

**FOR IMMEDIATE RELEASE**

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**NOTE:** This news release is a summary extract of content from the 4th Quarter 2024 editions Foote Partners' *IT Skills Demand and Pay Trends Report* and *IT Skills and Certification Pay Volatility Index*, two market intelligence trend reports updated every 3 months from data contributed by HR departments at 4,480 U.S. and Canadian employers. It contains IT jobs, skills and certifications data trends published in the firm's *IT Skills and Certifications Pay Index™* and deep-dive supply/demand benchmark analysis from Foote Partners' research group.

**640 IT certifications** reported in Foote Partners' *IT Skills and Certifications Pay Index(ITSCPI)* gained slightly in average market value in 4<sup>th</sup> quarter 2024---up 0.2%---**but with a whopping 10-point decrease in pay volatility**. Only 103 certifications (16%) changed in cash premiums paid by employers compared to 167 in the prior quarter although average market value across all certifications surveyed remained largely the same.

By contrast, average cash pay premiums for **640 non-certified IT skills** recorded only one half the downward volatility of certified skills in the quarter **and lost 0.3% of their market value on average**. They are still earning substantially more cash than certifications: the equivalent of 9.6% of base salary on average compared to only 6.5% for certifications.

**Another key finding is that certifications in Database/Data Management and Networking & Communications categories are showing sustained strength over the past year while those in Architecture/Process/Project Management are also gaining.**

January 27, 2025 – Vero Beach, FL. Extra pay awarded by employers to talented tech professionals for **714 non-certified IT skills**---also known as cash pay premiums---has decreased on average in the final six months of 2024 including in the 4<sup>th</sup> quarter when only skills related to Systems/Networking and Management/Methodology/Process could manage gains. This is markedly different than four successive quarterly average market value gains starting in the last quarter of 2023 in the *IT Skills and Certifications Pay Index*.

The **640 IT certifications** tracked in the ITSPI have been on a different run over the same timeline, a saw tooth patterns of quarterly losses following by gains and then losses over the past six quarters. In the final quarter of 2024, average market value was up slightly thanks to gains in four of the eight certification categories reported. No particular vendor was responsible, with gains being displayed across more than twenty vendors and a half dozen vendor-independent certifications.

**The gap in average cash pay premium between noncertified and certified IT skills has remained the widest in nearly two decades, by more than 3% of base salary.** These findings are from quarterly compensation data updates provided by 4,480 private and public-sector employers in 83 U.S. and Canadian cities who partner with our firm to report pay for their 439,057 technology professionals in the U.S. and Canada.

Since its launch in 1999, the *IT Skills and Certifications Pay Index™* has continuously tracked cash premiums paid to tech professionals by their employers for an ever-increasing number of popular tech skills and certifications. Rigorously validated data and detailed market analyses are updated and published by Foote Partners every 90 days. Currently, premiums are reported for 1,354 certifications and non-certified skills.

“The extreme pay volatility spikes that our research has uncovered most recently---the highest in nearly two decades---are a strong indicator of just how much employers struggling with reshuffling their workforces in a very fluid environment,” notes David Foote, chief analyst and research officer of Foote Partners. “For example, the deepening threat landscape and rapidly evolving high momentum technologies like A.I. are forcing organizations to move with lightning speed to fill specific gaps in their job architectures. Our research model is able to segment skills supply and demand into more than a hundred specializations, and to do it over very short timelines such as three months. And that’s not even short enough when it comes to the hottest IT skills and certifications.”

Continues Foote, “Whether it’s additional pay for a salaried professional, a part-time worker, consulting rates for contingent labor, the use of cash pay premiums for individual certified and noncertified skills is incredibly popular. Employers are struggling with highly volatile market conditions and without agility and flexibility in compensation practices it is nearly impossible for them to manage the workers they need to execute on dynamic business initiatives. Skills pay provides this agility.”

**Pay Performance, 3/12/24/24/36 months  
 Certified vs. Noncertified Tech Skills**

(101,182 IT professionals, data through 1/1/2025)

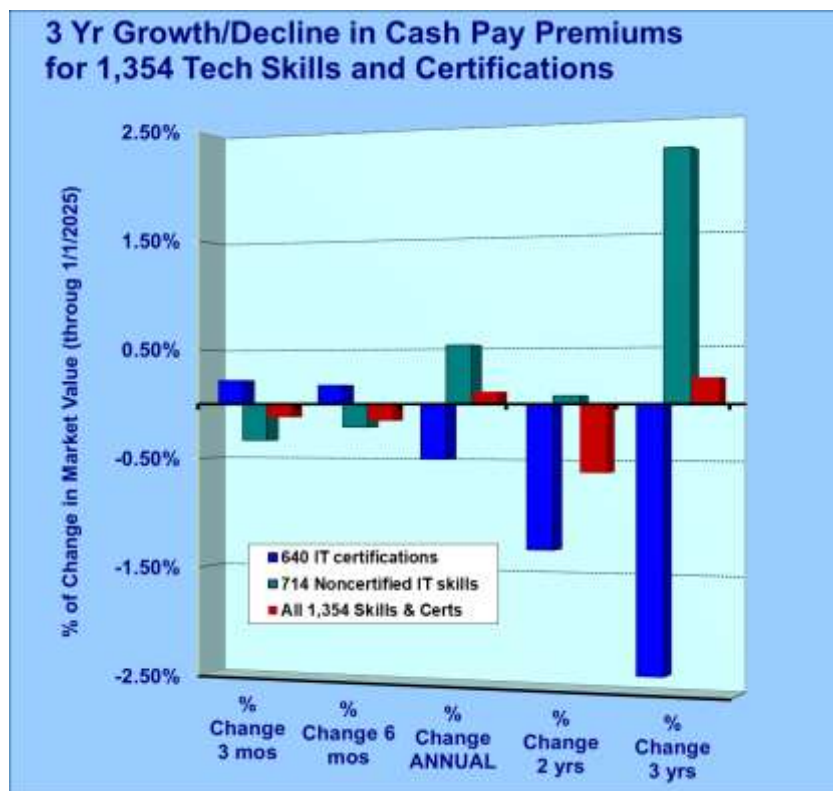


Figure 1

Source: Foote Partners, *IT Skills and Certifications Pay Index™* (4Q2021 – 4Q2024 datasets)

### MULTI-YEAR PAY PREMIUM TRENDS: Certified versus Noncertified IT Skills

Average median cash pay premiums for a single certified or noncertified IT skill. N = 101,182 IT Professional

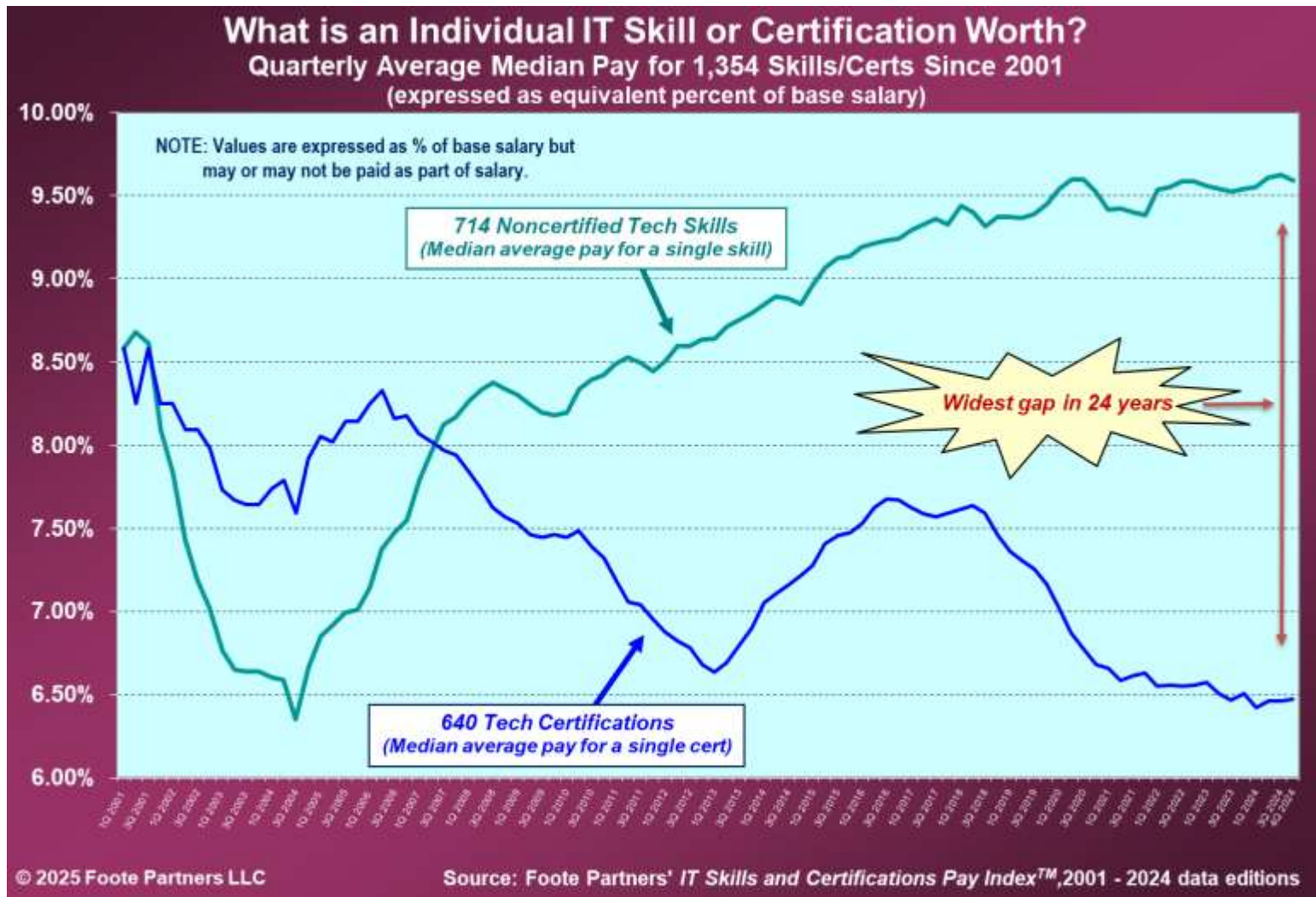


Figure 2

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## ***How to interpret gains and losses in IT skills and certifications pay premiums***

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Quarterly gains and losses in premium pay reflect a widening or narrowing, respectively, in the gap between supply and demand for skills and certifications. This may occur for any number of reasons. For example, a quarterly decline in pay for a skill may signal that the market supply of talent for that skill is catching up to demand—not necessarily that demand is starting to wane. IT professionals are often attracted to a skill or certification if they perceive that it has rising value in the marketplace and therefore can help them to achieve higher pay, greater job security, a promotion, or more flexibility in their career choices. As they pursue greater competency in that skill or as more workers attain certification, supply increases and market pricing (which is elastic to the laws of supply and demand) will be driven downward unless demand is rising at the same proportional rate. Conversely, if demand rises and supply is not increasing to match that level of demand, pay premiums for specific skills and certifications will increase.

Therefore, when interpreting gains and losses in market pay it is important to consider all factors that could be driving supply and demand and market perception. Those factors range from:

- aggressive marketing of certifications by vendors;
- changes in certification programs (e.g., certification extensions or retirement);
- new technology and evolution/maturation of current technologies;
- technology adoption rate;
- product integration strategies,
- economic conditions;
- employment opportunities;
- mergers/acquisitions;
- budget cycles and the timing of skills and talent acquisition by employers;
- changes in labor sourcing plans pursuant to company strategies.

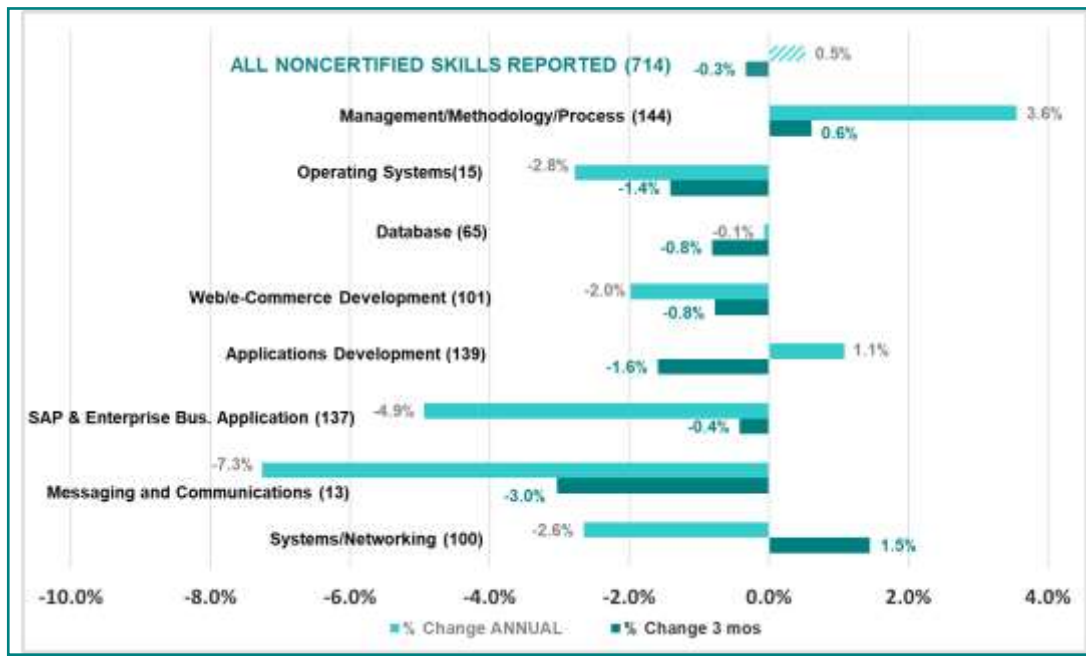
**IT NONCERTIFIED SKILLS PAY SUMMARY – Through January 1, 2025**

**NONCERTIFIED TECH SKILLS PAY PERFORMANCE: By Category**

**NON-CERTIFIED TECH SKILLS.** 221 of 710 non-certified tech skills changed cash market value from October 1, 2024 to January 1, 2025, a 5-point decrease compared to 257 of 710 skills in the prior calendar quarter. The average cash pay premium declined slightly, down 0.3%, from the 0.1% gain in the prior quarter and gains in the prior three quarters.

**Noncertified IT Skills - % Growth/Decline  
3 months & 12 months**

(714 skills, data through 1/1/2025)



**Figure 3**

Source: Foote Partners [IT Skills & Certifications Pay Index™](#), 4th Quarter 2024 data

**NON-CERTIFIED IT SKILLS ANALYSIS – Winners**

**A. NON-CERTIFIED TECH SKILLS EARNING HIGH PAY---AND STILL GROWING IN VALUE**

The following non-certified tech skills meet two prerequisites:

- They **earned workers cash pay premiums well above the average** of all 714 skills reported in our *IT Skills and Certifications Pay Index™* in quarter ending January 1, 2025.
- They **recorded gains in cash market value in the six months** ending January 1, 2025.

No skill below is earning less than the equivalent of 17 percent of base salary—significant considering the average for all skills reported is 9.6 percent of base—and are listed in descending ranked order of cash premium and market value increases (including ties). Not surprising, the list contains a number of security, coding, database, analytics and artificial intelligence related skills.

Here is the list of noncertified IT skills pay premiums meeting the above criteria (in alphabetical order):

Artificial Intelligence	Ethereum	Predictive Analytics and Modeling
Artificial Intelligence for IT Operations	Event-Driven Architecture	PyTorch
Azure Machine Learning	Flink	Risk analytics/assessment
Business analytics	Google TensorFlow	Rust
Computer Vision	Hbase	Scaled Agile Framework (SAFe)
Continuous Integration	Identity access management	Security testing
Convolutional Neural Network	Keras	Site Reliability Engineering
Data Architecture	Large Language Models	Smart Contracts
Data Engineering	Machine Learning	Snowflake/Snowflake Schema
Data Privacy	Marketo	Splunk
Data Strategy	Network Architecture	Threat Detection/Modelling/Mgt
Data Transformation	Prescriptive Analytics	

Below is the same list, but **in descending ranked order of cash premium first and market value increase second** (including ties).

