



# Tech career success starts with IT Specialist.

Employers and workforce development organizations alike face the challenge of finding and placing qualified, skilled individuals in technology-focused roles. Complicating matters further, it's been difficult to find a truly foundational training program that prepares individuals hoping to enter and advance in tech careers. Until now.

Introducing the **Pearson IT Specialist training and certification program**, an all-in-one solution that offers high value at a reasonable cost. With training options that span 15 areas of study, the IT Specialist program can help workforce development organizations place more individuals in high-growth tech occupations. Each focus area offers a comprehensive program developed for today's market.

Within the IT Specialist training and certification program, your learners can access:

- Courseware
- Video lessons
- Interactive labs
- Prescriptive study guides
- Practice exams

In the following pages, you'll discover why the IT Specialist training and certification program is a critical component to tech career progression. From foundational to advanced-level career paths, this digital catalog explores the potential career training path tech learners can walk through from start to finish.

See where the IT Specialist program can take your learners as they pursue the journey to becoming a skilled technology professional.



# The pathway to success starts here.

Help your learners find the right fit from a wide range of IT Specialist certification focus areas.

**Artificial Intelligence** – Learn about diverse topics across the AI field, from defining the AI-related problem, managing the data, and building an AI model to solve it, to producing, deploying, and monitoring the model in an application.

**Cloud computing** – Identify and describe solutions that leverage cloud technologies, considerations that span across solutions, and the “art of the possible” in using the cloud to develop solutions.

**Computational thinking** – Understand how to decompose problems, collect and analyze data, recognize patterns in data, represent data through abstractions, and automate solutions by using algorithmic thinking.

**Cybersecurity** – Gain an understanding of key security paradigms, terminology, and mindset while developing a keen awareness of the importance of security and the threats to a business when security procedures are not followed.

**Data analytics** – Build foundational IT skills and knowledge while learning how to responsibly manipulate, analyze, and communicate the findings of data analysis.

**Databases** – Leave this course knowing the basics of database design and database object management using DDL, data manipulation using DML, and troubleshooting data management and manipulation query failures.

**Device configuration and management** – Gain foundational skills in, and a basic knowledge of, Windows devices and mobility.

**HTML5 application development** – Learn how to use HTML5, CSS, and JavaScript to build responsive web applications that will run on a variety of touch-enabled devices, including PCs, tablets, and phones.

**HTML and CSS** – Develop an understanding of how to structure a webpage using HTML elements and create and apply styles using CSS.

**Java** – Discover the fundamentals of Java and how to perform basic input and output variables, construct code loops, and debug Java code to troubleshoot syntax errors.

**JavaScript** – Understand how to debug JavaScript code using arithmetic operators, apply JavaScript best practices and identify Document Object Models (DOM) events.

**Networking** – Gain foundational networking knowledge and skills, including TCP/IP, networking services, networking topologies, and troubleshooting in wired and wireless environments.







**Network security** – Get the basics of security knowledge and skills, including an understanding of core security principles, operating system security, network and device security, and secure computing practices.

**Python** – Obtain a complete understanding of input and output operations, code documentation using pydoc, and how to perform basic file system and command-line operations using modules and tools.

**Software development** – Learn core software development skills, including object-oriented programming, web applications, and databases. Intended for learners with some experience with C# and ANSI SQL.










## Job title: Computer Support Specialist (O\*Net code: 15-1232.00)

Daily tasks	Potential career choices	
<ul style="list-style-type: none"><li>• Answer user inquiries</li><li>• Oversee the daily performance of computer systems</li><li>• Conduct computer diagnostics to resolve problems</li><li>• Set up equipment for employee use</li><li>• Develop training materials and procedures</li></ul>	<ul style="list-style-type: none"><li>• Computer technician</li><li>• Desktop support technician</li><li>• Help desk analyst</li><li>• Help desk technician</li><li>• Technical support specialist</li></ul>	
Growth and salary potential		
	<p>According to O*Net Online, the demand for Computer Support Specialist professionals will grow by 7% by 2031, adding 58,900 unique jobs with a median salary of \$49,770 annually.</p>	
Optimal training and certification pathways		
<b>IT Specialist training and certification:</b> <ul style="list-style-type: none"><li>• INF-101: Networking</li><li>• INF-103: Device Configuration and Management</li><li>• INF-104: Cloud Computing</li></ul>		<b>Add industry certifications for a broader career training program:</b> <ul style="list-style-type: none"><li>• AWS Certified Cloud Practitioner</li><li>• ITIL Foundation</li><li>• Microsoft MD-100: Windows Client</li><li>• Microsoft MD-101: Managing Modern Desktops</li></ul>
		  











