WEB PROGRAMMING - MINOR

College of Arts and Sciences
Department of Computer Science
www.kent.edu/cs

Contact Information
• Program Coordinator: Feodor F. Dragan, Angela Guercio | ugradinfo@cs.kent.edu | 330-672-9120
• Kent Campus
• Stark Campus

Fully Offered
• Kent Campus
• Stark Campus

Description
The Web Programming minor provides students with a foundation in web development. The minor is for students in any field — from the natural sciences to social sciences and humanities — allowing them to work with substantial computing and Internet-oriented cyber systems.

The Web Programming minor allows students to acquire skills and theoretical foundations needed to create web-related quality software and gain experience with full-stack development.

Please see the “Web Design & Development” minor offered by the School of Emerging Media & Technology for a distinct program minor with greater emphasis on design and front-end development.

Admission Requirements
Admission to a minor is open to students declared in a bachelor’s degree, the A.A.B. or A.A.S. degree or the A.T.S. degree (not Individualized Program major). Students declared only in the A.A. or A.S. degree or the A.T.S. degree in Individualized Program may not declare a minor. Students may not pursue a minor and a major in the same discipline.

Program Learning Outcomes
Graduates of this program will be able to:
1. Understand the essential facts, concepts, principles and theories related to computer science and web programming with data bases.
2. Apply computer science concepts to solve computer and web-related problems.
3. Design and create web-related quality software by gaining experience with full stack development.
4. Make succinct oral presentations and written expositions about technical problems and their solutions.
5. Work effectively as a member of a web-software development team.

Graduation Requirements
Minimum Minor GPA: 2.000
Minimum Overall GPA: 2.000

• Students must complete at least two upper-division (30000 or 40000 level) courses in the minor at Kent State on a graded basis (A-F).
• Minimum 6 credit hours in the minor must be upper-division coursework (30000 and 40000 level).
• Minimum 6 credit hours in the minor must be outside of the course requirements for any major or other minor the student is pursuing.
• Minimum 50 percent of the total credit hours for the minor must be taken at Kent State (in residence).

Minor Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>MATH 11010</td>
<td>ALGEBRA FOR CALCULUS (KMCR)</td>
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<tr>
<td>CS 13011 &amp; CS 13012</td>
<td>COMPUTER SCIENCE IA: PROCEDURAL PROGRAMMING and COMPUTER SCIENCE IB: OBJECT ORIENTED PROGRAMMING</td>
<td>4</td>
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<tr>
<td></td>
<td>or CS 13001</td>
<td>COMPUTER SCIENCE I: PROGRAMMING AND PROBLEM SOLVING</td>
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<tr>
<td>CS 23001</td>
<td>COMPUTER SCIENCE II: DATA STRUCTURES AND ABSTRACTION</td>
<td>4</td>
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<tr>
<td>CS 23022</td>
<td>DISCRETE STRUCTURES FOR COMPUTER SCIENCE</td>
<td>3</td>
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<tr>
<td>CS 33007</td>
<td>INTRODUCTION TO DATABASE SYSTEM DESIGN</td>
<td>3</td>
</tr>
<tr>
<td>CS 44105</td>
<td>WEB PROGRAMMING I</td>
<td>3</td>
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<tr>
<td>CS 44106</td>
<td>WEB PROGRAMMING II</td>
<td>3</td>
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Minimum Total Credit Hours: 20