**1. Site Reliability Engineering**

*Average Pay Premium: 22 percent* of base salary equivalent

*Market Value Increase: 10 percent* (in the six months through January 1, 2025)

**2. Convolutional Neural Network**

**Data Strategy**

**Flink**

*Average Pay Premium: 22 percent* of base salary equivalent

*Market Value Increase: 4.8 percent* (in the six months through January 1, 2025)

**5. Predictive Analytics and Modeling**

*Average Pay Premium: 21 percent* of base salary equivalent

*Market Value Increase: 23.5 percent* (in the six months through January 1, 2025)

**6. Risk analytics/assessment**

**Smart Contracts**

*Average Pay Premium: 21 percent* of base salary equivalent

*Market Value Increase: 16.7 percent* (in the six months through January 1, 2025)

## NON-CERTIFIED IT SKILLS ANALYSIS – Winners, cont'd.

8. **Event-Driven Architecture**  
*Average Pay Premium: 21 percent* of base salary equivalent  
*Market Value Increase: 10.5 percent* (in the six months through January 1, 2025)
  
9. **Data Architecture**  
*Average Pay Premium: 21 percent* of base salary equivalent  
*Market Value Increase: 5 percent* (in the six months through January 1, 2025)
  
10. **Security Testing**  
*Average Pay Premium: 20 percent* of base salary equivalent  
*Market Value Increase: 33.3 percent* (in the six months through January 1, 2025)
  
11. **Business analytics**  
*Average Pay Premium: 21 percent* of base salary equivalent  
*Market Value Increase: 17.6 percent* (in the six months through January 1, 2025)
  
12. **Artificial Intelligence for IT Operations (AIOps)**  
**Identity access management**  
**Machine Learning**  
*Average Pay Premium: 21 percent* of base salary equivalent  
*Market Value Increase: 11.1 percent* (in the six months through January 1, 2025)
  
15. **Large Language Model/LLM tuning**  
**PyTorch**  
**Snowflake/Snowflake Schema**  
*Average Pay Premium: 20 percent* of base salary equivalent  
*Market Value Increase: 5.3 percent* (in the six months through January 1, 2025)
  
18. **Google TensorFlow**  
**Marketo**  
**Splunk**  
*Average Pay Premium: 19 percent* of base salary equivalent  
*Market Value Increase: 11.8 percent* (in the six months through January 1, 2025)
  
21. **Artificial Intelligence**  
**Data Engineering**  
**Ethereum**  
**Prescriptive Analytics**  
**Scaled Agile Framework (SAFe)**  
**Threat Detection/Modelling/Management**  
*Average Pay Premium: 19 percent* of base salary equivalent  
*Market Value Increase: 5.6 percent* (in the six months through January 1, 2025)
  
27. **Azure Machine Learning**  
**Network Architecture**  
**Rust**  
*Average Pay Premium: 18 percent* of base salary equivalent  
*Market Value Increase: 20 percent* (in the six months through January 1, 2025)

NON-CERTIFIED IT SKILLS ANALYSIS – Winners, cont'd.

30. Computer Vision

Hbase

Average Pay Premium: 182 percent of base salary equivalent

Market Value Increase: 12.5 percent (in the six months through January 1, 2025)

32. Continuous Integration

Data Privacy

Data Transformation

Keras

Average Pay Premium: 18 percent of base salary equivalent

Market Value Increase: 5.9 percent (in the six months through January 1, 2025)

IT CERTIFICATIONS PAY SUMMARY – Through January 1, 2025

A. CERTIFIED IT SKILLS PAY PERFORMANCE: By Category

**TECH CERTIFICATIONS.** 103 of 638 IT certifications changed cash market value in 4Q 2024 compared to only 167 of 632 certification in the prior quarter. The average cash pay premium for all certifications reported increased by a slight 0.2% in this quarter following basically flat performance in the prior quarter.

IT Certifications - % Growth/Decline  
 3 months & 12 months

(640 certifications, data through 1/1/2025)

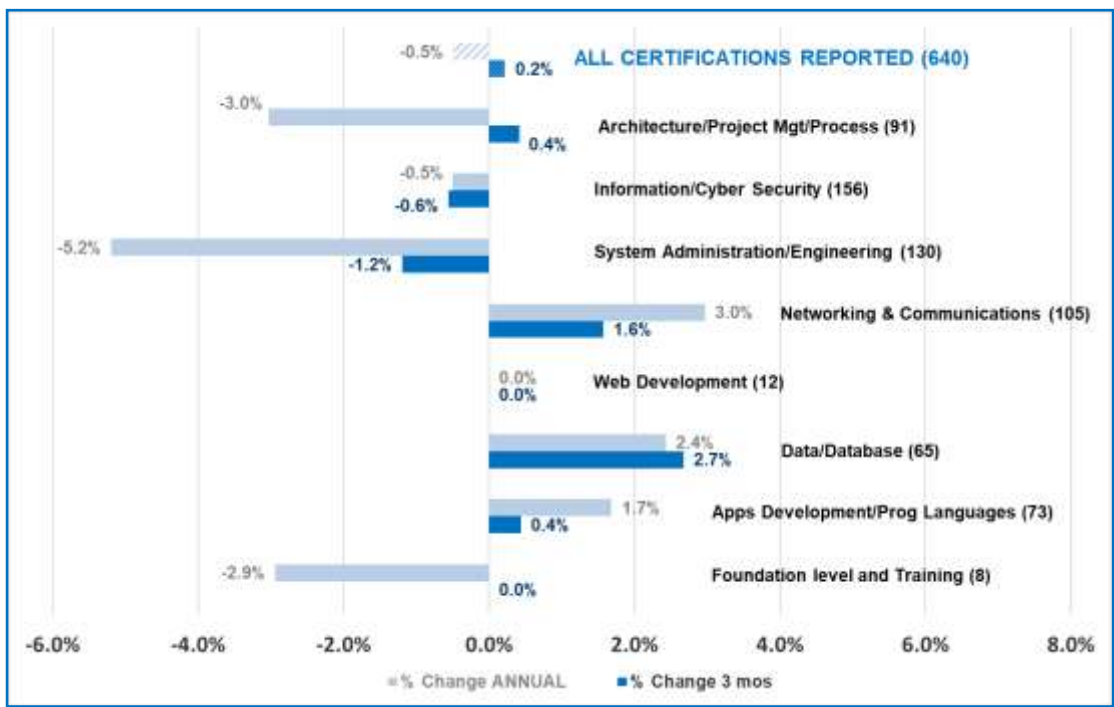


Figure 4

Source: Foote Partners [IT Skills & Certifications Pay Index™](#), 4th Quarter 2024 data

IT CERTIFICATIONS ANALYSIS – Winners

A. IT CERTIFICATIONS: Paying well above average + gaining the most in market value

As a group, the 640 IT certifications tracked in our *IT Skills and Certifications Pay Index™* have decreased in market value in two of the last four calendar quarters but in the 4<sup>th</sup> quarter 2024 declined only slightly. **Let’s examine those certifications that have helped drive up average cash pay premiums in the last six months.** The following IT certifications meet two prerequisites:

- They **earned workers cash pay premiums well above the average of all certifications** in our IT Skills and Certifications Pay Index™ in quarter ending January 1, 2025.
- They recorded substantial gains in cash market value in the six months ending January 1, 2025.

None of the following IT certifications is earning less than the equivalent of 10 percent of base salary—significant considering the average for all skills reported is 6.5 percent of base—and every certification listed below grew somewhere in the 8 percent to 25 percent range in cash market value in the six months ending January 1st. **They are listed in descending ranked order of market value gain..**

Here is the list of IT certifications the meet the above criteria (in alphabetical order):

Artificial Intelligence Engineer (AIE - all tracks)	GIAC Cloud Security Automation
AWS Certified Security - Specialty	GIAC Network Forensic Analyst
Certification of Capability in Business Analysis	GIAC Strategic Planning, Policy, and Leadership
Certified Data Privacy Solutions Engineer	Offensive Security Certified Expert
Certified Enterprise Coach (Scrum/Agile)	Offensive Security Web Expert (OSWE)
Certified in Risk and Information Systems Control (CRISC)	Oracle Certified Master – Java SE Developer
Certified Scrum Professional - ScrumMaster	Oracle Cloud Platform Application Integration Certified Professional
EC-Council Certified Cloud Security Engineer	Pegasystems Certified Data Scientist
EC-Council Certified Threat Intelligence Analyst	PMI Portfolio Management Professional (PfMP)
Fortinet Certified Expert in Cybersecurity	SAS Certified Professional: AI and Machine Learning
GIAC Reverse Engineering Malware (GREM)	

Below is the same list, but **in descending ranked order of cash premium first and market value increase second** (including ties).

\* \* \* \*

1. **GIAC Strategic Planning, Policy, and Leadership (GSTRT)**  
*Average Pay Premium: 13 percent* of base salary equivalent  
*Market Value Increase: 8.3 percent* (in the six months through January 1, 2025)
2. **Certified Data Privacy Solutions Engineer(CDPSE-ISACA)**  
*Average Pay Premium: 12 percent* of base salary equivalent  
*Market Value Increase: 9.1 percent* (in the six months through January 1, 2025)
3. **Offensive Security Certified Expert(OSCE)**  
**SAS Certified Professional: AI and Machine Learning**  
*Average Pay Premium: 11 percent* of base salary equivalent  
*Market Value Increase: 22.2 percent* (in the six months through January 1, 2025)

## IT CERTIFICATIONS ANALYSIS – Winners, cont'd.

5. **Oracle Cloud Platform Application Integration Certified Professional**  
*Average Pay Premium: 11 percent* of base salary equivalent  
*Market Value Increase: 10 percent* (in the six months through January 1, 2025)
  
6. **Artificial Intelligence Engineer (AIE - all tracks)**  
**GIAC Cloud Security Automation (GCSA)**  
**GIAC Network Forensic Analyst (GNFA)**  
**GIAC Reverse Engineering Malware (GREM)**  
**Offensive Security Web Expert (OSWE)**  
*Average Pay Premium: 10 percent* of base salary equivalent  
*Market Value Increase: 25 percent* (in the six months through January 1, 2025)
  
11. **AWS Certified Security - Specialty**  
**Certification of Capability in Business Analysis (CCBA)**  
**Certified Enterprise Coach (Scrum/Agile)**  
**Certified in Risk and Information Systems Control (CRISC)**  
**Certified Scrum Professional - ScrumMaster**  
**EC-Council Certified Cloud Security Engineer (CCSE)**  
**EC-Council Certified Threat Intelligence Analyst(CTIA)**  
**Fortinet Certified Expert in Cybersecurity (FCX)**  
**Oracle Certified Master - Java SE Developer**  
**Pegasystems Certified Data Scientist**  
**PMI Portfolio Management Professional (PfMP)**  
*Average Pay Premium: 10 percent* of base salary equivalent  
*Market Value Increase: 11.1 percent* (in the six months through January 1, 2025)

## IT CERTIFICATIONS ANALYSIS – Losers

### IT CERTIFICATIONS THAT HAVE LOST THE MOST MARKET VALUE OVER TIME

**LOSING GROUND:** Listed to the right are certifications in alphabetical order that have lost between **22% to 50%** percent of their cash pay premium market value in the 24-month period ending January 1, 2025. Some on this list are now retired or scheduled to be.

#### *Why have more certifications been losing value than gaining value?*

Certifications decline in market value for a number of obvious and not so obvious reasons. Pay premiums may diminish as a certification expires, is retired, or is replaced with other certifications as technology evolves. Also, there remains a lingering bias that taking a proctored exam does not confer expertise in a subject on the test taker, especially when the pass rate is 70 percent (or less) correct answers. The certification industry has fought back against this bias by adding laboratory requirements and even peer review panels that decide if the candidate has qualified to receive designation.

But just as often it is their popularity that drives down pay premiums for a certification: as interest in a certification escalates and more people attain the certification, the gap between supply and demand for the certification narrows, driving down its market value as the laws of scarcity would dictate. This has been frequently documented in the case of dozens of certifications over the 20+ years Foote Partners has been tracking and reporting their cash pay premiums in the *IT Skills and Certifications Pay Index*.

- Adobe/Magento 2 Certified Developer-Associate
- AWS Certified Developer - Associate
- Certified Scrum Trainer
- Cisco Certified Entry Network Technician (CCENT)
- CompTIA Linux+
- CSX CyberSecurity Practitioner (CSXP)
- EC-Council Certified Encryption Specialist v2(ECES)
- GIAC Certified Forensics Examiner (GCFE)
- Google Certified Professional Cloud Architect
- HDI Support Center Analyst
- HDI Technical Support Professional
- HP Accredited Technical Professional (ATP - all)
- IBM Certified Administrator - Cognos Analytics
- Microsoft MTA: Windows OS
- Microsoft Office Specialist
- Novell Certified Administrator (CNA)
- Offensive Security Web Assessor (OSWA)
- Offensive Wireless Security Professional (OSWP)
- Okta Certified Developer
- Okta Certified Professional
- Oracle VM 3.0 for x86 Certified Implementation Specialist
- Red Hat Certified Specialist in Messaging Administration
- SAS Certified Big Data Professional Using SAS 9
- Six Sigma Black Belt
- Teradata VantageCloud Lake Associate Certified
- VMware Certified Professional 6 - Data Center Virtualization
- VMware Certified Professional 6.5 - Data Center Virtualization
- VMware Certified Professional 6/6.5

## IT Skills & Certifications Pay Data Trend Charts & Analysis

### IT Skills and Certifications Pay Index™ – 4th Quarter 2024 data edition\*

- Noncertified IT Skills (Page 14)
- IT Certifications (Page 23)

### IT Skills and Certifications Pay Volatility Index™ – 4th Quarter 2024 data edition \*

- Summary (Page 31)
- IT certifications (page 32)
- Non-certified IT skills (page 33)

\*All data collected through January 1, 2025

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## Noncertified IT Skills Data Trend Charts & Analysis

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(Data collected through January 1, 2025)

**Apps Develop. Tools & Platforms**

Agile software development  
 AI Chatbot  
 Amazon Kinesis  
 Amazon SageMaker (ML)  
 Amazon Web Services  
 Apache Airflow  
 Apache Ant  
 Apache Camel  
 Apache Cloudstack  
 Apache Cordova  
 Apache Flex  
 Apache Hadoop  
 Apache Lucene  
 Apache Maven  
 Apache Pig  
 Apache Spark  
 Apache Struts/Struts2  
 Apache Tomcat  
 Apache Zookeeper  
 Appium  
 Automated Testing  
 AWS CDK  
 AWS CloudFormation  
 AWS CloudFront/CloudFront Functions  
 AWS CodeDeploy  
 AWS Lambda  
 Azure Stack  
 Bamboo/BambooHR  
 Behavior-Driven Development  
 Bitbucket  
 Boost C++  
 Business Objects  
 C  
 C#  
 C++  
 C++ /CLI  
 CA PPM (Clarity PPM)  
 Cerner Millennium  
 ChatGPT  
 CircleCI  
 Clojure  
 Cloudera software  
 Cloud Foundry PaaS  
 COBOL  
 Cognos  
 Confluence  
 Continuous Delivery  
 Cucumber

Delphi  
 Drupal  
 Eclipse  
 Elixir  
 Epic Systems applications  
 Erlang  
 Ethereum  
 F#  
 Flutter  
 Full Stack Development  
 Generative AI  
 Git/GitHub  
 GitLab  
 GitOps  
 Go language (Golang)  
 GoCD  
 Gosu/Guidewire  
 Gradle  
 Groovy/Grails  
 gRPC  
 Grunt  
 Hibernate/NHibernate  
 HP ALM (App. Lifecycle Mgt)  
 HP Unified Functional Testing  
 Integration Testing  
 iRise  
 Jasmine  
 Java  
 JBehave  
 Jenkins  
 JIRA  
 JUnit  
 Kotlin  
 MapReduce  
 MATLAB  
 Microsoft Azure  
 Microsoft Azure Stack  
 Microsoft Azure Logic Apps  
 Microsoft Copilot  
 Microsoft PowerApps  
 Microsoft Power Platform  
 Microsoft SQL Server Mgt Studio  
 Microsoft Team Foundation Server  
 Midjourney  
 Mokitio  
 NetWeaver  
 Next.js  
 NIM  
 NUnit

Objective Caml (Ocaml)  
 Octopus Deploy  
 OpenShift  
 Oracle APEX  
 Oracle Apps Developer Framework  
 Platform Engineering  
 PL/SQL  
 Powerbuilder  
 Progress 4GL/Development tools  
 R language  
 RapidMiner  
 Red Hat Fuse  
 Rstudio  
 Ruby  
 Ruby on Rails  
 Rust  
 Saas  
 SAS  
 SAS Enterprise Guide  
 Scala  
 Scrum  
 Selenium  
 Semaphore CI/CD  
 ServiceNow ITSM  
 Sonatype Nexus  
 SpecFlow  
 SPSS  
 SQL  
 Stable Diffusion  
 Swift  
 Tcl  
 TeamCity  
 TestNG  
 TransacT-SQL/tSQLt  
 Travis CI  
 UML (unified modeling language)  
 Visual Basic 6.0  
 Visual C++  
 Vue.js  
 VMware Cloud Foundry PaaS  
 WebSphereMQ  
 Xcode

