**Cloud Architect Career Guide: 10 In-Demand Jobs and Skills in 2024**

Written by Coursera Staff • Updated on Jan 18, 2024

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A cloud architect designs and implements an organisation’s transition to cloud computing. Discover how this senior IT role operates and different cloud architect job opportunities.



There are several steps you can take early in your career to prepare for a cloud architect role. You’ll need to understand cloud computing fundamentals, the pros and cons of working in the cloud, and how to communicate well with all members of an organization. Use the following guide to learn more about career path options, in-demand skills, and salary insights for cloud architects.

**What is a cloud architect?**

Cloud computing is the delivery of computing resources like data storage and software via the internet. A cloud architect is responsible for an organisation’s cloud computing system. They work with cloud technology to develop cloud adoption plans, determine cloud application design, and create systems for managing, monitoring, and maintaining the cloud system.

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**What does a cloud architect do?**

Cloud architects create, optimise, and maintain cloud computing solutions for clients, such as tech research companies, cloud computing businesses, information technology (IT) providers, or IT departments. A few components of cloud-based solutions that cloud architects work with include:

* **Front-end platforms.** Front-end cloud infrastructure includes everything the client will interact with. It's the software that allows users to access the cloud.
* **Back-end platforms.**Back-end cloud infrastructure refers to hardware and software components of a cloud system, like data storage, servers, virtual machines, hypervisors, and network devices.
* **Cloud-based data delivery models.** Cloud computing service vendors typically provide organizations with IT capabilities via one of three major models: Software as a Service (SaaS), Infrastructure as a Service (IaaS), or Platform as a Service (PaaS)

**A day in the life of a cloud architect**

Cloud architects usually work with a team of IT professionals such as DevOps engineers and software developers. Together, they help deliver final projects that solve organisations’ cloud computing needs. Specific tasks and responsibilities can include:

* Designing the cloud environment for a company based on its requirements
* Monitoring, troubleshooting, and optimising the cloud environment
* Collaborating with other technology team members to complete projects
* Creating cloud-based applications that are efficient and secure
* Converting the technical requirements of projects into suitable architecture
* Ensuring cloud solutions and operations are reliable
* Staying abreast of new technologies and trends in cloud computing

**Cloud architect skills**

Cloud architecture is a senior position that requires strong communication, management, and presentation skills. Review the lists below of additional technical and workplace skills for cloud architects.

**Technical skills**

* Programming, including experience with several programming languages
* Automating processes and working with legacy information systems
* Knowledge of Java, Node.js, PHP, Python, and Ruby on Rails
* Ability to integrate several parts of an organisation’s IT system in one place
* Understanding how databases, networks, and other critical functions work
* Proficiency in IT security to protect information in the cloud from unauthorised internal users and malicious external hackers.

**Workplace skills**

* Effective communication skills to deal with stakeholders inside and outside of your organisation, including entry-level programmers, business managers, project team members, and senior executives
* Project management and collaboration skills to create effective cloud solutions through a team effort.
* Ability to organise people and instill trust so they can come to you with problems with the cloud software.

**Cloud architect qualifications and certifications**

Becoming a cloud architect requires a combination of education, skill development, and certification. Generally, a bachelor's degree in computer science, information technology, information architecture, cloud computing, or a related field is required, and certification may also be necessary to qualify as a cloud architect.

**Degree coursework**

Typical coursework you'll complete when pursuing a bachelor's degree that includes a specialisation in cloud computing may include:

* Cloud computing platforms, such as Microsoft Azure and Amazon Web Services (AWS)
* IT foundations
* Web and cloud security
* Web development
* Scripting and programming
* IT management
* Networks
* Cloud security
* Cloud application development
* Scripting in the cloud

**Cloud architect certifications**

The certification process not only builds technical knowledge but shows employers your skills are up to date. Having certifications from a few different cloud vendors may aid you in choosing which is best for the organisation that hires you. Choose certifications based on the platforms you are interested in or those required by your current or prospective employer. A few recommended cloud architect certifications include:

* Google Professional Cloud Architect
* AWS Certified Solutions Architect – Associate
* Microsoft Certified: Azure Fundamentals
* Google Associate Cloud Engineer
* IBM Certified Technical Advocate - Cloud v3
* Linux Professional Institute Linux Essentials
* CompTIA Cloud+

**Cloud architect salary and job outlook**

According to Glassdoor, the total pay for cloud architects in India is ₹20L per year as of May 2023 [[1](https://www.glassdoor.co.in/Salaries/india-cloud-architect-salary-SRCH_IL.0,5_IN115_KO6,21.htm?clickSource=searchBtn)]. Total pay ranges from ₹ 29,499-₹ 9,30,000 depending on factors like years of experience, location, and company size.