## Job title: Computer Network Support Specialist (O\*Net code: 15-1231.00)

Daily tasks	Potential career choices
<ul style="list-style-type: none"> <li>• Back up network data</li> <li>• Configure security settings or access permissions</li> <li>• Analyze and report computer network security breaches</li> <li>• Identify the causes of networking problems</li> <li>• Document network support activities</li> </ul>	<ul style="list-style-type: none"> <li>• Computer network specialist</li> <li>• Network specialist</li> <li>• Network technical analyst</li> <li>• Network support specialist</li> <li>• Network technician</li> </ul>
Growth and salary potential	
<div>  <p>According to O*Net Online, the demand for Computer Network Support Specialist professionals will grow by 7% by 2031, adding 16,100 unique jobs with a median salary of \$62,760 annually.</p>  </div>	
Optimal training and certification pathways	
<p><b>IT Specialist training and certification:</b></p> <ul style="list-style-type: none"> <li>• INF-101: Networking</li> <li>• INF-102: Network Security</li> <li>• INF-104: Cloud Computing</li> <li>• INF-105: Cybersecurity</li> </ul> <div>  </div>	<p><b>Add industry certifications for a broader career training program:</b></p> <ul style="list-style-type: none"> <li>• AWS Certified Cloud Practitioner</li> <li>• Cisco Certified Support Technician - Networking</li> <li>• CompTIA Network+</li> <li>• Microsoft Azure Network Engineer Associate</li> </ul> <div>     </div>









## Job title: Information Security Analysts (O\*Net code: 15-1212.00)

Daily tasks	Potential career choices
<ul style="list-style-type: none"> <li>• Develop plans to safeguard computer files</li> <li>• Monitor current reports of computer viruses</li> <li>• Encrypt data transmissions and erect firewalls</li> <li>• Perform risk assessments and execute tests of data processing systems</li> <li>• Modify computer security files</li> </ul>	<ul style="list-style-type: none"> <li>• Systems analyst</li> <li>• Security analyst</li> <li>• Network security technician</li> <li>• Network security analyst</li> <li>• Information systems security analyst</li> </ul>
Growth and salary potential	
<div>  <p>According to O*Net Online, the demand for Information Security Analyst professionals will grow by 11% by 2031, adding 19,500 unique jobs with a median salary of \$102,600 annually.</p>  </div>	
Optimal training and certification pathways	
<p><b>IT Specialist training and certification:</b></p> <ul style="list-style-type: none"> <li>• INF-102: Network Security</li> <li>• INF-105: Cybersecurity</li> <li>• INF-202: Data Analytics</li> <li>• INF-307: Artificial Intelligence</li> </ul> <div>  </div>	<p><b>Add industry certifications for a broader career training program:</b></p> <ul style="list-style-type: none"> <li>• Cisco Certified CyberOps Associate</li> <li>• Cisco Certified Support Technician - Networking</li> <li>• CompTIA Security+</li> <li>• Microsoft Certified: Azure Security Associate</li> </ul> <div>    </div>










## Job title: Cybersecurity Analysts (O\*Net code: 15-1212.00)

Daily tasks	Potential career choices
<ul style="list-style-type: none"><li>• Develop plans to safeguard computer files</li><li>• Monitor current reports of computer viruses</li><li>• Encrypt data transmissions and erect firewalls</li><li>• Perform risk assessments and execute tests of data processing systems</li><li>• Modify computer security files</li></ul>	<ul style="list-style-type: none"><li>• Information security officer</li><li>• Information security specialist</li><li>• Information security analysts</li><li>• Information systems security officer</li><li>• Information technology security analyst</li></ul>
Growth and salary potential	
	<p>According to O*Net Online, the demand for Cybersecurity Analyst professionals will grow by 11% by 2031, adding 19,500 unique jobs with a median salary of \$102,600 annually.</p> 
Optimal training and certification pathways	
<p><b>IT Specialist training and certification:</b></p> <ul style="list-style-type: none"><li>• INF-101: Networking</li><li>• INF-102: Network Security</li><li>• INF-103: Device Configuration and Management</li><li>• INF-105: Cybersecurity</li></ul> 	<p><b>Add industry certifications for a broader career training program:</b></p> <ul style="list-style-type: none"><li>• AWS Certified Security Associate</li><li>• Cisco Certified Support Technician (CCST) Cybersecurity</li><li>• Cisco Certified CyberOps Associate</li><li>• EC-Council Certified Security Specialist</li></ul>   