**Web/e-Commerce Development**

Active Server Pages  
 ActiveX  
 Adobe Experience Manager  
 Ajax  
 Amazon Cloudwatch

SAP Hybris/Commerce Cloud

AngularJS  
 Apache Solr  
 Apache Velocity  
 Apache web server  
 Apache Wicket  
 Apex Code  
 Backbone.js  
 CGI  
 Cold Fusion MX  
 Content management systems  
 CSS/CSS3  
 Cypress  
 Django  
 Docker /Docker Swarm  
 Documentum  
 Elasticsearch/Elastic Stack  
 Ember.js  
 Figma  
 Front End Development  
 GatsbyJS  
 Google Analytics  
 Google App Engine  
 Google Cloud Platform  
 Gradio  
 GraphQL  
 HTML5  
 JavaBeans/EJB 3.0  
 JavaFX  
 JavaScript  
 Java Server Pages  
 JBoss/Wildfly  
 Jetty  
 Joomla!  
 jQuery  
 JSON  
 Julia  
 KnockoutJS  
 Laravel PHP  
 Magento/Adobe Commerce  
 Magnolia  
 Microsoft .NET  
 Microsoft BizTalk Server  
 Microsoft Blazor  
 Microsoft Commerce Server  
 Microsoft Identity Integration Services  
 Microsoft Forefront Threat Management Gateway (ISA)  
 Microsoft Sharepoint/Sharepoint Server  
 SuccessFactors

Microsoft Silverlight  
 Microsoft Visual Studio  
 Mobile applications development  
 Mule/MuleESB  
 Node.js  
 Oracle Fusion  
 Oracle WebLogic/  
 Oracle Workflow  
 Pandas  
 Perl  
 PHP (all)  
 PySpark  
 Python  
 React  
 Redux  
 REST  
 RESTful  
 SailPoint  
 Scalable Vector Graphics (SVG)  
 Secure coding/SW development  
 Sitecore CMS  
 SOAP/SOAP UI  
 Social Media/Networks  
 Spring Framework  
 Spring Boot  
 Spring Cloud  
 Spring Integration  
 Spring MVC  
 Spring Security  
 TIBCO  
 UDDI  
 Umbraco  
 VBScript  
 Video/graphics editing  
 Visual Interdev VoiceXML  
 Web collaboration appliances  
 Web Content Development  
 Web Design  
 WebSphere  
 WebSphere Datapower  
 Wikis  
 WSDL  
 XAML/XACML  
 XHTML MP  
 XML (all variants)

**SAP & Enterprise Business Applications**

ABAP (all modules)  
 Accelerated SAP (SLM)  
 Baan (Infor LN ERP)  
 Enterprise Application Integration  
 IBM Sterling  
 J.D. Edwards/Oracle  
 Lawson  
 Microsoft Dynamics/Dynamics 365  
 NetWeaver  
 NetWeaver Portal (SAP EP)  
 Oracle BPM  
 Oracle CRM  
 Oracle E-Business suite  
 Oracle Eloqua  
 Oracle ERP  
 Oracle Financials  
 Oracle HFM (Hyperion Fin. Mgt)  
 Oracle HRMS  
 Oracle NetSuite  
 Oracle Payables  
 Oracle Payroll  
 Oracle Retail  
 Oracle SCM  
 Oracle SOA Suite  
 Pega  
 PeopleSoft (CRM/Financials/ HCM)  
 Remedy ITSM  
 Salesforce  
 Salesforce Commerce Cloud  
 Salesforce CRM  
 Salesforce Sales Cloud  
 Salesforce Service Cloud  
 SAP AFS  
 SAP ALE  
 SAP APO  
 SAP Ariba  
 SAP Auto-ID infrastructure (SAP RF)  
 SAP Basis Components  
 SAP BI / SAP BW  
 SAP BO Data Services  
 SAP BODI  
 SAP BOXI  
 SAP BO Dashboard Design  
 SAP BPC  
 SAP BSP  
 SAP Business One  
 SAP AFS

SAP ALE  
 SAP APO  
 SAP Ariba  
 SAP Auto-ID infrastructure  
 SAP Basis Components  
 SAP BI  
 SAP BO Data Services  
 SAP BODI  
 SAP BOXI  
 SAP BO Dashboard Design  
 SAP BPC  
 SAP BSP  
 SAP Business One  
 SAP Business Workflow/Webflow  
 SAP CA  
 SAP CAF  
 SAP CAR  
 SAP CCM  
 SAP CE  
 SAP CFM  
 SAP CO  
 SAP CO-PA  
 SAP Commerce Cloud  
 SAP CRM  
 SAP Crystal Reports  
 SAP CS  
 SAP Digital Banking  
 SAP EBP  
 SAP EDI  
 SAP EHS  
 SAP EPM  
 SAP ERP  
 SAP ESA  
 SAP Exchange Infrastructure (XI)  
 SAP FI (Financial Accounting)  
 SAP FI – CA  
 SAP FI - CO  
 SAP FI – FSCM  
 SAP FI - Travel Management  
 SAP Fiori  
 SAP F&R (Forecasting/Replenish)  
 SAP FS (Insurance)  
 SAP GRC  
 SAP GTS  
 SAP HANA  
 SAP HCM (SAP HR)  
 SAP HCM ESS/MSS  
 SAP HR-PA  
 SAP HR-PY (Payroll)

SAP IBP (Integrated Business Planning)  
 SAP IS-U (Utilities)  
 SAP ITS  
 SAP MDM  
 SAP MDX  
 SAP MI  
 SAP MII  
 SAP MM  
 SAP MRO  
 SAP MRS  
 SAP Netweaver Applications Server  
 SAP Netweaver BW (BIW)  
 SAP NetWeaver Visual Composer  
 SAP NWDI  
 SAP NWDS  
 SAP Oil & Gas  
 SAP PI (NetWeaver Process Integration)  
 SAP PLM  
 SAP PM  
 SAP POSDM  
 SAP PP  
 SAP PS  
 SAP PSCD  
 SAP Public Sector Management  
 SAP QM  
 SAP for Retail  
 SAP SAM (Service & Asset Mgt)  
 SAP S/4HANA  
 SAP SCM  
 SAP SD  
 SAP SD - GTS  
 SAP Security  
 SAP SEM  
 SAP SM  
 SAP Smart Forms  
 SAP Solution Manager  
 SAP SRM  
 SAP TM  
 SAP UI5 (UI development toolkit for HTML5)  
 SAP Web Application Server  
 SAP WEBI  
 SAP WM  
 SAP WM – EWM  
 Siebel/Siebel Analytics  
 Software AG webMethods

Web Dynpro  
 Workday HCM

**Data/Database**

Alteryx Designer  
 Amazon Athena  
 Amazon DynamoDB  
 Amazon EMR  
 Amazon RedShift  
 Apache Cassandra  
 Apache CouchDB  
 Apache Hive  
 Apache Ignite  
 Apache Impala  
 Apache Spark SQL  
 Azure Cosmos DB  
 Azure Data Factory  
 Azure SQL Data Warehouse  
 Alteryx Designer  
 Amazon Athena  
 Amazon DynamoDB  
 Amazon RedShift  
 Apache Cassandra  
 Apache CouchDB  
 Apache Hive  
 Apache Spark SQL  
 Azure Cosmos DB  
 Azure Data Factory  
 Azure SQL Data Warehouse  
 Azure SQL Database  
 Azure Synapse Analytics  
 Base SAS  
 Big Data  
 Blockchain  
 Cloudera Impala  
 Couchbase Server  
 Data mining  
 Data Vault  
 Database management  
 DB2  
 dBASE/xBASE  
 ETL (Extract, transform, load)  
 GIS  
 Google BigQuery  
 Google Data Studio  
 Hbase  
 Informatica  
 Java Database Connectivity

Kibana  
 Looker  
 Master data management  
 Microsoft Access  
 Microsoft Exchange Server  
 2010/2013  
 Microsoft SQL Server  
 2019/2016/2014/2012  
 Microsoft SQL Server Integration Services  
 Microsoft SQL Server Reporting Services (SSRS)  
 MongoDB  
 MySQL  
 NewSQL  
 NoSQL  
 OpenEdge ABL  
 Oracle Application Server  
 Oracle Business Intelligence Enterprise Edition Plus  
 Oracle Coherence  
 Oracle DB 9i/10g/11i/12c  
 Oracle Enterprise Manager  
 Oracle Exadata  
 Oracle Forms  
 Oracle Reports  
 PostgreSQL  
 Power Query  
 Redis  
 Riak  
 Smart Contracts  
 Snowflake/Snowflake Schema  
 Sqoop  
 Sybase Adaptive Server  
 Teradata  
 TIBCO Spotfire  
 Visual SQL

**Systems/Networking**

Active Directory  
Amazon AWS CloudTrail  
Amazon Elastic Kubernetes Service  
Ansible  
Apache Flume  
Arista  
ATM  
AWS Fargate  
Azure Active Directory  
Azure AKS  
Azure Sentinel  
Azure Storage  
Business continuity and disaster recovery planning  
CA Endeavor  
Chef/Opencode  
Cisco ASA  
Cisco CUCM  
Cisco ICM  
Cisco IPCC  
Cisco ISE/Identity Services Engine  
Cisco Nexus  
Cisco Prime  
Cisco UCCE  
Cisco UCCX  
Citrix Hypervisor (XenServer)  
Citrix NetScaler  
Citrix Virtual Apps (XenApp)  
Cloud architecture  
Cloud security  
DHCP  
EIGRP  
Ethernet  
Fast Ethernet  
Gigabit Ethernet  
Google Kubernetes  
Grafana  
HP ConvergedSystem  
HP Quality Center  
HTTPS  
IaaS (Infrastructure as a Service)  
Infrastructure architecture  
Infrastructure as code(IaC)  
Intrusion prevention/detection sys  
IPX/SPX  
Juniper  
LAN  
Application Virtualization  
Microsoft Azure Sentinel

Microsoft Hyper-V  
Microsoft SCCM  
Microsoft SCVMM  
Microsoft Virtual Server  
Mobile device management  
Mobile security  
Multiprotocol Label Switching  
NAS/Network Attached Storage  
Network access control/Identity mgt systems  
Network security management  
NGFW(next-generation firewall)  
Novell Netware  
PaaS  
Performance Analysis/Tuning  
Performance Management/Metrics  
Performance Testing  
Prometheus  
Puppet  
Rackspace Cloud  
RedHat OpenShift  
Routing (e.g. OSPF, RIP, IGRP)  
Salt  
SAN/Storage Area Networks  
Security skills (project-based)  
Security Information and Event Management  
SMTP  
SNA  
Software-Defined Networking  
SolarWinds Orion  
Storage Virtualization/Admin  
TCP/IP  
Terraform  
Tivoli  
Vagrant  
vCenter Server  
vCloud  
Virtualization (various)  
Virtual security  
VMware ESXi Server  
VMware NSX  
VoIP/IP telephony  
VPN/OpenVPN  
WAN/3G/4G services  
Web Infrastructure  
Web services security  
Wireless Network Mgmt  
Wireless security  
Wireless sensors/RFID

Wireline Networking/ Telecomm.  
WML

**Operating Systems**

AIX  
Fedora CoreOS  
HP-UX  
Linux  
Mac OS X  
Mobile operating systems (iOS, Android)  
OpenStack  
Red Hat Enterprise Linux  
Solaris  
SUSE  
Unix (all)  
VMware vSphere  
Windows 10/11  
Windows NT  
Windows Server 2019/2016/ 2012

**Management, Methodologies and Process**

Artificial Intelligence  
Artificial Intelligence for IT Operations  
Artificial Intelligence  
Model Optimization  
AWS Codebuild  
AWS DevOps  
Azure DevOps  
Azure Key Vault  
Azure Machine Learning  
Azure Monitor  
Azure OpenAI  
Azure Service Fabric  
Big Data Analytics  
Bioinformatics  
Business Analysis  
Business Analytics  
Business Intelligence  
Business performance mgt  
Business process management/ modeling/improvement  
Caffe  
Capacity Planning/Management  
Change management  
COBIT  
Collaboration software

Complex Event Processing/Event Correlation  
Computer Vision  
Configuration Management  
Continuous Improvement  
Continuous Integration/Continuous Delivery  
Convolutional Neural Network  
CRM  
Cryptography (encryption, VPN)  
Customer Experience  
Cyber Threat Intelligence  
Cybersecurity  
Data Acquisition and Control Systems  
Data Analytics  
Data Architecture  
Data Cleansing  
Data Engineering  
Data Governance  
Data Integration  
Data Management  
Data Migration  
Data Modelling  
Data Privacy  
Data Protection  
Data Quality  
Data Science  
Data Security  
Data Strategy  
Data Transformation  
Data Visualization  
DataOps  
DataRobot Enterprise AI Platform  
Deep Learning  
Deployment Automation  
DevOps  
DevSecOps  
Digital Analytics  
Digital Forensics  
Digital Marketing  
E-Discovery  
E-Procurement  
ERP  
Event-Driven Architecture  
FinOps  
Flink  
ForgeRock/Ping Identity  
Functional Programming  
Functional Testing

Game Development/Gamification  
General Data Protection Regulation  
Google TensorFlow  
Governance, Risk Management and Compliance  
H2O.ai  
HL7  
Hyperautomation  
Identity access management  
Incident Management  
Information management  
IT Audit  
IT Governance  
ITIL V3  
IT Service Management/ITSM  
Kanban  
Keras  
Large Language Model/LLM tuning  
Machine Learning  
Marketo  
Metadata design and development  
Microservices  
Microsoft SQL Server Analysis Services  
Microsoft Visio  
MLOps  
Model Tuning  
Natural language processing  
Network Architecture  
Neural Networks  
NIST/NIST 800  
Object Detection/YOLO  
Penetration testing  
Power BI  
Predictive Analytics and Modeling  
Prescriptive Analytics  
Program Management  
Project management/governance  
Prompt Engineering  
PyTorch  
QlikSense  
Quality Assurance/QA Automation  
Quality management/TQM  
Quantitative Analysis/Regression  
Razor  
Requirements Engineering/Analysis  
Risk analytics/assessment  
Robotic Process Automation  
Scaled Agile Framework (SAFe)

**Management, Methodologies and Process – cont'd.**

Security architecture and models  
Security auditing Security management  
Security testing  
SEO  
Site Reliability Engineering  
Six Sigma/Lean Six Sigma  
Social media analysis/analytics  
Software development lifecycle management  
Splunk  
Tableau  
Test Automation  
Test Driven Development/ Scripting  
Threat Detection/Modelling/Mgt  
TIBCO BusinessWorks  
TOGAF  
Unit Testing  
Usability Research/Human Factors Research  
User Acceptance Testing  
User Experience/User Interface  
User-Centered Design  
Vulnerability Scanning/ Assessment/Management  
Waterfall  
Web Analytics  
Webtrends analytics  
Zachman Framework

**Messaging & Communications**

ActiveMQ  
Apache Camel  
Apache Kafka  
HCL Domino  
Java Messaging Service  
Message-oriented Middleware (Wave, XMPP/Jabber, etc.)  
Microsoft Exchange  
Novell Groupwise  
Oracle Comm Messaging Server  
RabbitMQ  
TIBCO Enterprise Message Service  
TIBCO Rendezvous  
Unified Communications/ Messaging

