

WEB DEVELOPMENT, ASSOCIATE IN APPLIED SCIENCE



College(s): DA, MX, OH, WR

Program Code: 0409

The Web Development Associate in Applied Science program prepares students for entry-level positions in website design, development, and administration. Students will learn various programming principles, languages, and web technologies to effectively create and deploy dynamic websites. Students will also learn how to integrate web and database servers to increase the productivity and interactivity of a website. Potential job opportunities for students in this program include web designer, web developer, e-commerce manager, web technician, or web server administrator.

Program Requirements

Code	Title	Hours
General Education Coursework		
ENGLISH 101	Composition	3
MATH 118	General Education Math (or higher Mathematics)	4
Fine Arts or Humanities course		3
Social and Behavioral Sciences course		3
Physical Sciences or Life Sciences course		3
Required Program Core		
CIS 101	Computer Science 101	3
CIS 113	Human-Computer Interaction	3
CIS 114	Mobile Application Development	3
CIS 116	Operating System I	3
CIS 144	Java Object Oriented Programming I	3
CIS 181	Web Development I/Basic Web Technologies	3
CIS 182	Web Development II/Client Side Scripting	3
CIS 260	Computer Information Systems Field Project	3
CIS 281	Web Development III/Server Side Programming	3

CIS 282	Web Development IV/Web Database Integration	3
BUSINES 111	Introduction To Business	3
NET TEC 101	Client-Server Database I	3

Program Electives		
Students must complete a minimum of 9 credit hours in the subjects Computer Information Systems (0032), Networking Technologies (0165), or Cybersecurity (0162).		9
Total Hours		61

At least one course must meet the Human Diversity (HD) requirement.

Pathway

This is an **example course sequence** for students interested in Web Development. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn a Basic Certificate (BC), Advanced Certificate (AC) and Associate in Applied Science Degree (AAS) in Web Development. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below.

The Web Development AAS program prepares students for entry-level positions in website design, development, and administration. Students will learn various programming principles, languages, and web technologies to effectively create and deploy dynamic websites. Students will also learn how to integrate web and database servers to increase the productivity and interactivity of a website. Potential job opportunities for students in this program include web designer, web developer, e-commerce manager, web technician, or web server administrator.

Semester-by-Semester Program Plan for Full-Time Students

All plans can be modified to fit the needs of part-time students by adding more semesters.

Semester 1		Hours
ENGLISH 101	Composition ¹	3
Social and Behavioral Sciences course ¹		3
CIS 101	Computer Science 101	3
CIS 116	Operating System I	3
CIS 181	Web Development I/Basic Web Technologies	3
Hours		15
Semester 2		
MATH 118	General Education Math (or higher Mathematics) ¹	4
CIS 113	Human-Computer Interaction	3
CIS 144	Java Object Oriented Programming I	3
CIS 182	Web Development II/Client Side Scripting	3
NET TEC 101	Client-Server Database I	3
Hours		16
Semester 3		
Fine Arts & Humanities course (HD) ¹		3
BUSINES 111	Introduction To Business	3
CIS 114	Mobile Application Development	3
CIS 281	Web Development III/Server Side Programming	3
Select one of the following:		3
CIS 103	Fundamentals of Programming ²	
Program Elective (p. 2) ²		
Hours		15
Semester 4		
Physical Sciences or Life Sciences course ¹		3
CIS 282	Web Development IV/Web Database Integration	3
CIS 260	Computer Information Systems Field Project	3
Program Elective (p. 2) ²		3
Program Elective (p. 2) ²		3
Hours		15
Total Hours		61

¹ General Education Requirement

² Program Elective (p. 2)

Program Elective

Code	Title	Hours
CIS 118	Information Technology Problem Solving	3
CIS 120	Introduction to Computer Applications	3
CIS 250	Systems Analysis and Design	3
Other recommended CIS, COMPSFI, or Networking Technology courses		

Choose your courses with your College Advisor.

Careers

This program can prepare students for the jobs listed below. Click on each one to learn more, including average earnings, annual job openings, and how much education people in that field have. For additional guidance and resources on career options, current City Colleges students and alumni can contact the Career Services Office (<https://www.ccc.edu/departments/Pages/Career-Services.aspx>).

Web Developers

Job Description

Develop and implement websites, web applications, application databases, and interactive web interfaces. Evaluate code to ensure that it is properly structured, meets industry standards, and is compatible with

browsers and devices. Optimize website performance, scalability, and server-side code and processes. May develop website infrastructure and integrate websites with other computer applications.

Salary Based on Experience Level

Take a look at the average hourly/annual earnings for this career in Cook County

Lightcast earnings figures are based on OES data from the BLS and include base rate, cost of living allowances, guaranteed pay, hazardous-duty pay, incentive pay (including commissions and bonuses), on-call pay, and tips.

Annual Wages

Entry-Level 10 th Percentile	\$53,200
Median 50 th Percentile	\$86,736
Senior-Level 90 th Percentile	\$139,621

Hourly Wages

Entry-Level 10 th Percentile	\$26
Median 50 th Percentile	\$42
Senior-Level 90 th Percentile	\$67

Annual Job Openings

88 annual openings in Cook County

National Education Attainment

Here, you can see the level of education that people in this career complete.

Degree Program	% of Jobs
A high school diploma or less	12.50%
A certificate	16.67%
Some college	4.17%
An Associate degree	16.67%
A Bachelor's degree	50.00%
A Master's or Professional degree	0.00%
A Doctoral degree or more	0.00%

50.00% continue their education beyond an associate degree