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

Required Courses

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Credits</th>
<th>Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1402*</td>
<td>Foundations of CIS</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CIS 1406*</td>
<td>HTML/CSS</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CIS 1410*</td>
<td>Web Site Design</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CIS 1412*</td>
<td>Web Graphics I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CIS 1415*</td>
<td>Introduction to Programming</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>CIS 1408*</td>
<td>Scripting and Frameworks</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>CIS 1420*</td>
<td>Advanced Web Site Design</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>CIS 1430*</td>
<td>Data Analytics Fundamentals</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CIS 2635*</td>
<td>Java Programming</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits 30

*Requires a prerequisite or a concurrent course

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

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

Created: 3/1/05
AASC Approval: 1/13/21
Updated: 2/1/23

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.