### 4-YEAR NON-CERTIFIED IT SKILLS PAY TRENDS

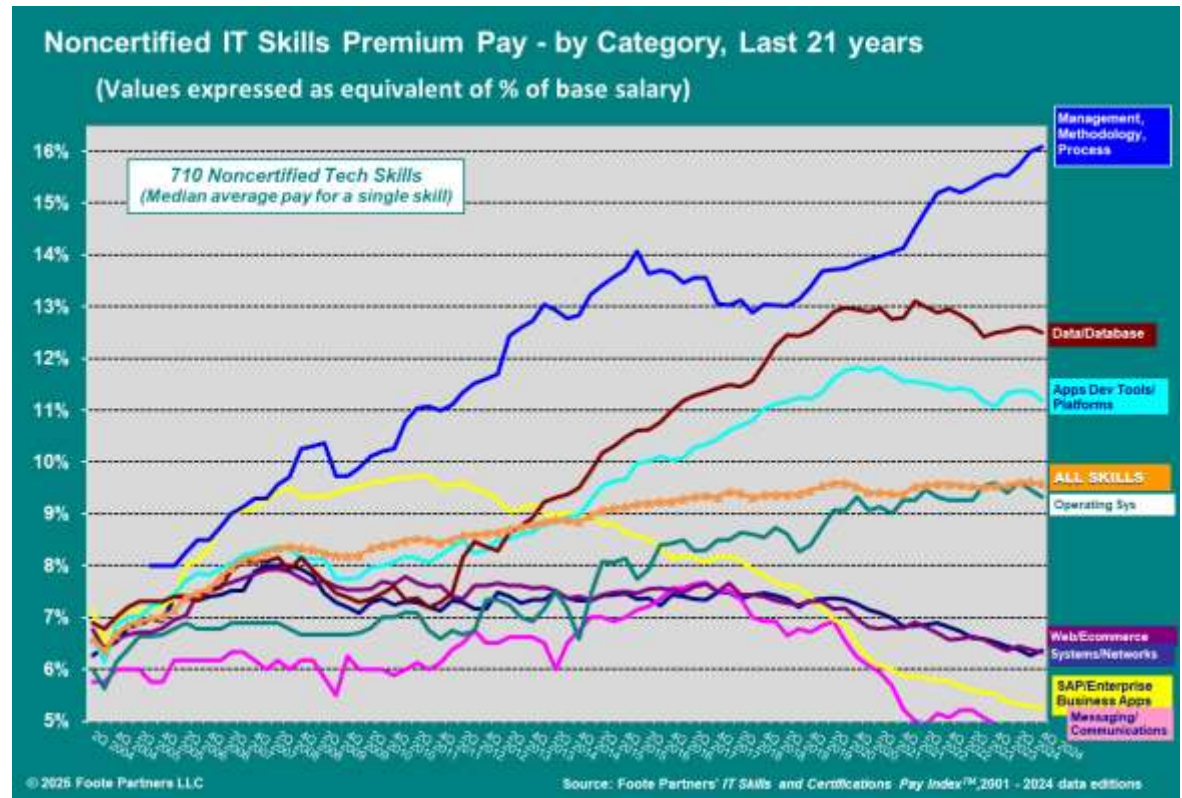
(Through 1/1/2025 – 101,182 IT Professionals)

NONCERTIFIED IT SKILLS CATEGORIES	# of skills surveyed	Change in Average Premium Pay by Category					
		% Change 3 mos	% Change 6 mos	% Change ANNUAL	% Change 2 yrs	% Change 3 yrs	% Change 4 yrs
Systems/Networking	100	1.5%	-0.3%	-2.6%	-6.8%	-7.0%	-12.4%
Messaging and Communications	13	-3.0%	-5.9%	-7.3%	-9.9%	-12.6%	-26.6%
SAP & Enterprise Business Applications	137	-0.4%	-1.5%	-4.9%	-8.8%	-10.4%	-18.9%
Apps Development Tools & Platforms	139	-1.6%	-1.7%	1.1%	-1.8%	-3.2%	-5.4%
Web/e-Commerce Development	101	-0.8%	-1.8%	-2.0%	-3.8%	-7.0%	-9.2%
Data/Database	65	-0.8%	-0.8%	-0.1%	-3.5%	-2.4%	-3.5%
Operating Systems	15	-1.4%	-2.8%	-2.8%	0.7%	0.7%	0.0%
Management/Methodology/Process	144	0.6%	2.4%	3.6%	5.2%	13.8%	16.3%
<b>ALL NONCERTIFIED SKILLS REPORTED</b>	<b>714</b>	<b>-0.33%</b>	<b>-0.21%</b>	<b>0.52%</b>	<b>0.07%</b>	<b>2.21%</b>	<b>0.71%</b>

### 17-YEAR NON-CERTIFIED IT SKILLS PAY TRENDS BY CATEGORY

% Change in Average Median Pay for a Single Non-certified IT Skill)

(Through 1/1/2025 – 101,182 IT Professionals)



## HIGHEST PAYING Non-certified IT Skills (cash pay premiums, all 714 skills surveyed, ranked)

These **non-certified IT skills** are among those earning the highest pay premiums (data collected October 1, 2024 to January 1, 2025). **Shown in alphabetical order by overall market value rank in descending order including ties.** **Green/Red** = increased/decreased in market value this quarter. **Purple** = Made the list this quarter for first time.

1. Convolutional Neural Network Data Strategy Flink Site Reliability Engineering	4.[cont.] Threat Detection/Modelling/ Management	6.[cont.] Penetration testing <b>Requirements Engineering/Analysis</b> Test Driven Development/Scripting Vulnerability Scanning/Assessment/ Management	7.[cont.] Security auditing Security testing Software development lifecycle management Test automation
2.[Tie] Amazon Athena Data Architecture Event-Drive Architecture Predictive Analytics and Modeling Risk analytics/assessment Smart Contracts	5. [Tie]Apache Hive <b>Apache Iceberg</b> Artificial Intelligence Model Optimization Azure Machine Learning COBIT Computer Vision Continuous Integration Data Privacy Data Transformation <b>Deep Learning</b> FinOps gRPC Hbase Keras Metadata design and development <b>Natural language processing</b> Network Architecture Prompt Engineering Rust Zachman Framework	7.[Tie] <b>AI Chatbot</b> Amazon RedShift Apache Zookeeper AWS Codebuild Azure DevOps Azure Key Vault Azure Service Fabric <b>Big Data</b> Business process mapping/modeling/ improvement Caffe Cyber Threat Intelligence Data Analytics Data Management Data Protection <b>Data Visualization</b> Digital Forensics ForgeRock/Ping Identity Go language (Golang) Governance, Risk management and Compliance Gradle HL7 Hyperautomation IT Governance Kanban Master data management <b>NIST/NIST 800</b> Program Management QA Automation/Quality Assurance Quantitative Analysis/Regression Analysis <b>Security management</b> Software development lifecycle management	8.[Tie] Amazon Kinesis Amazon Web Services Apache Impala Apache Spark Azure Monitor Azure OpenAI Big Data analytics Business intelligence Clojure Cloudera software Configuration Management Continuous Improvement Customer Experience Cybersecurity Data Acquisition and Control Systems Data Cleansing Data Migration General Data Protection Regulation(GDPR) (EU) Generative AI GitOps Google BigQuery Gosu/Guidewire Informatica IT Audit Microsoft SQL Server Analysis Services Security auditing Stable Diffusion Tableau Test automation Unit Testing User Acceptance Testing User-Centered Design
3.[Tie] Apache Airflow Artificial Intelligence for IT Operations Business analytics Identity access management Large Language Model/LLM tuning Machine Learning MLOps PyTorch Security architecture and models Security testing Snowflake/Snowflake Schema	6.[Tie] Amazon EMR <b>Bioinformatics</b> Blockchain Data Integration <b>Data Modelling</b> <b>Data Quality</b> <b>Data Science</b> <b>Data Security</b> Deployment Automation DevOps H2O.ai Microservices <b>Neural Networks</b> Object Detection/YOLO		
4.[Tie] Apache Ignite Artificial Intelligence AWS DevOps Cryptography (encryption, VPN, SSL/TLS, Hybrids) Data Engineering Data Governance DataOps <b>DevSecOps</b> Ethereum Google TensorFlow Marketo Prescriptive Analytics Scaled Agile Framework (SAFe) Splunk			

SOURCE: Foote Partners [IT Skills & Certifications Pay Index™](#), 4Q 2024 data edition

**NON-CERTIFIED TECH SKILLS TREND HIGHLIGHTS: Market Value Gainers & Highest Pay – 4th Quarter 2024 data**

These non-certified tech skills *gained 10% or more in market value in the three months ending January 1, 2025* vs. prior quarter (seen below grouped by segment).  
*Listed in alphabetical order within each group.* Highest paying skills listed on right *in alphabetical order.*

IT SKILLS (non-certified)			Highest Paying(A-Z)	
<p><b><u>Applications Development skills</u></b>            Amazon Kinesis            Apache Cloudstack            Apache Hadoop            Appium            AWS CodeDeploy            Delphi            Drupal            Flutter            IBM MQ (WebSphere MQ)            Microsoft PowerApps            NetWeaver            Oracle APEX            SAS            Swift            TestNG</p> <p><b><u>Management, Process &amp; Methodology skills</u></b>            Azure Machine Learning            Business process apping/modeling/improvement            Customer Experience            Data Protection            Digital Forensics            General Data Protection Regulation(GDPR) (EU)            Hyperautomation            Identity access management            QlikSense            Security testing</p>	<p><b><u>SAP &amp; Enterprise Business Applications skills</u></b>            Oracle HFM (Hyperion Financial Management)            SAP ALE (Application Link Enabling)            SAP BOXI (Business Objects XI)            SAP MII (Manufacturing Integration and Intelligence)            SAP MM (Materials Management)            SAP Oil &amp; Gas            SAP PM (Plant Maintenance)            SAP PS (Project Systems)            SAP S/4HANA            SAP Smart Forms            SAP UI development toolkit for HTML5 (SAP UI5)            SAP WEBI (BusinessObjects Web Intelligence)            SAP WM (Warehouse Management)</p> <p><b><u>Operating Systems skills</u></b>            Mobile operating systems (iOS, Android, etc.)            VMware vSphere            Windows 10/11</p> <p><b><u>Database Skills</u></b>            GIS            Google Data Studio            Oracle Forms            Power Query            Smart Contracts</p>	<p><b><u>Systems/Networking skills</u></b>            Azure Sentinel            CA Endevor            Cisco CUCM            Cisco ISE (Identity Services Engine)            Cisco Nexus            Cisco Prime            Cisco UCCE            Cisco UCCX            Citrix Hypervisor (XenServer)            Network security management            Performance Testing            Rackspace Cloud            Software-Defined Networking            VMware NSX</p> <p><b><u>Web/SOA/E-Commerce skills</u></b>            Documentum            GatsbyJS            Jetty            Microsoft Sharepoint/Sharepoint Server            PySpark            SailPoint            Scalable Vector Graphics (SVG)            WebSphere</p>	<ul style="list-style-type: none"> <li>- Amazon Athena</li> <li>- Apache Airflow</li> <li>- Apache Ignite</li> <li>- Artificial Intelligence</li> <li>- Artificial Intelligence for IT Operations (AIOps)</li> <li>- AWS DevOps</li> <li>- Business analytics</li> <li>- Convolutional Neural Network</li> <li>- Cryptography (encryption, VPN, SSL/TLS, Hybrids)</li> <li>- Data Architecture</li> <li>- Data Engineering</li> <li>- Data Governance</li> <li>- Data Strategy</li> <li>- DataOps</li> <li>- DevSecOps</li> <li>- Ethereum</li> <li>- Event-Drive Architecture</li> <li>- Flink</li> <li>- Google TensorFlow</li> <li>- Identity access management</li> <li>- Large Language Model/LLM tuning</li> <li>- Machine Learning</li> <li>- Marketo</li> <li>- MLOps</li> <li>- Predictive Analytics and Modeling</li> <li>- Prescriptive Analytics</li> <li>- PyTorch</li> <li>- Risk analytics/assessment</li> </ul> <ul style="list-style-type: none"> <li>- Detection/Modelling/Management</li> <li>- Scaled Agile Framework (SAFe)</li> <li>- Security architecture and models</li> <li>- Security testing</li> <li>- Site Reliability Engineering</li> <li>- Smart Contracts</li> <li>- Snowflake/Snowflake Schema</li> <li>- Splunk</li> <li>- Threat Detection/Modelling/Management</li> </ul>	
<p>SOURCE: Foote Partners <a href="#">IT Skills &amp; Certifications Pay Index™</a>, 4Q 2024data edition</p>				

**NON-CERTIFIED IT SKILLS TREND HIGHLIGHTS: Market Value Losers – 4th Quarter 2024 data**

These non-certified IT skills **declined 10% or more in market value in the three months ending January 1, 2025** vs. prior quarter (seen below grouped by segment).  
Listed in alphabetical order within each group.

**IT SKILLS (Non-certified)**

**Applications Development skills**

Apache Camel  
Apache Lucene  
AWS CloudFront/CloudFront Functions  
Bamboo/BambooHR  
Bitbucket  
CA PPM(Clarity PPM)  
Cerner Millennium  
Cloud Foundry PaaS  
Eclipse  
Erlang  
GitOps  
Grails/Groovy  
Grunt  
MapReduce  
Mokito  
Red Hat Fuse  
Sonatype Nexus  
Tcl  
UML (unified modeling language)  
Visual Basic 6.0

**Data/Database**

Apache Cassandra  
Data Vault  
DB2  
Microsoft SQL Server Reporting  
Services (SSRS)  
Sqoop  
TIBCO Spotfire

**SAP & Enterprise Business App skills**

Lawson  
Oracle ERP  
Oracle NetSuite  
Oracle Payables  
Oracle Payroll/Receivables  
Oracle Retail  
Pega  
Remedy ITSM  
SAP Basis Components  
SAP BPC (BusinessObjects Planning and Consolidation)  
SAP Crystal Reports  
SAP Fiori  
SAP HR-PY (Payroll)  
SAP MDG (Master Data Governance)  
SAP NetWeaver BW (Business Information Warehouse)  
SAP PP (Production Planning)  
SAP SCM (Supply Chain Management)  
SAP SD (Sales & Distribution)

**Messaging & Communications Skills**

TIBCO Enterprise Message Service  
TIBCO Rendezvous

**Systems/Networking skills**

Amazon AWS CloudTrail  
Apache Flume  
AWS Fargate  
HP Quality Center  
Microsoft Hyper-V  
Microsoft SCVMM  
Prometheus  
Virtual security

**Management, Process & Methodology skills**

Bioinformatics  
Deep Learning  
Digital Analytics  
Functional Programming  
Game Development/Gamification  
Natural language processing  
Neural Networks  
NIST/NIST 800  
Usability Research/Human Factors Research

**Operating Systems skills**

Mac OS X  
Solaris

**Web/E-commerce Development skills**

Active Server Pages  
Amazon Cloudwatch  
Elasticsearch/Elastic Stack  
Ember.js  
Google Analytics  
Java Server Pages  
JBoss /WildFly  
JSON  
Magnolia  
Microsoft Identity Integration Server (MIIS)  
Oracle Fusion  
Redux  
REST/REST Assured  
Sitecore CMS  
Umbraco  
XAML/XACML

SOURCE: Foote Partners [IT Skills & Certifications Pay Index™](#), 4Q 2024data edition

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## IT Certification Data Trend Charts & Analysis

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(Data collected through January 1, 2025)

AccessData Certified Examiner  
 Adobe/Magento 2 Certified Developer-Associate  
 Adobe/Magento 2 Certified Developer-Professional  
 Arcitura Certified Cloud Security Specialist  
 Artificial Intelligence Engineer (AIE)  
 Avaya Certified Design Specialist  
 Avaya Certified Implementation Specialist  
 Avaya Certified Integration Specialist  
 Avaya Certified Solution Specialist  
 Avaya Professional Design Specialist  
 AWS Certified Advanced Network – Specialty  
 AWS Certified Cloud Practitioner  
 AWS Certified Data Analytics – Specialty  
 AWS Certified Developer - Associate  
 AWS Certified DevOps Engineer - Professional  
 AWS Certified Security - Specialty  
 AWS Certified Solutions Architect - Associate (Cloud)  
 AWS Certified Solutions Architect - Professional (Cloud)  
 AWS Certified SysOpsAdministrator-Associate (Cloud)  
 AXELOS ITIL 4 certifications  
 BICSI ITS Technician  
 BICSI Technician and Registered Communications  
 Distribution Designer  
 Brocade Certified Network Engineer  
 Brocade Certified Network Professional  
 Brocade Certified Fabric Designer  
 Brocade Certified Fabric Professional (BCFP)  
 BTA Certified Blockchain Security Professional (CBSP)  
 Certificate in Information Security Management Principles  
 (CISMP)  
 Certificate of Cloud Security Knowledge (CCSK)  
 Certificate of Cloud Auditing Knowledge (CCAK)  
 Certification Authorization Professional (CAP)  
 Certification of Capability in Business Analysis (CCBA)  
 Certified Analytics Professional (CAP)  
 Certified Artificial Intelligence Scientist (CAIS)  
 Certified Business Analysis Professional (CBAP)  
 Certified Business Continuity Manager/ISO 22301(CBCM)  
 Certified Business Continuity Professional (CBCP)  
 Certified Business Process Associate (CBPA)  
 Certified Business Process Leader (CBPL)  
 Certified Business Process Professional (CBPP)  
 Certified Cisco Systems Instructor (CCSI)  
 Certified Cloud Architect  
 Certified Cloud Security Professional (CCSP)  
 Certified Cloud Technology Professional  
 Certified Compliance Professional  
 Certified Computer Examiner (CCE)  
 Certified Computing Professional (CCP-ISC2)  
 Certified Data Centre Management Professional (CDCMP)