## Job title: Business Intelligence Analysts (O\*Net code: 15-2051.00)

Daily tasks	Potential career choices
<ul style="list-style-type: none"> <li>• Generate reports</li> <li>• Synthesize trend data</li> <li>• Maintain library of model documents / templates</li> <li>• Create business intelligence tools or systems</li> <li>• Manage timely flow of business intelligence information</li> </ul>	<ul style="list-style-type: none"> <li>• Intelligence analyst</li> <li>• Data analyst</li> <li>• Market analyst</li> <li>• Market intelligence consultant</li> <li>• Strategist</li> </ul>
Growth and salary potential	
<div>  <p>According to O*Net Online, the demand for Business Intelligence Analyst professionals will grow by 11% by 2031, adding 13,500 unique jobs with a median salary of \$100,910 annually.</p>  </div>	
Optimal training and certification pathways	
<p><b>IT Specialist training and certification:</b></p> <ul style="list-style-type: none"> <li>• INF-201: Databases</li> <li>• INF-202: Data Analytics</li> <li>• INF-307: Artificial Intelligence</li> <li>• INF-308: Computational Thinking</li> </ul> <p></p>	<p><b>Add industry certifications for a broader career training program:</b></p> <ul style="list-style-type: none"> <li>• AWS Certified Data Analytics</li> <li>• Google Data Analytics Certificate</li> <li>• IBM Data Analyst Professional Certificate</li> <li>• Microsoft Azure Enterprise Data Analyst Associate (DP-500)</li> </ul> <p>     </p>









**Job title: Software Quality Assurance** (O\*Net code: 15-1253.00)

Daily tasks	Potential career choices
<ul style="list-style-type: none"> <li>• Identify, analyze, and document problems</li> <li>• Document software defects</li> <li>• Develop testing programs</li> <li>• Design test plans, scenarios, scripts, or procedures</li> <li>• Document test procedures</li> </ul>	<ul style="list-style-type: none"> <li>• Automation tester</li> <li>• Information technology analyst</li> <li>• Quality assurance analyst</li> <li>• Software quality assurance analyst</li> <li>• Software test engineer</li> </ul>
Growth and salary potential	
<div>  <p>According to O*Net Online, the demand for Software Quality Assurance professionals will grow by 11% by 2031, adding 19,500 unique jobs with a median salary of \$98,220 annually.</p>  </div>	
Optimal training and certification pathways	
<p><b>IT Specialist training and certification:</b></p> <ul style="list-style-type: none"> <li>• INF-202: Data Analytics</li> <li>• INF-305: Software Development</li> <li>• INF-307: Artificial Intelligence</li> <li>• INF-308: Computational Thinking</li> </ul> <div>  </div>	<p><b>Add industry certifications for a broader career training program:</b></p> <ul style="list-style-type: none"> <li>• CertNexus Certified AI Practitioner (CAIP)</li> <li>• IBM AI Engineering Professional</li> <li>• Microsoft Azure AI Engineer Associate (DP-100)</li> <li>• Microsoft Azure AI Fundamentals (AI-900)</li> </ul> <div>    </div>











