



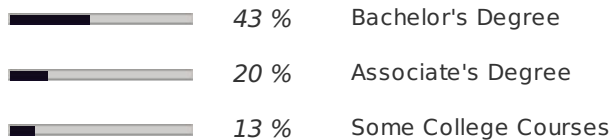
## Web Developers

### Description

Develop and design web applications and web sites. Create and specify architectural and technical parameters. Direct web site content creation, enhancement and maintenance.

### Education

The following is a breakdown of the top three degrees that people in this job possess (each educational level is described in the legend at the end of this document):

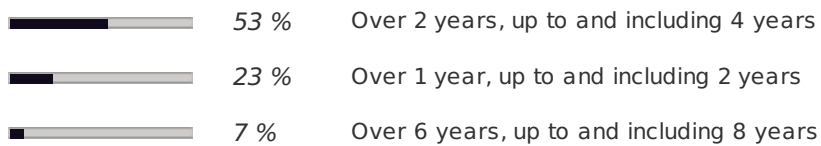


In order to pursue this career, you will need to be educated in one of the following areas:

- Web Page, Digital/Multimedia and Information Resources Des (CIP = 11.0801)
- Web/Multimedia Management and Webmaster.ááá(NEW) (CIP = 11.1004)
- E-Commerce/Electronic Commerce.ááá(NEW) (CIP = 52.0208)

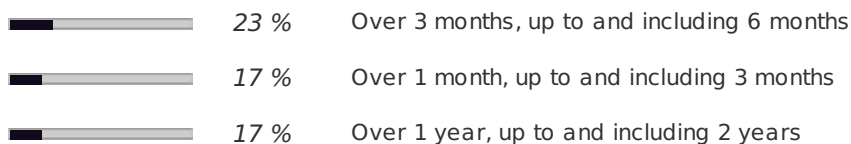
### Experience

The following is a breakdown of the level of related work experience that people in this job possess:



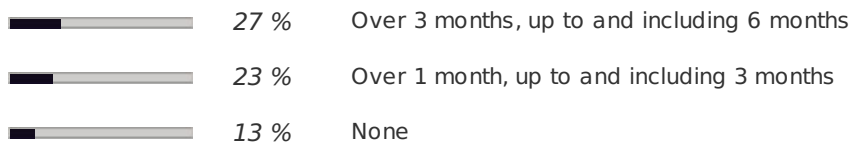
### On-site Training

The following is a breakdown of the length of on-site training that people in this job typically receive:



### On-the-job Training

The following is a breakdown of the level of on-the-job training that people in this job received:





## Interests

The following is a list of the top three career interests (also known as Holland Codes) that people with this occupation possess, along with their level of importance to this career.

- Conventional (High)
- Investigative (High)
- Realistic (High)

## Tasks

Here are the most common tasks and duties for which you would be responsible in this job:

- Design, build, or maintain web sites, using authoring or scripting languages, content creation tools, management tools, and digital media.
- Perform or direct web site updates.
- Write, design, or edit web page content, or direct others producing content.
- Confer with management or development teams to prioritize needs, resolve conflicts, develop content criteria, or choose solutions.
- Back up files from web sites to local directories for instant recovery in case of problems.
- Identify problems uncovered by testing or customer feedback, and correct problems or refer problems to appropriate personnel for correction.
- Evaluate code to ensure that it is valid, is properly structured, meets industry standards and is compatible with browsers, devices, or operating systems.
- Maintain understanding of current web technologies or programming practices through continuing education, reading, or participation in professional conferences, workshops, or groups.
- Analyze user needs to determine technical requirements.
- Develop or validate test routines and schedules to ensure that test cases mimic external interfaces and address all browser and device types.
- Develop databases that support web applications and web sites.
- Renew domain name registrations.
- Collaborate with management or users to develop e-commerce strategies and to integrate these strategies with web sites.
- Write supporting code for web applications or web sites.
- Communicate with network personnel or web site hosting agencies to address hardware or software issues affecting web sites.
- Design and implement web site security measures such as firewalls or message encryption.
- Perform web site tests according to planned schedules, or after any web site or product revisions.
- Select programming languages, design tools, or applications.
- Incorporate technical considerations into web site design plans, such as budgets, equipment, performance requirements, or legal issues including accessibility and privacy.
- Respond to user email inquiries, or set up automated systems to send responses.