Certified Data Privacy Solutions Engineer/ISACA(CDPSE)  
 Certified Data Professional (CDP)  
 Certified Disaster Recovery Engineer (C/DRE)  
 Certified Enterprise Coach (Scrum/Agile)  
 Certified Forensic Computer Examiner (CFCE)  
 Certified Fraud Examiner  
 Certified Healthcare Information Security and Privacy  
 Practitioner (HCISPP)  
 Certified in Convergent Network Technologies (CCNT)  
 Certified in Emerging Technology(CET-ISACA)  
 Certified in Governance, Risk and Compliance(CGRC)  
 Certified in Risk and Information Systems Control (CRISC)  
 Certified in the Governance of Enterprise IT (CGEIT)  
 Certified Information Privacy Manager- all countries  
 Certified Information Privacy Professional - all countries  
 Certified Information Privacy Technologist- all countries  
 Certified Information Security Manager (CISM)  
 Certified Information Systems Auditor (CISA)  
 Certified Information Systems Risk Manager/Mile2  
 Certified Information Systems Security Professional (CISSP)  
 Certified IP Telecom Network Specialist (CIPTS)  
 Certified Tester Foundation Level (CTFL) v4.0  
 Certified Tester Foundation Level Agile Tester (CTFL-AT)  
 Certified Tester Advanced Level Test Analyst (CTAL-TA)  
 Certified IT Architect (IASA CITA)  
 Certified Kubernetes Administrator (CKA)  
 Certified Kubernetes Security Specialist (CKS)  
 Certified Manager of Software Quality (CMSQ)  
 Certified Penetration Testing Engineer (CPTE)  
 Certified Protection Professional  
 Certified Scrum Developer  
 Certified Scrum Product Owner  
 Certified Scrum Product Owner - Advanced  
 Certified Scrum Professional - ScrumMaster  
 Certified Scrum Team Coach  
 Certified Scrum Trainer  
 Certified ScrumMaster  
 Certified ScrumMaster – Advanced  
 Certified Secure Software Lifecycle Professional (CSSLP)  
 Certified Software Quality Analyst (CSQA)  
 Certified Telecommunications Network Specialist (CTNS)  
 Certified Tester Foundation Level (CTFL) v4.0  
 Certified Tester Foundation Level Agile Tester (CTFL-AT)  
 Certified Tester Advanced Level Test Analyst (CTAL-TA)  
 Check Point Certified Security Administrator (CCSA)  
 Check Point Certified Security Expert (CCSE)  
 Check Point Certified Security Master (CCSM)  
 Cisco Certified CyberOps Associate  
 Cisco Certified CyberOps Professional  
 Cisco Certified Design Expert (CCDE)

Cisco Certified DevNet Associate  
 Cisco Certified DevNet Professional  
 Cisco Certified DevNet Expert  
 Cisco Certified Entry Network Technician (CCENT)  
 Cisco Certified Internetwork Expert (CCIE, all variations)  
 Cisco Certified Network Associate - Data Center  
 Cisco Certified Network Associate (CCNA Routing and  
 Switching)  
 Cisco Certified Network Associate (Network Security)  
 Cisco Certified Network Associate (Networking automation  
 and programmability)  
 Cisco Certified Network Associate (was CCNA Cloud)  
 Cisco Certified Network Associate (was CCNA  
 Collaboration)  
 Cisco Certified Network Associate (was CCNA Wireless)  
 Cisco Certified Network Associate (was Design Associate)  
 Cisco Certified Network Professional - Collaboration  
 Cisco Certified Network Professional - Data Center  
 Cisco Certified Network Professional - Service Provider  
 Cisco Certified Network Professional - Enterprise/Design  
 Cisco Certified Network Professional - Enterprise/Routing  
 and Services  
 Cisco Certified Network Professional - Enterprise/Wireless  
 Networks  
 Cisco Certified Network Professional (CCNP-all)  
 Cisco Certified Network Professional - Security  
 Cisco Certified Systems Instructor (CCSI)  
 Cisco Data Center Unified Computing Design Specialist  
 Cisco Data Center Unified Fabric Support Specialist  
 Citrix Certified Associate - Networking  
 Citrix Certified Associate - Virtualization  
 Citrix Certified Expert – Networking  
 Citrix Certified Expert - Virtualization  
 Citrix Certified Instructor (CCI - Virtualization, Networking,  
 or Mobility)  
 Citrix Certified Professional - Networking  
 Citrix Certified Professional - Virtualization (CCP-V)  
 Citrix XenServer Certified (CC-XenServer)  
 CIW Advanced HTML5 and CSS3 Specialist  
 CIW Certified Database Design Specialist  
 CIW Web Design Professional  
 CIW Web Development Professional  
 CIW Web Foundations Associate  
 CIW Web Security Professional  
 Cloud U (Rackspace)  
 Cloudera Certified Associate Administrator  
 Cloudera Certified Associate Data Analyst  
 Cloudera Certified Associate Spark and Hadoop  
 Developer  
 Cloudera Certified Professional: Data Engineer

CompTIA A+  
 CompTIA Advanced Security Practitioner  
 CompTIA Certified Technical Trainer  
 CompTIA Cloud Essentials  
 CompTIA Cloud+  
 CompTIA Cybersecurity Analyst+  
 CompTIA Linux+  
 CompTIA Mobile App Security+  
 CompTIA Mobility+  
 CompTIA Network+  
 CompTIA Penetration Tester  
 CompTIA Project+  
 CompTIA Security+  
 CompTIA Server+  
 CompTIA Storage+  
 Convergence Technologies Professional (CTP)  
 CSX CyberSecurity Practitioner (CSXP)  
 CWNP Certified Wireless Security Professional (CWSP)  
 CWNP/Certified Wireless Analysis Professional (CWAP)  
 CWNP/Certified Wireless Design Professional (CWDP)  
 CWNP/Certified Wireless Network Administrator(CWNA)  
 CWNP/Certified Wireless Network Trainer (CWNT)  
 CWNP/Certified Wireless Network Expert (CWNE)  
 CWNP/Certified Wireless Technology Specialist (CWTS)  
 Cyber Security Forensic Analyst  
 Dell Cloud Infrastructure Design Proven Professional  
 Dell Cloud Services Architect - Expert (DCE - CA)  
 Dell Cloud Services Design Proven Professional  
 Dell Data Science Associate (DCA-DS)  
 Dell Data Science Specialist - Advanced Analytics  
 Dell Information Storage and Management Foundations  
 Dell Platform Engineer/PowerScale - Specialist  
 Dell PowerEdge Association(EMC)  
 Dell PowerEdge Professional(EMC)  
 Dell PowerMax (all - Maintenance/Install/Operate)  
 Dell PowerStore (all - Deploy/Operate)  
 EC-Council Certified Application Security Engineer  
 (CASE)  
 EC-Council Certified Cloud Security Engineer (CCSE)  
 EC-Council Certified DevSecOps Engineer (ECDE)  
 EC-Council Certified Encryption Specialist v2(ECES)  
 EC-Council Certified Ethical Hacker (CEH)  
 EC-Council Certified Incident Handler V2 (ECIH)  
 EC-Council Certified Network Defender  
 EC-Council Certified Penetration Testing Professional  
 EC-Council Certified SOC Analyst (ECSA)  
 EC-Council Computer Hacking Forensic Investigator  
 EC-Council Disaster Recovery Professional (EDRP)  
 EC-Council Web Application Hacking and Security  
 Testing

Fortinet Network Security Expert (NSE) Level 1  
 Fortinet Network Security Expert (NSE) Level 2  
 Fortinet Network Security Expert (NSE) Level 3  
 Fundamentals of Google AI for Web-Based Machine Learning  
 GIAC Assessing and Auditing Wireless Networks  
 GIAC Certified Defending Advanced Threats (GDAT)  
 GIAC Certified Detection Analyst (GCDA)  
 GIAC Certified Enterprise Defender (GCEd)  
 GIAC Certified Forensics Analyst (GCFA)  
 GIAC Certified Forensics Examiner  
 GIAC Certified Incident Handler (GCIH)  
 GIAC Certified Intrusion Analyst (GCIA)  
 GIAC Certified Project Manager (GCPM)  
 GIAC Certified Web Application Defender  
 GIAC Certified Windows Security Administrator (GCWN)  
 GIAC Cloud Forensic Responder (GCFR)  
 GIAC Cloud Penetration Tester (GCPN)  
 GIAC Cloud Security Automation (GCSA)  
 GIAC Cloud Security Essentials (GCLD)  
 GIAC Continuous Monitoring Certification (GMON)  
 GIAC Critical Controls Certifications (GCCC)  
 GIAC Cyber Threat Intelligence (GCTI)  
 GIAC Defending Advanced Threats (GDAT)  
 GIAC Defensible Security Architecture (GDSA)  
 GIAC Enterprise Vulnerability Assessor (GEVA)  
 GIAC Exploit Researcher and Advanced Penetration Tester (GWAPT)  
 GIAC Information Security Fundamentals (GISF)  
 GIAC Information Security Professional (GISP)  
 GIAC Mobile Device Security Analyst (GMOB)  
 GIAC Network Forensic Analyst (GNFA)  
 GIAC Penetration Tester (GPEN)  
 GIAC Public Cloud Security (GPCS)  
 GIAC Python Coder (GPYC)  
 GIAC Reverse Engineering Malware (GREM)  
 GIAC Security Essentials (GSEC)  
 GIAC Security Leadership (GSLC)  
 GIAC Security Operations Certified (GSOC)  
 GIAC Security Operations Manager (GSOM)  
 GIAC Systems and Network Auditor (GSNA)  
 GIAC Web Application Penetration Tester (GWAPT)  
 Global Industrial Cyber Security Professional (GICSP)  
 Google Cloud - Professional Cloud Architect  
 Google Cloud - Professional Data Engineer  
 Google Cloud - Professional Network Engineer  
 Google Cloud Associate - Cloud Engineer  
 Google Cloud DevOps Engineer  
 Google Professional Cloud Developer  
 Google Professional Machine Learning Engineer

Google Cloud - Professional Cloud Security Engineer  
 HDI Customer Service Representative  
 HDI Desktop Support Manager  
 HDI Desktop Support Technician  
 HDI Support Center Analyst  
 HDI Support Center Director  
 HDI Support Center Manager  
 HDI Support Center Team Lead  
 HDI Technical Support Professional  
 Help Desk Analyst: Tier 1 Support Specialist/Ed2Go  
 Help Desk Team Lead/RCCSP  
 Hitachi Qualified Professional - Storage Administration  
 HP Accredited Solutions Expert (ASE - all)  
 HP Accredited Technical Professional (ATP - all)  
 HP ASE - Storage Solutions V4  
 HP ATP - Hybrid IT Solutions V2  
 HP ATP - Storage Solutions V1 /V2  
 HP Master Accredited Solutions Expert (MASE - all)  
 HP Master ASE – Hybrid IT Solutions Architect V1  
 HP Master ASE - Storage Solutions Architect V3  
 Huawei Certified Network Associate (all)  
 Huawei Certified Network Expert (all)  
 Huawei Certified Network Professional (all)  
 IAPP Certified Information Privacy Manager  
 IAPP Certified Information Privacy Professional  
 IBM Advanced Systems Administrator (all)  
 IBM AI Engineering Professional Certificate  
 IBM Certified Administrator - Cognos Analytics  
 IBM Certified Application Developer - Cloud Solutions v3  
 IBM Certified Application Developer - DB2 9.7 for Linux, Unix and Windows  
 IBM Certified Application Developer (all)  
 IBM Certified Data Architect - Big Data  
 IBM Certified Data Engineer - Big Data  
 IBM Certified Database Administrator - DB2 11.1 for Linux, UNIX and Windows  
 IBM Certified Developer - Cognos Analytics  
 IBM Certified Professional Developer - Cloud v4  
 IBM Certified Professional SRE - Cloud v1  
 IBM Cloud Security Engineer Specialty  
 IBM Certified Solution Advisor - Blockchain Platform V2  
 IBM Certified Solution Advisor - DevOps V2  
 IBM Certified Solution Architect – Cloud v4  
 IBM Certified Solution Architect - Data Warehouse V1  
 IBM Certified Solution Designer (all)  
 IBM Certified Specialist - AI Enterprise Workflow V1  
 IBM Certified Systems Administrator: WebSphere Application Server Network Deployment  
 IBM Certified Systems Administrator (all)  
 IBM Cloud Security Engineer Specialty

Information Systems Security Architecture Professional (ISSAP/CISSP)  
 Information Systems Security Engineering Professional (ISSEP/CISSP)  
 InfoSys Security Management Professional (ISSMP/CISSP)  
 ITIL Expert Certification  
 ITIL Foundation Certification  
 ITIL Intermediate Certification  
 ITIL Master Certification  
 JBoss Certified Developer (Seam, Persistence, ESB)  
 Juniper Networks Certified Internet Associate  
 Juniper Networks Certified Internet Expert  
 Juniper Networks Certified Internet Professional  
 Juniper Networks Certified Internet Specialist  
 Linux Foundation Certified Engineer  
 Linux Foundation Certified System Administrator  
 Linux Professional Institute certification (LPIC- 2)  
 Linux Professional Institute certification (LPIC- 3)  
 MCSE: Core Infrastructure  
 Microsoft Certified Azure Administrator  
 Microsoft Certified Azure Administrator Associate  
 Microsoft Certified Azure AI Engineer Associate  
 Microsoft Certified Azure Data Engineer Associate  
 Microsoft Certified Azure Data Scientist Associate  
 Microsoft Certified Azure Developer Associate  
 Microsoft Certified Azure Fundamentals  
 Microsoft Certified Azure Security Engineer Associate  
 Microsoft Certified Azure Solutions Architect  
 Microsoft Certified Azure Solutions Architect Expert  
 Microsoft Certified DevOps Engineer Expert  
 Microsoft Certified Professional  
 Microsoft Certified Solutions Associate(all)  
 Microsoft Certified Power BI Data Analyst Associate  
 Microsoft Certified Solutions Associate: SQL 2016 DBA  
 Microsoft Certified Solutions Associate: Windows Server 2012/2016  
 Microsoft Certified Solutions Developer (MCSD)  
 Microsoft Certified Dynamics 365 Associate(all business applications)  
 Microsoft Certified Solutions Expert: Data Platform  
 Microsoft Certified Solutions Expert: Desktop Infrastructure  
 Microsoft Certified Trainer (MCT)  
 Microsoft MTA: Windows OS  
 Microsoft Office Specialist  
 Mile2 Certified Cloud Security Officer(C)CSO)  
 Mongo DB Associate Data Modeler  
 Mongo DB Certified DBA  
 Mongo DB Certified Developer  
 MongoDB Certified Developer Associate

NetApp Certified Data Administrator, ONTAP (NCDA)  
 NetApp Certified Hybrid Cloud Architect  
 NetApp Certified Implementation Engineer (NCIE)  
 NetApp Certified Storage Associate – Hybrid Cloud  
 NetScout/nGenius Certified Analyst (nCA)  
 NetScout/nGenius Certified Associate (nCA)  
 NetScout/nGenius Certified Expert (nCE)  
 NetScout/nGenius Certified Specialist (nCS)  
 Novell Certified Administrator (CNA)  
 Novell Certified Novell Engineer (CNE)  
 Novell Certified Instructor  
 Novell Certified Linux Engineer (Novell CLE)  
 Novell Certified Linux Professional (Novell CLP)  
 Novell Identity Manager Administrator  
 Offensive Security Defense Analyst (OSDA)  
 Offensive Security Defense Security Expert  
 Offensive Security Certified Expert  
 Offensive Security Experienced Penetration Tester  
 Offensive Security Exploit Developer (OSED)  
 Offensive Security Exploitation Expert (OSEE)  
 Offensive Security Professional (OSCP)  
 Offensive Security Web Assessor (OSWA)  
 Offensive Security Web Expert (OSWE)  
 Offensive Security Wireless Professional (OSWP)  
 Okta Certified Administrator  
 Okta Certified Consultant  
 Okta Certified Developer  
 Okta Certified Professional  
 Open Group Certified Architect (Open CA)  
 Open Group Certified IT Specialist (Open CITS)  
 Oracle Business Intelligence Foundation Suite 11G Certified Implementation Specialist  
 Oracle Certified Associate - DBA (OCA)  
 Oracle Certified Associate - Java SE 8 Programmer  
 Oracle Certified Associate - MySQL Heatwave  
 Oracle Certified Associate - WebLogic Server 12c Admin  
 Oracle Certified Expert - Java SE Developer  
 Oracle Certified Expert - MySQL 5.1 Cluster Database Administrator  
 Oracle Certified Expert - Siebel CRM Business Analyst  
 Oracle Certified Expert - Solaris 10 Network Administrator for Solaris  
 Oracle Certified Master - DBA (OCM)  
 Oracle Certified Master - Java EE Enterprise Architect  
 Oracle Certified Master - Java SE Developer  
 Oracle Certified Professional - Advanced PL/SQL Developer  
 Oracle Certified Professional - Application Server Administrator

