

# Information Technology Career Cluster

The Information Technology (IT) Career Cluster focuses on building linkages in IT occupations for entry level, technical, and professional careers related to the design, development, support, and management of hardware, software, multimedia, and systems integration services.

## Web Development Statewide Program of Study



The Web Development program of study explores the occupations and educational opportunities associated with designing, creating, and modifying websites. This program of study may also explore integrating websites with other computer applications, and converting written, graphic, audio, and video components to compatible web formats by using software designed to facilitate the creation of web and multimedia content.

### Secondary Courses for High School Credit

#### Level 1

- Principles of Information Technology
- Web Communications

#### Level 2

- Computer Science I
- Foundations of User Experience (UX)

#### Level 3

- Web Design
- Web Game Development
- Advanced User Experience Design

#### Level 4

- Practicum in Information Technology
- Practicum in Entrepreneurship
- Project Based Research
- Independent Study in Technology Applications
- Independent Study in Evolving/Emerging Technologies
- Career Preparation I

### Postsecondary Opportunities

#### Associates Degrees

- Computer Programming/Programmer, General
- Computer Science
- Web Page, Digital/Multimedia and Information Resources Design
- Computer Systems Networking and Telecommunications

#### Bachelor's Degrees

- Web/Multimedia Management and Webmaster
- Computer Science
- Web Page, Digital/Multimedia and Information Resources Design
- Computer Systems Networking and Telecommunications

#### Master's, Doctoral, and Professional Degrees

- Computational Science
- Computer Science
- Information Science/Studies
- Computer Systems Networking and Telecommunications

### Work-Based Learning and Expanded Learning Opportunities

#### Exploration Activities

- Join TSA
- Participate in a coding or computer programming club
- Create a web page

#### Work-Based Learning Activities

- Earn an Oracle or web certification

### Industry-Based Certifications

- Certified Web and Mobile App Developer Apprentice
- Certified Web Animator Associate
- CodeHS Python Level 1 Certification
- CodeHS Web Design Level 1 Certification
- Information Technology Specialist: HTML and CSS
- Information Technology Specialist: HTML5 Application Development
- Information Technology Specialist: JavaScript
- Microsoft Azure Data Fundamentals
- Oracle Certified Associate Java SE 8 Programmer
- Web Design- Job Ready

- Google Analytics Individual Qualification\*
- WD Certified Web Design\*

\*IBC sunseting 8/31/24



### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Web Developers	\$67,912	1,079	39%
Web Administrators, Computer Occupations	\$85,197	1,616	20%
Software Developers	\$104,499	6,311	30%

Successful completion of the Web Development program of study will fulfill requirements of the Business and Industry endorsement and STEM endorsement if the math and science requirements are met.. Revised – August 2022

# Web Development Course Information

## Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Information Technology	13027200 (1 credit)	None	None
Web Communications	03580810 (.5 credit)	None	None

## Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Computer Science I	03580200 (1 credit)	None	None
Foundations of User Experience (UX)	N1302809 (1 credit)	None	None

## Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Web Design	03580820 (1 credit)	None	None
Web Game Development	03580830 (1 credit)	None	None
Advanced User Experience Design	N1302814 (1 credit)	None	None

## Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Practicum in Information Technology	13028000 (2 credits) 13028005 (3 credits) 13028010 (2 credits) 13028015 (3 credits)	A minimum of two high school Information Technology (IT) courses	None
Practicum in Entrepreneurship	N1303425 (2 credits)	None	None
Project Based Research	12701500 (1 credit)	None	None
Independent Study in Technology Applications	03580900 (1 credit)	None	None
Independent Study in Evolving/Emerging Technologies	03581500 (1 credit)	None	None
Career Preparation I	12701300 (2 credits) 12701305 (3 credits)	None	None

FOR ADDITIONAL INFORMATION ON THE INFORMATION TECHNOLOGY CAREER CLUSTER, PLEASE CONTACT: [CTE@tea.texas.gov](mailto:CTE@tea.texas.gov)  
<https://tea.texas.gov/cte>

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