

## COMPUTER INFORMATION SYSTEMS – FULL STACK WEB DEVELOPMENT – ASSOCIATE IN SCIENCE DEGREE, CERTIFICATE OF ACHIEVEMENT

Top Code:

0707.10

This Full Stack Web Development curriculum prepares students with necessary skills to seek entry-level employment in client-side and server-side web development. Instruction includes development, testing, deployment, and maintenance of secure web applications using programming languages including and not limited to HTML, CSS, JavaScript, jQuery, Bootstrap, React, Angular.js, Node.js, PHP, SQL, and Python. Upon completion of coursework, students will have the foundation needed to pursue industry certifications including and not limited to Python institute's Certified Associate in Python Programming (PCAP), CIW Advanced HTML5 and CSS3 Specialist, CIW JavaScript Specialist certification, OpenJS Node.js Application Developer, and Zend Certified PHP Engineer.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

## **Program Outcomes**

- Create user-centered websites using modern web languages and tools that comply with current web standards.
- Plan, design, develop, implement, and maintain responsive web sites and applications using client-side and server-side programming languages.

## Requirements for the Certificate of Achievement

Code	Title	Units
CIS 012	INTRODUCTION TO PROGRAMMING USING PYTHON	3
CIS 031	INTRODUCTION TO DATABASE MANAGEMENT SYSTEMS	3
CIS 192	INTRODUCTION TO WEB DEVELOPMENT	3
CIS 193	CLIENT-SIDE WEB DEVELOPMENT USING JAVASCRIPT	3
CIS 194	CLIENT-SIDE WEB DEVELOPMENT USING JAVASCRIPT FRAMEWORKS	3
CIS 197	SERVER-SIDE WEB DEVELOPMENT	3
Total Units		18

Visit the Program Mapper for a suggested sequence of courses.

## **General Education Requirements for the Associate in Science Degree**

- General Information (https://curriculum.pasadena.edu/academicprograms-leading-degree-certificate/)
- PCC Local Gen Ed (https://curriculum.pasadena.edu/academicprograms-leading-degree-certificate/#pcclocaltext)
- CSU Breadth (https://curriculum.pasadena.edu/academic-programs-leading-degree-certificate/#csubreadthtext)
- IGETC (https://curriculum.pasadena.edu/academic-programsleading-degree-certificate/#igetctext)