

HOT JOBS

By Trinity Stepanski

SELECT A JOB TO LEARN ABOUT

- ❖ Computer Systems Analysts [Job 1](#)
- ❖ Web Developers [Job 2](#)
- ❖ Graphic Designers [Job 3](#)
- ❖ Web Administrators [Job 4](#)

COMPUTER SYSTEMS ANALYSTS

- ❖ Test, maintain, and monitor computer programs and systems, including coordinating the installation of computer programs and systems.
- ❖ Troubleshoot program and system malfunctions to restore normal functioning.
- ❖ Expand or modify system to serve new purposes or improve work flow.
- ❖ Use the computer in the analysis and solution of business problems, such as development of integrated production and inventory control and cost analysis systems.
- ❖ Consult with management to ensure agreement on system principles.

- ❖ **Bachelor's degree**
- ❖ **Computers and Electronics** — Knowledge of circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.
- ❖ **English Language** — Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
- ❖ **Customer and Personal Service** — Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.
- ❖ **Mathematics** — Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications.
- ❖ **Administration and Management** — Knowledge of business and management principles involved in strategic planning, resource allocation, human resources modeling, leadership technique, production methods, and coordination of people and resources.



COMPUTER SYSTEMS ANALYSTS

Computer systems analysts plan, design, and test computer systems and programs. They may also be responsible for installing, maintaining, and repairing computer systems. They may also be responsible for training users on how to use computer systems. Computer systems analysts may work for government agencies, educational institutions, or private companies. They may also work as consultants.

State	Employment		Percent Change	Projected Annual Job Openings
	2014	2024		
Pennsylvania	24,030	29,030	+21%	810

Location	Entry Level	Top Pay
United States	\$53,110	\$137,690
Pennsylvania	\$53,020	\$133,110



WEB DEVELOPERS

- ❖ Write supporting code for Web applications or Web sites.
- ❖ Design, build, or maintain Web sites, using authoring or scripting languages, content creation tools, management tools, and digital media.
- ❖ Back up files from Web sites to local directories for instant recovery in case of problems.
- ❖ Write, design, or edit Web page content, or direct others producing content.
- ❖ Select programming languages, design tools, or applications.

❖ **Bachelor's degree**

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- ❖ **English Language** — Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
- ❖ **Mathematics** — Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications.
- ❖ **Communications and Media** — Knowledge of media production, communication, and dissemination techniques and methods. This includes alternative ways to inform and entertain via written, oral, and visual media.



WEB DEVELOPERS

State	Employment		Percent Change	Projected Annual Job Openings
	2014	2024		
Pennsylvania	4,610	5,700	+24%	170

Location	Entry Level	Top Pay
United States	\$35,390	\$119,550
Pennsylvania	\$36,510	\$105,010



GRAPHIC DESIGNERS

- ❖ Determine size and arrangement of illustrative material and copy, and select style and size of type.
- ❖ Confer with clients to discuss and determine layout design.
- ❖ Create designs, concepts, and sample layouts, based on knowledge of layout principles and esthetic design concepts.
- ❖ Develop graphics and layouts for product illustrations, company logos, and Web sites.
- ❖ Use computer software to generate new images.

❖ *Bachelor's degree*

- ❖ **Design** — Knowledge of design techniques, tools, and principles involved in production of precision technical plans, blueprints, drawings, and models.
- ❖ **Communications and Media** — Knowledge of media production, communication, and dissemination techniques and methods. This includes alternative ways to inform and entertain via written, oral, and visual media.
- ❖ **English Language** — Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
- ❖ **Fine Arts** — Knowledge of the theory and techniques required to compose, produce, and perform works of music, dance, visual arts, drama, and sculpture.
- ❖ **Computers and Electronics** — Knowledge of circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.



GRAPHIC DESIGNERS

State	Employment		Percent Change	Projected Annual Job Openings*
	2014	2024		
Pennsylvania	11,050	10,970	-1%	260

Location	Entry Level	Top Pay
United States	\$27,950	\$82,020
Pennsylvania	\$26,740	\$79,920



WEB ADMINISTRATORS

- ❖ Back up or modify applications and related data to provide for disaster recovery.
- ❖ Determine sources of Web page or server problems, and take action to correct such problems.
- ❖ Review or update Web page content or links in a timely manner, using appropriate tools.
- ❖ Monitor systems for intrusions or denial of service attacks, and report security breaches to appropriate personnel.
- ❖ Implement Web site security measures, such as firewalls or message encryption

- ❖ **Bachelor's degree**
- ❖ **Computers and Electronics** — Knowledge of circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.
- ❖ **English Language** — Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
- ❖ **Communications and Media** — Knowledge of media production, communication, and dissemination techniques and methods. This includes alternative ways to inform and entertain via written, oral, and visual media.
- ❖ **Administration and Management** — Knowledge of business and management principles involved in strategic planning, resource allocation, human resources modeling, leadership technique, production methods, and coordination of people and resources.
- ❖ **Customer and Personal Service** — Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.



WEB ADMINISTRATORS

State	Employment		Percent Change	Projected Annual Job Openings *
	2014	2024		
Pennsylvania	7,480	7,730	+3%	120

Location	Entry Level	Top Pay
United States	\$45,410	\$133,890
Pennsylvania	\$51,730	\$127,160

