and multimedia.
- Develop and apply both front-end and back-end web development techniques.
- Analyze and build elementary web-based or computer-based applications using appropriate programming languages and data

**Pre-program Requirements**
Successful entry into this program requires a basic level of keyboarding skills and a specific level of skill in the areas of English, reading, and mathematics.

**English/Reading:**
- Eligible for ENGL 1106 - College Composition I, or
- Completion of ENGL/READ 0950/0955 (or equivalent or higher). ENGL/READ 0950/0955 may be taken concurrently with Semester I coursework.

**Mathematics:**
- Eligible for MATH 0970 - Intermediate Algebra, or
- Completion of MATH 0950/0955 (or equivalent or higher). MATH 0950/0955 may be taken concurrently with Semester I coursework.

There are other ways to qualify. Visit Course Placement (lsc.edu/course-placement) to find out more.

For interpretation of test results and selection of appropriate coursework; or general information about the program, admissions, financial aid, and getting started at LSC, contact the professional advising team (advising@lsc.edu) or 218-733-7601

For more information about the Computer and Web Programming Certificate including course descriptions, course prerequisites, the program report, and potential career opportunities, see the program website (https://degrees.lsc.edu/web-design/) or

Contact Faculty Advisor, Anup Parajuli (anup.parajuli@lsc.edu) at 218-733-5955

**Required Courses**

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Credits</th>
<th>Term</th>
</tr>
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<tbody>
<tr>
<td>CIS 1402</td>
<td>Foundations of CIS</td>
<td>3</td>
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<tr>
<td>CIS 1406</td>
<td>HTML/CSS</td>
<td>3</td>
<td></td>
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<tr>
<td>CIS 1410</td>
<td>Web Site Design</td>
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<td>CIS 1412</td>
<td>Web Graphics I</td>
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<td>CIS 1415</td>
<td>Introduction to Programming</td>
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<td>CIS 1408*</td>
<td>Scripting and Frameworks</td>
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<tr>
<td>CIS 1420*</td>
<td>Advanced Web Site Design</td>
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<td>CIS 1430</td>
<td>Data Analytics Fundamentals</td>
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<td>CIS 2635</td>
<td>Java Programming</td>
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Total Credits **30**
*Requires a prerequisite or a concurrent course

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CIP Code: 11.0801
Minnesota State Program ID: 4704
LSC Major ID: 5101

Created: 3/1/05
AASC Approval: 1/13/21
Updated: 2/1/22

All courses in diploma and/or certificate programs are acceptable for credit toward Lake Superior College degree programs as indicated on individual program planners. This is not a contract; Lake Superior College reserves the right to change the planner as necessary. This document is available in alternative formats upon request, by contacting Disability Services or (218) 733-7650 or MRS/TTY (800) 627-3529.