Oracle Certified Professional - Database Cloud Administrator  
 Oracle Certified Professional 2019 - DBA(OCP)  
 Oracle Certified Professional - Fusion Middleware 11g/12c Forms Developer  
 Oracle Certified Professional - Java EE Web Component Developer  
 Oracle Certified Professional - Java EE Web Services Developer  
 Oracle Certified Professional - Java SE Programmer  
 Oracle Certified Professional - MySQL 8.0 Database Administrator  
 Oracle Certified Professional - MySQL 5.x Developer  
 Oracle Certified Professional - Solaris 10 Systems Administrator  
 Oracle Certified WebLogic Server 12c Administrator  
 Oracle Cloud Infrastructure 2022/2023 Certified Architect Professional  
 Oracle Database PL/SQL Developer Certified Professional  
 Oracle E-Business Suite 12 Certified Implementation Specialist  
 Oracle Linux Certified Administrator (OCA)  
 Oracle MySQL 8.x Database Developer Certified Professional  
 Oracle PL/SQL Developer Associate  
 Oracle SOA Suite 12c Implementation Specialist  
 Oracle VM 3.0 for x86 Certified Implementation Specialist  
 Pegasystems Certified Data Scientist  
 Pegasystems Certified Decisioning Consultant  
 Pegasystems Certified Lead System Architect  
 Pegasystems Certified Senior Systems Architect  
 Pegasystems Certified System Architect  
 Pegasystems Certified Pega Business Architect  
 Pegasystems Certified Robotics System Architect  
 PHP Certification  
 Pivotal Application Architect  
 Pivotal Cloud Foundry Operator certification  
 Pivotal Developer  
 PMI Agile Certified Practitioner (PMI-ACP)  
 PMI Certified Associate in Project Management (CAPM)  
 PMI Portfolio Management Professional (PfMP)  
 PMI Professional in Business Analysis (PMI-PBA)  
 PMI Program Management Professional (PgMP)  
 PMI Project Management Professional (PMP)  
 PMI Risk Management Professional (PMI-RMP)  
 Prince2 Foundation  
 Prince2 Practitioner  
 Professional Certified Investigator  
 Professional in Project Management (GAQM)  
 Qlik Sense Business Analyst  
 Qlik Sense Data Architect

Qualified Information Security Professional Q/ISP  
 Rackspace Certified Technician  
 Red Hat Certified Architect (RHCA)  
 Red Hat Certified Architect: Cloud  
 Red Hat Certified Architect: Enterprise Applications  
 Red Hat Certified Architect: Infrastructure  
 Red Hat Certified Engineer (RHCE)  
 Red Hat Certified Enterprise Application Developer  
 Red Hat Certified Specialist in Business Process Design  
 Red Hat Certified Specialist in Cloud Infrastructure  
 Red Hat Certified Specialist in Linux Performance Tuning  
 Red Hat Certified Specialist in Messaging Administration  
 Red Hat Certified Systems Administrator (RHCSA)  
 RSA Certified Administrator (RSA/CA)  
 RSA Certified Instructor (RSA/CI)  
 SAFe Certification  
 Salesforce B2C Commerce Developer  
 Salesforce Certified Administrator  
 Salesforce Certified Advanced Administrator  
 Salesforce Certified Application Architect  
 Salesforce Certified Data Architect  
 Salesforce Certified Hyperautomation Specialist  
 Salesforce Certified Integration Architecture Designer  
 Salesforce Certified Platform Developer  
 Salesforce Certified Systems Architect  
 Salesforce Certified Technical Architect  
 Salesforce Certified User Experience Designer  
 Salesforce Identity and Access Management Architect  
 Salesforce Platform App Builder  
 SAS Certified Big Data Professional Using SAS 9  
 SAS Certified Data Integration Developer for SAS 9  
 SAS Certified Data Scientist Using SAS 9  
 SAS Certified Predictive Modeler - SAS Enterprise Miner  
 SAS Certified Professional: Advanced Programming/SAS 9.4  
 SAS Certified Specialist Base Programming/SAS 9.4  
 SAS Certified Statistical Business Analyst - SAS 9  
 SAS Certified Advanced Analytics Professional Using SAS 9  
 SAS Certified Data Quality Steward for SAS®  
 SAS Certified Professional: AI and Machine Learning  
 SAS Certified Professional: Data Curation for SAS Data Scientists  
 SAS Certified Specialist: Visual Business Analytics  
 ServiceNow Certified Application Developer (CAD)  
 ServiceNow Certified Implementation Specialist (CIS)  
 ServiceNow Certified Systems Administrator (CSA)  
 Siebel 8 Consultant Certified Expert  
 Six Sigma Black Belt  
 Six Sigma Green Belt  
 Six Sigma Master Black Belt  
 Six Sigma Yellow Belt

SNIA Certified Storage Architect  
 SNIA Certified Storage Networking Expert (SCSN-E)  
 SNIA Certified Storage Professional  
 SNIA Certified Systems Engineer Sniffer Certified Expert  
 SolarWinds Certified Professional (SCP)  
 SonicWall Network Security Administrator  
 Splunk Core Certified User  
 SUSE Certified Administrator  
 SUSE Enterprise Engineer (SCE)  
 SUSE Enterprise Architect or (SEA)  
 Systems Security Certified Practitioner (SSCP)  
 Tableau Desktop Certified Professional  
 Tableau Server Certified Professional  
 Teradata VantageCloud Lake Associate Certified  
 Teradata Vantage Administration  
 Teradata Vantage Data Engineering Certified  
 Teradata Vantage Data Science Master  
 Teradata Vantage Master 2.0  
 Teradata Vantage Architecture  
 Teradata Vantage Analytics  
 Teradata SQL for Business Users  
 TIBCO Certified Professional  
 TIBCO Certified SOA Architect  
 TOGAF 9 Certified  
 Virtualization Council Master Infrastructure Architect  
 VMware Certified Advanced Professional - Digital Workspace  
 VMware Certified Advanced Professional 6.5 - Data Center Virtualization Design  
 VMware Certified Advanced Professional – Network Virtualization  
 VMware Certified Advanced Professional (all)  
 VMware Certified Advanced Professional 6 - Data Center Virtualization Deployment  
 VMware Certified Advanced Professional 6/7 - Cloud Mgt and Automation Deployment  
 VMware Certified Advanced Professional 6/7 - Cloud Mgt and Automation Design  
 VMware Certified Design Expert – Network Virtualization  
 VMware Certified Design Expert - Cloud Mgt and Automation  
 VMware Certified Design Expert (all)  
 VMware Certified Design Expert 6 - Data Center Virtualization  
 VMware Certified Professional - Digital Workspace  
 VMware Certified Professional – Desktop Management 2021  
 VMware Certified Professional - Network Virtualization  
 VMware Certified Professional - Security 2021

VMware Certified Professional 6 - Data Center Virtualization (VCP6-DCV)  
 VMware Certified Professional 6.5 - Data Center Virtualization (VCP6.5-DCV)  
 VMware Certified Professional 6/6.5  
 VMware Certified Professional 6/7 - Cloud Mgt and Automation  
 VMware Certified Technical Associate - Data Center Virtualization  
 Zachman Certified - Enterprise Architect

### 4-YEAR IT CERTIFICATIONS PAY TRENDS

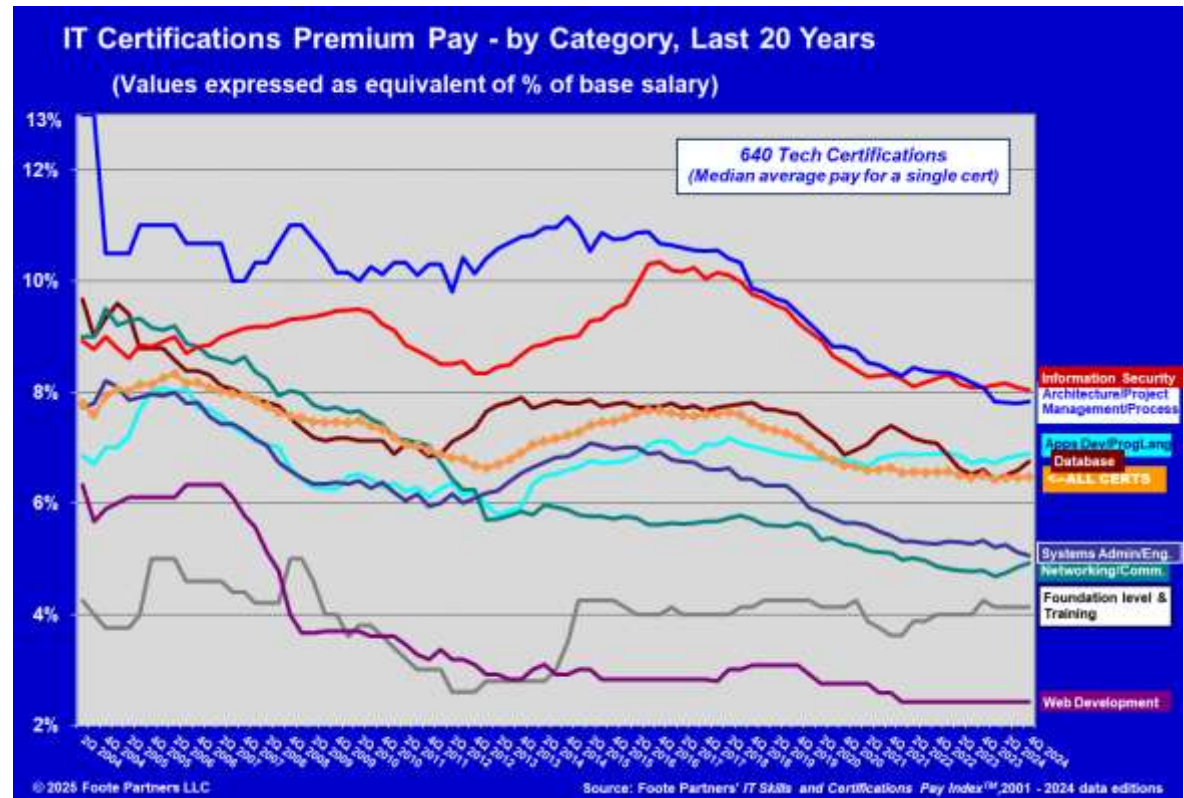
(Through 1/1/2025 – 101,182 IT Professionals)

IT CERTIFICATIONS CATEGORIES	# of certs surveyed	Change in Average Premium Pay by Category					
		% Change 3 mos	% Change 6 mos	% Change ANNUAL	% Change 2 yrs	% Change 3 yrs	% Change 4 yrs
Training and Beginner/Foundation level	8	0.0%	0.0%	-2.9%	3.1%	13.8%	0.0%
Apps Development/Prog. Languages	73	0.4%	1.3%	1.7%	0.0%	0.4%	1.9%
Data/Database	65	2.7%	3.7%	2.4%	-4.6%	-8.7%	-1.7%
Web Development	12	0.0%	0.0%	0.0%	0.0%	-6.4%	-12.1%
Networking & Communications	105	1.6%	4.0%	3.0%	1.4%	-3.3%	-6.5%
System Administration/Engineering	130	-1.2%	-3.7%	-5.2%	-4.0%	-6.7%	-10.3%
Information/Cyber Security	156	-0.6%	-1.5%	-0.5%	-2.6%	-3.5%	-5.8%
Architecture/Project Management/Process	91	0.4%	0.2%	-3.0%	-6.2%	-6.6%	-11.1%
<b>ALL CERTIFICATIONS REPORTED</b>	<b>640</b>	<b>0.22%</b>	<b>0.17%</b>	<b>-0.49%</b>	<b>-1.28%</b>	<b>-2.35%</b>	<b>-3.13%</b>

### 17-YEAR IT CERTIFICATIONS PAY TRENDS BY CATEGORY

% Change in Average Median Pay for a Single IT Certification)

(Through 1/1/2025 – 101,182 IT Professionals)



SOURCE: Foote Partners 2025 [IT Skills & Certifications Pay Index™](#)

Pay data supporting these charts available in the [IT Skills and Certifications Pay Index™](#) – 4Q 2024 data edition

**HIGHEST PAYING IT Certifications (cash pay premiums for all 640 certs surveyed, ranked)**

These IT certifications are among those earning the highest pay premiums (data collected October 1, 2024 to January 1, 2025). **Shown in alphabetical order by overall rank in descending order including ties.** **Green/Red** = increased/decreased in market value this quarter. **Purple** = Made the list this quarter for first time.

<p>1. GIAC Security Leadership</p> <p>2. GIAC Strategic Planning, Policy, and Leadership</p> <p>3. Certified Data Privacy Solutions Engineer Zachman Certified - Enterprise Architect</p> <p>4.[Tie] Certified Cloud Security Professional Certified Secure Software Lifecycle Professional Certified Software Quality Manager InfoSys Security Engineering Professional (ISSEP/CISSP) InfoSys Security Management Professional (ISSMP/CISSP) <b>Offensive Security Certified Expert</b> Offensive Security Exploitation Expert <b>Oracle Cloud Platform Application Integration Certified Professional</b> <b>Pegasystems Certified Lead System Architect</b> <b>SAS Certified Professional: AI and Machine Learning</b> TOGAF 9 Certified</p> <p>5. [Tie] Artificial Intelligence Engineer (AIE - all tracks) 10 AWS Certified Security - Specialty Certification of Capability in Business Analysis Certified Artificial Intelligence Scientist Certified Enterprise Coach (Scrum/Agile) <b>Certified in Governance, Risk and Compliance</b> Certified in Risk and Information Systems Control Certified in the Governance of Enterprise IT Certified Information Privacy Manager- all countries <b>Certified Information Security Manager</b> Certified Information Systems Security Professional Certified Professional Scrum Product Owner Certified Scrum Product Owner - Advanced</p>	<p>5.[cont.] <b>Certified Scrum Professional - ScrumMaster</b> Certified ScrumMaster - Advanced Cisco Certified Network Professional - Security EC-Council Certified Chief Information Security Officer EC-Council Certified Cloud Security Engineer EC-Council Certified Threat Intelligence Analyst <b>Fortinet Certified Expert in Cybersecurity</b> <b>GIAC Certified Incident Handler</b> GIAC Cloud Security Automation GIAC Exploit Researcher and Advanced Penetration Tester GIAC Network Forensic Analyst GIAC Reverse Engineering Malware GIAC Security Operations Manager Google Cloud - Professional Cloud Security Engineer InfoSys Security Architecture Professional (ISSAP/CISSP) <b>Offensive Security Web Expert</b> Oracle Certified Master - Java SE Developer Pegasystems Certified Data Scientist Pegasystems Certified Senior Systems Architect <b>PMI Portfolio Management Professional</b> PMI Risk Management Professional Six Sigma Master Black Belt</p> <p>6.[Tie] AWS Certified Data Analytics – Specialty <b>AWS Certified DevOps Engineer - Professional</b> BTA Certified Blockchain Security Professional Certificate of Cloud Auditing Knowledge <b>Certificate of Cloud Security Knowledge</b> Certified Business Continuity Manager/ISO 22301 Certified Business Continuity Professional Certified Business Process Leader Certified Compliance &amp; Ethics Professional Certified Forensic Computer Examiner Certified Information Privacy Technologist- all countries <b>Certified Information Systems Auditor</b></p>	<p>6.[cont.] Certified Information Systems Risk Manager/Mile2 Certified Kubernetes Security Specialist Certified Penetration Testing Engineer Certified Scrum Product Owner Certified ScrumMaster <b>Check Point Certified Security Expert</b> Cisco Certified CyberOps Professional CompTIA Cybersecurity Analyst+ CyberSecurity Forensic Analyst <b>EC-Council Certified Ethical Hacker</b> EC-Council Certified SOC Analyst EC-Council Web Application Hacking and Security Testing GIAC Certified Forensics Analyst GIAC Certified Intrusion Analyst GIAC Defending Advanced Threats GIAC Experienced Cyber Security GIAC Experienced Forensic Analyst GIAC Web Application Penetration Tester IAPP Certified Information Privacy Manager IBM Certified Advanced Security Professional IBM Certified Solution Advisor - DevOps V2 Mile2 Certified Cloud Security Officer Offensive Security Certified Professional Offensive Security Defense Security Expert <b>Offensive Security Experienced Penetration Tester</b> Open Group Certified Architect (Open CA) Oracle Certified Expert - Java SE Developer (all) Oracle Certified Master - DBA Pegasystems Certified Pega Business Architect <b>PMI Professional in Business Analysis (PMI-PBA)</b> <b>PMI Project Management Professional(PMP)</b> <b>Red Hat Certified Architect: Cloud</b></p>
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Source: Foote Partners [IT Skills & Certifications Pay Index™](#), 4Q 2024data edition

