



# CIS - Web Programming Certificate

This program prepares students to design, develop, support, and maintain corporate-level Web pages and full Web sites at the level of the Intranet or Internet. Additionally, this certificate will prepare students to design and develop database management applications to support Web-based commercial objectives.

**Total Units: 29-33**

## First Year

### Semester 1

7 Units

COURSE	UNITS	PRE-REQS <sup>^</sup>	SEMESTERS OFFERED*
<b>CISW 300</b> <sup>Z</sup> Web Publishing	3	Advisory: CISC 305	F(O,P), S(O,P), Su(O)
<b>CISC 308</b> <sup>Z</sup> Exploring Computer Environments and the Internet <b>or</b>	1		F(O), S(O)
<b>CISC 323</b> <sup>1</sup> Linux Operating System	1		F(O), S(O)
<b>CISP 300</b> <sup>Z</sup> Algorithm Design/Problem Solving	3	Intermediate Algebra	F, S, Su

<sup>Z</sup> At least one section of this course is offered with free textbooks and is labeled as zero textbook costs (ZTC). If it is a GE area class or elective, there may be several ZTC offerings to fulfill the GE requirement. Use the Free Textbook filter to find these courses. Learn more on the [ZTC page of the college website](#).

<sup>1</sup> CISC 323 is the pre-req for CISC 324 in Semester 2

### Semester 2

8-9 Units

COURSE	UNITS	PRE-REQS <sup>^</sup>	SEMESTERS OFFERED*
<b>CISA 320</b> Introduction to Database Management	1	Advisory: CISC 302 or 310	F(O), S(O), Su(O)
<b>CISW 400</b> <sup>Z</sup> Client-side Web Scripting	4	CISW 300; Advisory: CISP 320	F(O), S(O)
<b>CISC 324</b> Intermediate Linux Operating System	1	CISC 323	F(O), S(O), Su(O)
<b>2-3 units from List A</b>	2-3	See List A	See List A

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## Career

### Options/Outlook:

Web developers design, create and modify websites. Analyze user needs to implement Web site content, graphics, performance, and capacity. May integrate Web sites with other computer applications. May convert written, graphic, audio, and video components to compatible Web formats by using software designed to facilitate the creation of Web and multimedia content. **Career opportunities require more than two years of college study.**

### A sample of reported job titles:

Designer, Technology Applications Engineer, Web Architect, Web Design Specialist, Web Designer, Web Developer, Web Development Director, Web Development Instructor, Webmaster

### Projected job openings in California (2020-2030):

3,070

### Projected growth in California (2020-2030):

25% growth

### Median Salary in California with

# Year 2

## Semester 3

9 Units

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*
<b>CISP 350</b> Database Programming	3	CISA 320 & 3 units of any programming language	F(O)
<b>CISP 360</b> Introduction to Structured Programming	4	CISP 300 or MATH 400	F(P), S(P)
<b>CISW 304</b> <sup>Z</sup> Cascading Style Sheets	2	CISW 300 (Web Publishing) with a grade of "C" or better	F(O), S(O)

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## Semester 4

5-8 Units

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*
<b>CISW 410</b> Database-Driven Web Applications	4	CISW 300; Advisory: CISP 300 or CISW 310	S(O,P)
<b>1-4 units from List A</b>	1-4	See List A	See List A

^You must have passed the prerequisite course(s) with a "C" or better; Corequisite must be taken during the same semester; Advisory means it is recommended but not required to enroll in the course.

\*(O) = Online available, (P) = Partially online

## List A-a minimum of 5 units from the following:

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*
<b>CISA 321</b> Intermediate Database Management	1	CISA 320	F(O), S(O)
<b>CISS 310</b> Network Security Fundamentals	3	Advisory: CISP 300 & 304	Check Class Schedule for offering
<b>CISW 308</b> <sup>Z</sup> Mobile Web Development	2	CISW 300; Advisory: CISW 304	F(O), Su(O)
<b>CISW 310</b> Advanced Web Publishing	4	CISW 300	Check Class Schedule for offering

## advanced degree (2021):

\$84,860/yr

## Source:

<https://www.onetonline.org/link/summary/15-1134.00>

## About this map:

This program map represents one possible pathway to complete the program. Please see a counselor to create an education plan that is customized to meet your needs. This map is not a guarantee of course availability or financial aid applicability.

## Zero Textbook Costs (ZTC):

The Zero Textbook Costs designation and logo are added to any course that provides free access to all required instructional materials. These are typically shared with students through Canvas. Courses that are designated as ZTC may still require students to purchase supplemental materials such as lab coats, a calculator, art supplies, etc. See full definitions and searching tips on the [Zero Textbook Costs page](#) of the college website.

COURSE	UNITS	PRE-REQS <sup>^</sup>	SEMESTERS OFFERED*
<b>CISW 402</b> <sup>Z</sup> Intermediate JavaScript	2	CISW 400; Advisory: CISW 410	F(O), S(O)
<b>CISW 440</b> <sup>Z</sup> XML: Introduction to Extensible Markup Language	2	CISW 300; Advisory: CISA 320 or CISP 350	Su(P)

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