## Abilities

To pursue this career, you will need to display the following capacities:

- Deductive Reasoning
- Problem Sensitivity
- Oral Comprehension
- Near Vision
- Information Ordering
- Category Flexibility
- Speech Recognition
- Written Comprehension
- Selective Attention
- Inductive Reasoning
- Speech Clarity
- Oral Expression
- Fluency of Ideas
- Written Expression
- Originality
- Flexibility of Closure
- Perceptual Speed
- Visualization
- Speed of Closure
- Finger Dexterity



## **Knowledge**

To pursue this career, it would be helpful to be well-versed in the following subject areas:

- Computers and Electronics
- English Language
- Customer and Personal Service
- Design
- Communications and Media
- Mathematics
- Administration and Management
- Education and Training
- Telecommunications
- Clerical
- Sales and Marketing
- Engineering and Technology
- Psychology
- Law and Government
- Production and Processing
- Fine Arts
- Personnel and Human Resources
- Economics and Accounting
- Sociology and Anthropology

## **Skills**

The following skills are considered essential to this job:

- Programming
- Critical Thinking
- Operations Analysis
- Reading Comprehension
- Complex Problem Solving
- Active Listening
- Speaking
- Active Learning
- Judgment and Decision Making
- Monitoring
- Writing
- Systems Analysis
- Coordination
- Systems Evaluation
- Time Management
- Social Perceptiveness
- Persuasion
- Instructing
- Learning Strategies
- Negotiation



## Activities

In this job, you will likely spend most of your time engaged in the following activities:

- Interacting With Computers
- Updating and Using Relevant Knowledge
- Getting Information
- Thinking Creatively
- Processing Information
- Making Decisions and Solving Problems
- Communicating with Supervisors, Peers, or Subordinates
- Identifying Objects, Actions, and Events
- Organizing, Planning, and Prioritizing Work
- Analyzing Data or Information
- Provide Consultation and Advice to Others
- Establishing and Maintaining Interpersonal Relationships
- Evaluating Information to Determine Compliance with Standards
- Interpreting the Meaning of Information for Others
- Developing Objectives and Strategies
- Scheduling Work and Activities
- Communicating with Persons Outside Organization
- Training and Teaching Others
- Documenting/Recording Information
- Developing and Building Teams

## Job Zone

All occupations are categorized into job zones, based on the level of preparation (experience, education, and training) that is required. There are five job zone categories, with job zone one indicating that little to no preparation is required, to job zone five, where extensive preparation is needed.

**This occupation is categorized as Job Zone Three: Medium Preparation Needed**

Occupations in this job zone tend to require the following:

### Experience

Previous work-related skill, knowledge, or experience is required for these occupations. For example, an electrician must have completed three or four years of apprenticeship or several years of vocational training, and often must have passed a licensing exam, in order to perform the job.

### Education

Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree.

### Training

Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers. A recognized apprenticeship program may be associated with these occupations.

### Example

These occupations usually involve using communication and organizational skills to coordinate, supervise, manage, or train others to accomplish goals. Examples include food service managers, electricians, agricultural technicians, legal secretaries, interviewers, and insurance sales agents.



## Legend:

### Educational Levels

1. **Less than High School:** No schooling or just grade school or some high school courses.
2. **High School Diploma:** Or GED or High School Equivalence Certificate.
3. **Post-Secondary Certificate:** Awarded for training completed after high school (for example, in Personnel Services, Engineering-related Technologies, Vocational Home Economics, Construction Trades, Mechanics and Repairers, Precision Production Trades).
4. **Some College Courses:** Can consist of college preparatory courses or regular courses taken while attending college, but credits attained are not sufficient to get a degree.
5. **Associate's Degree:** An undergraduate degree awarded by a junior, community technical or bachelor's degree-granting college/university. Requires a completion of a two-year course of study.
6. **Bachelor's Degree:** An academic degree awarded for an undergraduate major or course. Requires a completion of a four-year course of study.
7. **Post-Baccalaureate Certificate:** Awarded for completion of an organized program of study; designed for people who have completed a Baccalaureate degree, but do not meet the requirements of academic degrees carrying the title of Master.
8. **Master's Degree:** An academic degree awarded to people who, in addition to achieving a bachelor's, have taken additional courses or completed a research study in a specific field or subject area. Requires an additional one to three years of study.
9. **Post-Master's Certificate:** Awarded for completion of an organized program of study; designed for people who have completed a Master's degree, but do not meet the requirements of academic degrees at the doctoral level.
10. **First Professional Degree:** Awarded for completion of a program that: requires at least 2 years of college work before entrance into the program, includes a total of at least 6 academic years of work to complete, and provides all remaining academic requirements to begin practice in a profession.
11. **Doctoral Degree:** An academic or professional degree awarded for the completion of advanced graduate study beyond a Master's degree. Requires an additional two to four years of study.
12. **Postdoctoral Training:** Consists of advanced academic research completed after doctoral studies. Generally done within five years of the completion of a Doctoral Degree in order to deepen a person's knowledge of a particular subject, hone skills, and publish academic papers.