## IT CERTIFICATION PAY TREND HIGHLIGHTS: Market Value Gainers & Highest Paying – 4th Quarter 2024 data

These tech certifications **gained 10% or more in market value in the three months ending January 1, 2025** vs. prior quarter (seen below grouped by segment).  
**Listed in alphabetical order within each group.** Highest paying skills listed on right **in alphabetical order.**

### IT CERTIFICATION Gainers

#### Info/Cyber Security certifications

Certificate in Information Security Management Principles (CISMP)  
Certified in Risk and Information Systems Control (CRISC)  
Check Point Certified Security Administrator (CCSA)  
CWNP Certified Wireless Security Professional (CWSP)  
Offensive Security Certified Expert  
Offensive Security Defense Analyst (OSDA)  
Offensive Security Experienced Penetration Tester (OSEP)  
Offensive Security Exploit Developer (OSED)  
Offensive Security Web Expert (OSWE)

#### Systems Administration certifications

Microsoft Certified Solutions Associate: Windows Server 2012/2016  
Red Hat Certified Architect: Cloud  
Red Hat Certified Engineer(RHCE)  
ServiceNow Certified Implementation Specialist (CIS)  
SUSE Enterprise Engineer (SCE)  
VMware Certified Design Expert - Cloud Mgt and Automation  
VMware Certified Design Expert (all)

#### Application Development/Programming Languages certifications

Cloudera Certified Associate Spark and Hadoop Developer  
Oracle Certified Professional - Fusion Middleware 11g/12c Forms Developer  
Oracle Certified Professional WebLogic Server 12c Administrator  
Oracle Cloud Platform Application Integration Certified Professional  
Red Hat Certified Architect: Enterprise Applications

#### Networking & Communications certifications

Avaya Certified Implementation Specialist(ACIS)  
Avaya Certified Solutions Administrator(ASAC)  
Avaya Certified Support Specialist(ACSS)  
AWS Certified Solutions Architect - Professional (Cloud)  
Brocade Certified Network Professional  
Cisco Certified Network Associate (Networking automation and programmability)  
Cisco Certified Network Associate (was CCNA Cloud)  
Cisco Certified Network Professional - Enterprise/Routing and Services  
CompTIA Network+  
Dell Cloud Services Design Proven Professional  
Dell Information Storage and Management Foundations  
Dell PowerStore (all - Deploy/Operate)  
Juniper Networks Certified Specialist (JNCIS - all specializations)  
VMware Certified Professional - Network Virtualization

#### Architecture, Project Management, and Process Certifications

Certified Scrum Professional - ScrumMaster  
Google Cloud DevOps Engineer  
PMI Agile Certified Practitioner (PMI-ACP)  
PMI Portfolio Management Professional (PfMP)  
PMI Professional in Business Analysis (PMI-PBA)  
PMI Program Management Professional (PgMP)  
Salesforce Certified Integration Architecture Designer

#### Data/Database certifications

Cloudera Certified Professional: Data Engineer  
Microsoft Certified Azure Data Scientist Associate  
Microsoft Certified Power BI Data Analyst Associate  
MongoDB Certified Associate Developer  
MongoDB Certified DBA  
Oracle Certified Associate - MySQL Heatwave  
Oracle Certified Professional - MySQL 8.0 Database Administrator  
Oracle MySQL 8.0 Database Developer Certified Professional  
SAS Certified Data Integration Developer for SAS 9  
SAS Certified Data Scientist Using SAS 9  
SAS Certified Data Quality Steward for SAS®  
SAS Certified Professional: AI and Machine Learning  
SAS Certified Professional: Data Curation for SAS Data Scientists

Source: Foote Partners [IT Skills & Certifications Pay Index™](#), 4Q 2024 data edition

**IT CERTIFICATION PAY TREND HIGHLIGHTS: Market Value Losers – 4th Quarter 2024 data**

These IT certifications **declined 10% or more in market value in the three months ending January 1, 2025** vs. prior quarter (seen below grouped by segment).  
*Listed in alphabetical order within each group.*

**TECH CERTIFICATIONS Losers**

**Application Development/Programming Languages**

AWS Certified Developer - Associate  
AWS Certified DevOps Engineer - Professional  
Microsoft Office Specialist  
Pegasystems Certified System Architect

**Data/Database certifications**

Oracle Certified Professional 2019 - DBA (OCP)  
Qlik Sense Data Architect  
SAS Certified Big Data Professional Using SAS 9  
Teradata Vantage Analytics  
Teradata Vantage Architecture

**Architecture, Project Management, and Process**

**Certifications**

AWS Certified Cloud Practitioner  
PMI Project Management Professional(PMP)  
Prince2 Foundation  
Six Sigma Green Belt

**Networking and Communications**

CWNP/Certified Wireless Analysis Professional (CWAP)  
CWNP/Certified Wireless Design Professional (CWDP)  
Juniper Networks Certified Associate (JNCIA - all specializations)  
NetScout/nGenius Certified Analyst (nCA)  
NetScout/nGenius Certified Expert (nCE)  
NetScout/nGenius Certified Specialist (nCS)

**Systems Administration certifications**

AWS Certified SysOpsAdministrator-Associate (Cloud)  
Citrix Certified Associate - Networking  
HP Accredited Technical Professional (ATP - all)  
HP ATP - Hybrid IT Solutions V2  
IBM Certified Solution Architect – Cloud v4  
IBM Certified Systems Administrator (all)  
Linux Professional Institute certification (LPIC-Level 3)  
Microsoft Certified Azure Administrator Associate  
Microsoft Certified Azure Solutions Architect  
Microsoft Certified Azure Solutions Architect Expert  
Red Hat Certified Systems Administrator (RHCSA)  
VMware Certified Professional - Digital Workspace  
VMware Certified Professional 6 - Data Center Virtualization (VCP6-DCV)  
VMware Certified Professional 6.5 - Data Center Virtualization (VCP6.5-DCV)  
VMware Certified Professional 6/6.5  
VMware Certified Professional 6/7 - Cloud Mgt and Automation

**Info/Cyber Security certifications**

Certificate of Cloud Security Knowledge (CCSK)  
Certified Information Security Manager (CISM)  
Certified Information Systems Auditor (CISA)  
Check Point Certified Security Expert (CCSE)  
CompTIA Advanced Security Practitioner (CASP)  
EC-Council Certified Ethical Hacker (CEH)  
Fortinet Certified Expert in Cybersecurity (FCX)  
Fortinet Network Security Professional  
GIAC Certified Forensics Examiner (GCFE)  
GIAC Certified Incident Handler (GCIH)  
Okta Certified Consultant  
Okta Certified Developer  
Okta Certified Professional

Source: Foote Partners [IT Skills & Certifications Pay Index™](#), 4Q 2024data edition

## 2025 IT Skills & Certifications Pay Volatility Index™

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Demand dynamics in benchmarked certified and non-certified IT skills pay

(Data collected through January 1, 2025)

### **What is skills and certifications pay volatility?**

Skills volatility is defined as the incidence of gains or declines in premium pay earned by tech professionals for specific certified and noncertified technical and business skills. Tracking volatility is useful for both analyzing and forecasting demand for skills, for monitoring IT workforce transition, and for understanding IT management decision making. Volatility offers valuable insights that salary movements and hiring behavior do not. Important in this distinction is that skills can be segmented and benchmarked more meaningfully than jobs. Similar to IT positions, there are the broad categories (e.g., security, networking, systems, database, applications development). But also, more narrow areas, for example---web/e-commerce development, storage area networking, virtualization, architecture, business process, project management, methodology. But unlike most jobs, within categories or niche are very specific vendor-specific or vendor independent niches and skill specializations that provide more granular analysis (e.g., SAP, AJAX, Ruby on Rails, Microsoft Sharepoint, collaboration appliances, Oracle database).

## TRENDS Cash Pay Premium Volatility for IT Skills and Certifications

Pay volatility in market value for individual IT skills and certifications—defined as incidence of gains or declines over a period of time in premium pay earned by IT professionals for specific technical and business skills—displayed a **dramatically decrease from October 1, 2024 to January 1, 2025** compared to the prior quarter according to the latest update of Foote Partners' long-running *IT Skills and Certifications Pay Index™* of market values for tech skills. Market value is measured by tracking additional cash compensation paid to workers by their employers for specific certified and non-certified skills they possess.

### Current Quarterly Recap (data collected through January 1, 2025)

#### TOTAL: All Skills and Certifications

- **24.0%** of skills and certifications(324 of 1,348) recorded a change in cash pay this quarter, dramatically lower than **31.6%** in the prior quarter when 422 of 1,342 changed. This was slightly lower than the **25.7%** average quarterly pay volatility over the last two years.
- **158 gained value** while **166 declined** in value in 4th Quarter 2024, significantly different than the 214 and 210 vectors, respectively, in the 3<sup>rd</sup> quarter and more in line with the 166 gains/178 declines recorded in 2Q 2024.

#### CERTIFIED SKILLS

- **16.1%** of reported certifications(103 of 638) changed value in 4<sup>th</sup> Quarter 2024, a whopping 10 points lower than the **26.4%** (167 of 632) volatility in the prior quarter and significantly lower than the 21% two-year average certifications pay volatility
- **54 certifications gained** market value while **49 declined** in value, significantly lower than the 79 gains and 88 declines, respectively, in the prior quarter.

#### NONCERTIFIED SKILLS

- **31.1%** of reported IT skills(221 of 710) changed value in 4th Quarter 2024, a 5-point drop from the **36.2%** (257 of 710) volatility in the prior quarter.
- **104 noncertified skills gained** in market value while **117 declined** in value in 4<sup>th</sup> Quarter 2024 compared to 135 and 122, respectively, in the prior quarter.

Tracking skills volatility is useful in many ways: analyzing and forecasting demand for skills; monitoring IT workforce transition; and understanding IT management decision making. In fact, we believe statistical volatility in IT skills pay offers a more complete story of true labor market conditions than salary movements and hiring behavior, among other common indicators. Important in this distinction is that skills can be segmented and benchmarked more meaningfully than jobs allowing microanalyses.

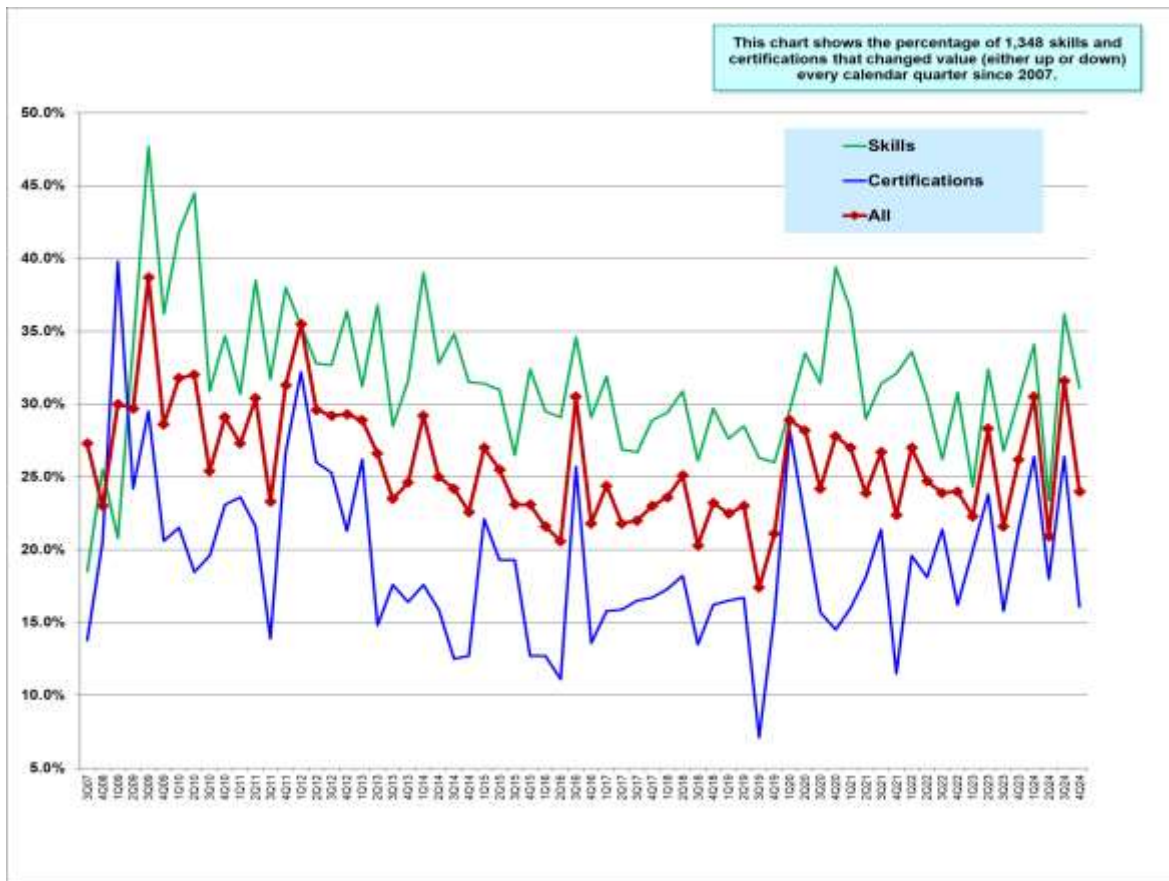
Similar to jobs, IT skills have broad skills categories that can be tracked (e.g., security, networking, systems, database, applications development). But unlike jobs, skills pay can be pinpointed to hundreds of niches and specializations. Also, unlike most job trends analyses, within skills categories and niches are *vendor-specific* and *vendor independent* skill specializations for more granular tracking, analysis, and forecasting.

Quarterly volatility for all 1,354 certified and non-certified skills in the last two years has been widely variable, in the 21% to 31% range. This is an important shift trend that we believe signals a move that employers are taking a more long-term view to building their tech workforces for evolving technologies such as AI/Machine Learning and a variety of digital solutions. Tech leaders right now are demanding more agility, faster reaction times, and more predictable execution; this is keeping volatility high as skills markets constantly adjust to meet surges in demand for specific certified and non-certified skills.

They will be able to achieve those capabilities through applying architecture principles and practices to people management.

**VOLATILITY HIGHLIGHTS - 18 Year Trending**

**IT Skills and Certifications Volatility Index™ – 1,354 Skills and Certifications**



**Recent IT skills and certifications volatility trends**

**QUARTERLY SUMMARY**

In the **4<sup>th</sup> Quarter 2024**, **24.0%** of skills and certifications(324 of 1,348) recorded a change in cash pay this quarter, **dramatically lower** than **31.6%** in the prior quarter when 422 of 1,342 changed. This was slightly lower than the **25.7%** average quarterly pay volatility over the last two years.