## Job title: Front-End Web Developer (O\*Net code: 15-1254.00)

Daily tasks	Potential career choices	
<ul style="list-style-type: none"><li>• Write supporting code for web applications</li><li>• Design, build, or maintain websites</li><li>• Back up files from websites to local directories</li><li>• Select programming languages, design tools, or applications</li><li>• Evaluate code to ensure it is structured to meet standards and system compatibility</li></ul>	<ul style="list-style-type: none"><li>• Web designer</li><li>• Web developer</li><li>• Web architect</li><li>• Web design specialist</li><li>• Webmaster</li></ul>	
Growth and salary potential		
	<p>According to O*Net Online, the demand for Front-End Web Developer professionals will grow by 11% by 2031, adding 11,000 unique jobs with a median salary of \$77,030 annually.</p>	
Optimal training and certification pathways		
<b>IT Specialist training and certification:</b> <ul style="list-style-type: none"><li>• INF-301: HTML and CSS</li><li>• INF-302: JavaScript</li><li>• INF-305: Software Development</li><li>• INF-306: HTML5 Application Development</li></ul>		<b>Add industry certifications for a broader career training program:</b> <ul style="list-style-type: none"><li>• Certified Web Professional - Web Developer (IWA)</li><li>• JavaScript Specialist (CIW)</li><li>• Microsoft Azure Developer Associate</li><li>• Sun Certified Java Associate (SCJA)</li></ul>
		  










## Job title: Back-End Web Developer (O\*Net code: 15-1254.00)

Daily tasks	Potential career choices
<ul style="list-style-type: none"> <li>• Write supporting code for web applications</li> <li>• Design, build, or maintain websites</li> <li>• Back up files from websites to local directories</li> <li>• Select programming languages, design tools, or applications</li> <li>• Evaluate code to ensure it is structured to meet standards and system compatibility</li> </ul>	<ul style="list-style-type: none"> <li>• Web designer</li> <li>• Web developer</li> <li>• Web architect</li> <li>• Web design specialist</li> <li>• Webmaster</li> </ul>
Growth and salary potential	
<div>  <p>According to O*Net Online, the demand for Back-End Web Developer professionals will grow by 11% by 2031, adding 11,000 unique jobs with a median salary of \$77,030 annually.</p>  </div>	
Optimal training and certification pathways	
<p><b>IT Specialist training and certification:</b></p> <ul style="list-style-type: none"> <li>• INF-302: JavaScript</li> <li>• INF-303: Python</li> <li>• INF-304: Java</li> <li>• INF-305: Software Development</li> </ul> <p>  </p>	<p><b>Add industry certifications for a broader career training program:</b></p> <ul style="list-style-type: none"> <li>• Associate Software Developer (IEEE)</li> <li>• Certified Associate in Python Programming (PCAP)</li> <li>• JavaScript Specialist (CIW)</li> <li>• Sun Certified Java Associate (SCJA)</li> </ul> <p>    </p>



**Job title: Web Administrators** (O\*Net code: 15-1299.01)

Daily tasks	Potential career choices
<ul style="list-style-type: none"> <li>• Monitor systems for intrusions or denial of service attacks</li> <li>• Identify or document backup or recovery plans</li> <li>• Back up or modify applications and related data</li> <li>• Correct testing-identified problems</li> <li>• Identify, standardize, and communicate levels of access and security</li> </ul>	<ul style="list-style-type: none"> <li>• Webmaster</li> <li>• Web technologies administrator</li> <li>• Web administrator</li> <li>• Web content manager</li> </ul>
Growth and salary potential	
<div>  <p>According to O*Net Online, the demand for Web Administrator professionals will grow by 11% by 2031, adding 34,700 unique jobs with a median salary of \$95,270 annually.</p>  </div>	
Optimal training and certification pathways	
<p><b>IT Specialist training and certification:</b></p> <ul style="list-style-type: none"> <li>• INF-301: HTML and CSS</li> <li>• INF-302: JavaScript</li> <li>• INF-303: Python</li> <li>• INF-304: Java</li> <li>• INF-305: Software Development</li> <li>• INF-306: HTML5 Application Development</li> </ul>	<p><b>Add industry certifications for a broader career training program:</b></p> <ul style="list-style-type: none"> <li>• Developing on AWS</li> <li>• Microsoft Azure Developer Associate</li> <li>• Project Management Professional (PMP)</li> <li>• Software Engineering Master Certification (IEEE)</li> </ul>
	   





The ideal foundational training program for tech is here. Featuring a comprehensive set of programming and development certifications, the IT Specialist training and certification program provides learners the valuable skills needed to pursue in-demand, high-growth jobs across 15 focus areas.

More than ever, organizations need tech pros with critical skills. Set them up for success with IT Specialist.

[www.MindhubPRO.com/IT-Specialist](https://www.MindhubPRO.com/IT-Specialist)