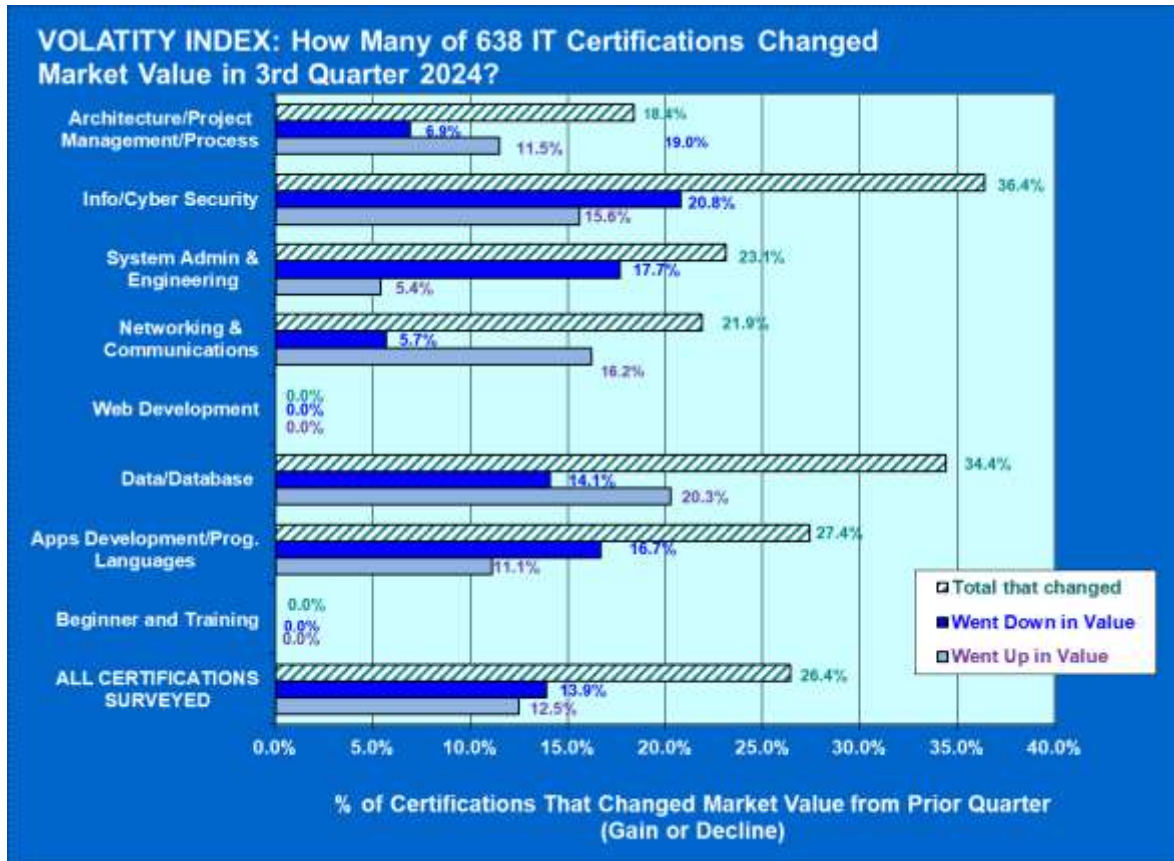
**NONCERTIFIED IT SKILLS PAY VOLATILITY** in 4Q 2024 was **31.1%** of reported certifications(221 of 710), a 5-point drop from the **36.2%** (257 of 710) volatility in the prior quarter.

**IT CERTIFICATIONS PAY VOLATILITY** in 4Q 2024 was **16.1%** (103 of 638), a whopping 10 points lower than the **26.4%**(167 of 632) volatility in the prior quarter and significantly lower than the 21% two-year average certifications pay volatility.

(Pay data supporting these charts available in the [IT Skills and Certifications Pay Index™](#) – 4Q 2024 quarterly data edition)

(Source: Foote Partners LLC, [2025 IT Skills & Certifications Pay Index™](#))

**VOLATILITY HIGHLIGHTS** IT Certifications – 4th Quarter 2024 datasets



(Source: Foote Partners LLC, [2025 IT Skills & Certifications Pay Index™](#))

**IT Skills and Certifications Volatility Index™**  
4Q 2024 data edition findings: Tech Certifications

**IT Certifications Volatility Highlights**

Among all 638 certifications reported in the prior quarter, **highest quarterly volatility (>15%)** occurred in these segments (ranked highest to lowest):

- Data/Database
- Networking & Communication
- Systems Administration/Engineering

Within segments, notable downward volatility (value **declines**) occurred most in these (ranked):

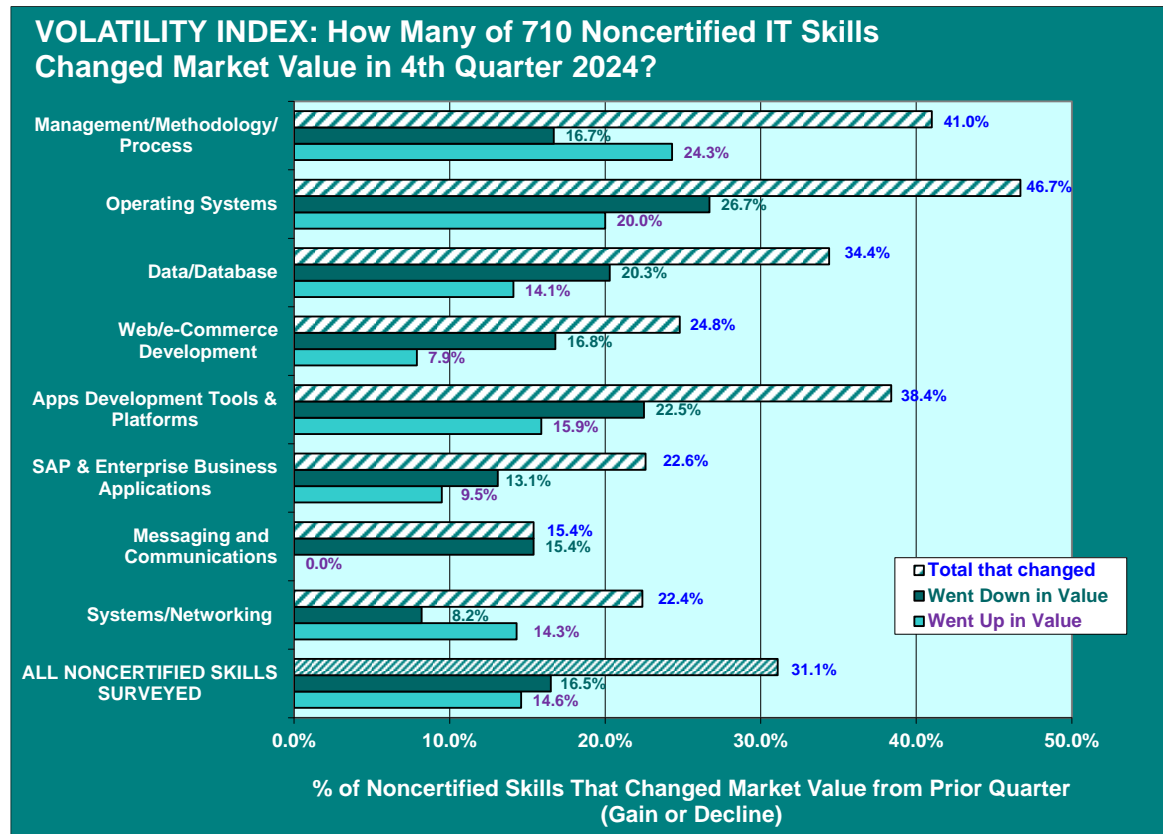
- Systems Administration/Engineering

Within segments, notable upward volatility (value **gains**) occurred most in these:

- Data/Database
- Networking & Communication

(Pay data supporting these charts available in the [IT Skills and Certifications Pay Index™](#) – 4Q 2024 quarterly data edition)

**VOLATILITY HIGHLIGHTS** Non-certified IT Skills – 4th Quarter 2024 datasets



(Source: Foote Partners LLC, [2025 IT Skills & Certifications Pay Index™](#))

**IT Skills and Certifications Volatility Index™**  
4Q 2024 data edition findings: Non-certified IT Skills

**Non-certified IT Skill Pay Volatility Highlights**

Among all 710 noncertified IT skills reported this quarter, high volatility (>20%) occurred in all segments (ranked highest to lowest):

- Operating Systems
- Management/ Methodology/Process
- Applications Development Tools & Platforms
- Data/Database
- Web/Ecommerce Development
- SAP & Enterprise Business Applications
- Systems/Networking

Within segments, notable downward volatility (value **declines**) occurred most in these (ranked):

- Operating Systems
- Applications Development Tools & Platforms
- Data/Database

Within segments, notable upward volatility (value **gains**) occurred most in these (ranked):

- Methodology/Process
- Operating Systems

(Pay data supporting these charts available in the [IT Skills and Certifications Pay Index™](#) – 4Q 2024 quarterly data edition)

## 2025 IT Skills and Certifications Pay Index™ (4<sup>th</sup> Quarter 2024 datasets)

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- Pay premiums for **1,354 certified and noncertified IT skills**
  - Three data points for each position: 10<sup>th</sup>, 50<sup>th</sup>, 90<sup>th</sup> percentile
- Verified and validated IT skills pay data from **101,185 IT professionals at 4,480 employers** in US and Canada
- Current data collected through January 1, 2025 (updated quarterly)
- Excel format data tables allowing for data loading into third-party data analytics tools from PayScale, MarketPay, PayFactors, CompAnalyst, WillisTowersWatson, Mercer, et. al.
- Certifications Guide containing basic information about surveyed IT certifications (pre-requisites; costs; test content; lab requirements, etc.)

### **Definition of IT skills premium pay**

- Pay that IT workers receive for possessing high-value IT and business skills used on the job
- Given in the form of a bonus, or embedded in base salary to adjust for the presence of a dominant vendor or technology central to job performance (examples: Cisco Network Engineer, Python Software Engineer, Redhat Linux Systems Administrator, or SAP Developer.)
- Often used to adjust either base pay or total pay in situations where job title does not match actual on-the-job duties and responsibilities, and changing the job title is not an attractive option
- May be used as a reward, recruiting inducement, retention tool, or as a guide for creating consulting rate cards

## ABOUT THIS RESEARCH

Foote Partners' primary research survey for tracking IT skills and certifications pay and supply/demand volatility is the industry-leading ***IT Skills and Certifications Pay Index™ (ITSCPI)***, launched in 1999, and the ***IT Skills and Certifications Volatility Index***, both updated every three months for the past 20 years. Data covering 439,057 tech professionals at 4,480 employers in 83 U.S. and Canada cities are reported for IT salaries and skills pay earned for 280 positions and 1,354 certified and noncertified technical and business skills. Verified and validated pay data for 101,185 tech workers has been included in the 4th Quarter 2024 data edition of the ITSCPI, compiled from data collected through January 1, 2025..

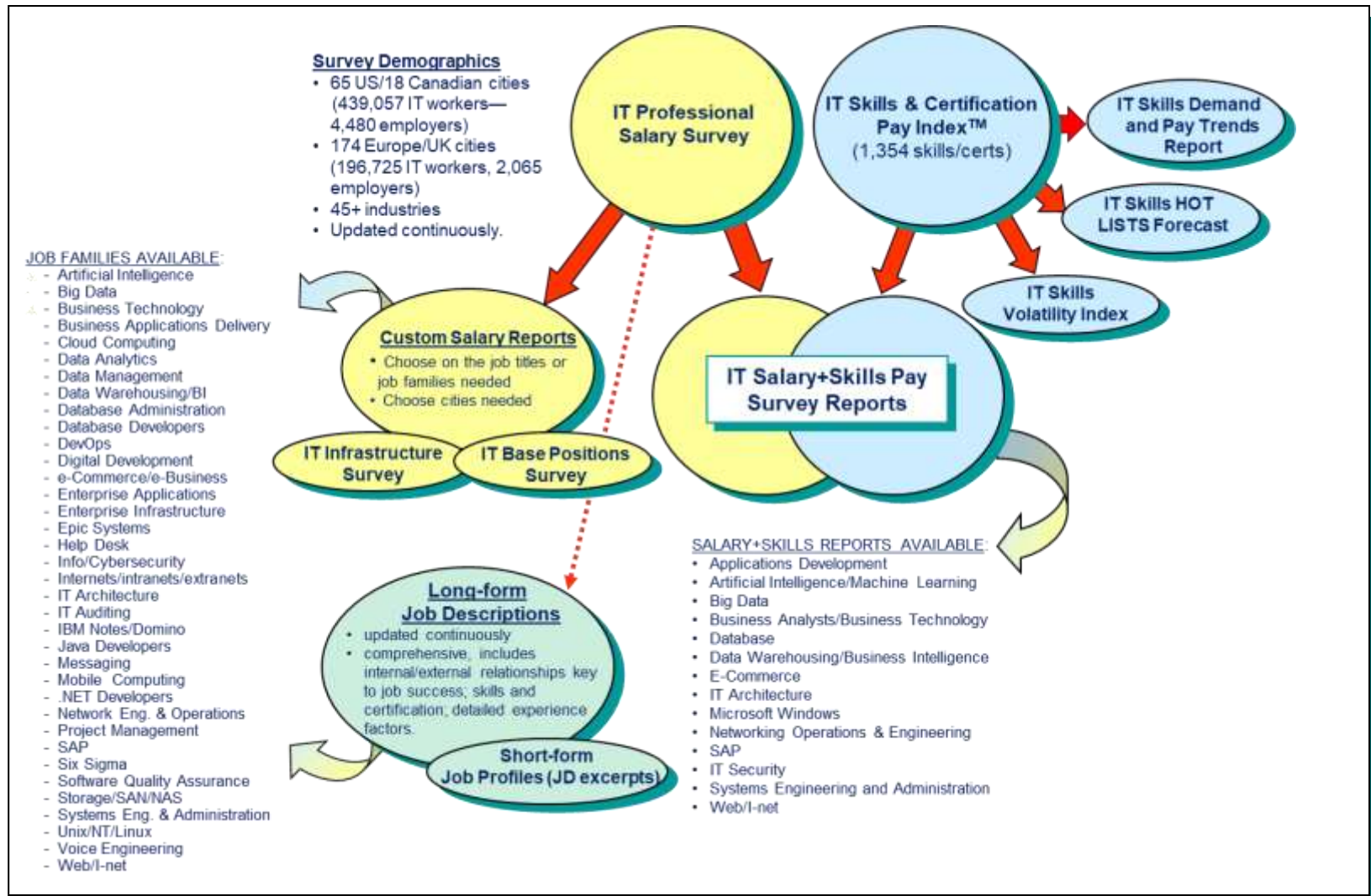
Demographics of the participating organizations for our latest update are as follows, measured most appropriately for the type of business, by revenues, assets, total premiums and operating budgets:

- 18% of participating organizations have \$5 billion+ in sales/\$15+ billion in total assets
- 28% of participating organizations earn more than \$1 billion in annual revenues or more than \$5 billion in total assets
- 46% of participating organizations have \$500+ million in sales/\$1+ billion in total assets/\$500+ million in premiums/\$500+ million operating budget (government, educational, not-for-profit)
- 54% of participating organizations fall in the SMB (small-to-medium sized business) segment, generally defined as organization under \$500 million in sales.
- [Public sector] 5% have operating budgets of \$500 million or more, [nonprofit/educational sectors] 4% with operating budgets \$100 million to less than \$500 million

### TO OBTAIN A COPY OF THE LATEST ***IT SKILLS AND CERTIFICATIONS PAY INDEX™***

Please visit the Foote Partners web site: [IT Skills and Certifications Pay Index](#)

## Foote Partners 2025 IT Compensation Survey Product Map



## **ABOUT FOOTE PARTNERS**

Foote Partners, LLC is a technology analyst firm and independent benchmark research organization focusing on the people (versus vendor) side of managing technology and the IT labor force. A thought leader and trusted advisor to thousands of employers on five continents who purchase our products and services, we provide benchmark data and pragmatic forward-thinking advice and market intelligence targeting the tech workforce in the modern highly integrated business/IT hybrid environment in which all private and public organizations now operate.

Our products are deeply grounded in specialized proprietary data-driven statistical and empirical research, benchmark surveys, and business intelligence collected from 4,480 North American employers with whom we have deep longstanding research partnerships. These partnerships have been created and supported specifically to enable unique market intelligence views and difficult-to-find decision support research on the multiple facets of IT human capital management. As a group, these U.S., Canadian, and European partners were selected to meet strict criteria for what we believe is the most meaningful demographic representation for tech professionals in each local labor markets.

Founded in 1997 and comprised of former Gartner industry analysts, McKinsey & Company, Mercer and WillisTowersWatson senior consultants, and former corporate HR, IT, and business executives, the firm's research division publishes 50+ quarterly-updated benchmarking, analytical research and forecasting products that help employers benchmark their IT compensation, solve difficult information technology management and workforce problems, and strengthen their ability to execute complex business solutions.

Foote Partners tech compensation survey findings and labor market trend analyses are featured regularly in countless business, HR, and IT media sources and periodicals around the globe, including *Bloomberg BusinessWeek*, *Forbes*, *Fortune*, *Wall Street Journal*, *New York Times*, *CIO Magazine*, *ComputerWorld*, and *WorldatWork's Journal* and *Workspan Magazine*; and in appearances on network and cable television, National Public Radio, and countless podcasts and webcasts.

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