The cloud computing market is part of the computer and information technology industry and its Revenues totalled $4.6 billion for 2021, according to IDC. The market is expected to reach $13.5 billion by 2026, growing at a CAGR of 24 per cent [[2](https://www.idc.com/getdoc.jsp?containerId=prAP49157122)]. This growth is attributed to the growing use of cloud computing through the adoption of digitisation around the world and increased automation and agility.

**7 Cloud architect jobs**

Just as there are many paths to becoming a cloud architect, there’s also more than one type of cloud architect job you can explore. You may create and work with cloud architecture across many areas like app development, security, and data management. You could also earn cloud architect certifications to specialise in specific platforms like Microsoft Azure, Hadoop, Amazon Web Services (AWS), or Google Cloud Platform (GCP).

*\*All annual salary data is sourced from Glassdoor as of  May 2023*

**1. AWS solutions architect**

In this role, you'll use the Amazon Web Services (AWS) cloud to design, build, manage, and maintain different solutions and applications. You may also move non-cloud systems into the cloud, secure the cloud, and assess the risk of working with third-party cloud providers and platforms.

**Average annual salary (India):**₹18L

**2. Azure cloud architect**

As an Azure architect, you'll use Microsoft Azure to create and implement cloud solutions, projects, and systems. You may also provide systems support and participate in workshops to ensure everything meets the client’s needs.

**Average annual salary (India):** ₹20L

**3. Senior cloud architect**

In this role, you'll typically be expected to have extensive technical knowledge of and skills in working with various cloud platforms. You'll be tasked with mapping out solutions to improve an organisation's growth and customer experience. You may work with cloud engineers and other IT team members to design and deploy cloud computing technologies and manage the cloud.

**Average annual salary (India):**₹31L

**4. Principal cloud architect**

As a principal cloud architect, you'll lead in creating the framework, architecture, and design of cloud platforms and solutions. You'll also help other team members by providing technical guidance to ensure each project is completed reliably and effectively, in addition to liaising between the IT and other departments within the organisation.

**Average annual salary (India):** ₹36L

**5. Junior cloud engineer**

In this role, you will typically plan, design, manage, maintain, and support cloud computing applications. You will need to learn about the organisation’s current environment and research and make recommendations for public, private, or hybrid cloud solutions.

**Average annual salary (India):** ₹3,95,071

**6. Cloud engineer**

In this role, you’ll typically be charged with operating the cloud-based infrastructure but also with transferring functions and procedures from legacy tech to the cloud. You’ll work to create cloud computing solutions that meet your organisation’s requirements using private, public, or hybrid cloud solutions.

**Average annual salary (India):** ₹ 6,10,000

**7. Cloud network engineer**

While a network engineer works to design, build, and implement standard on-premise networks, as a cloud network engineer you’ll be working with cloud-based infrastructure. Your job will involve configuring systems software, application software or hardware, and more to ensure cloud network resilience and reliability.

**Average annual salary (India):**₹ 9,13,499

**Next steps**

A strong foundation in IT is essential to succeed in the cloud architect role, and earning a Professional Certificate can help you stand out to employers and learn in-demand skills. Consider completing the [Google IT Support Professional Certificate](https://www.coursera.org/professional-certificates/google-it-support) on Coursera to become job-ready for an entry-level IT position in less than six months. From there, you can begin your career or continue expanding your skill set to enter an exciting role in cloud architecture and related fields.

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**Article sources**

1.

Glassdoor. “[Cloud Architect Salaries](https://www.glassdoor.co.in/Salaries/india-cloud-architect-salary-SRCH_IL.0,5_IN115_KO6,21.htm?clickSource=searchBtn), https://www.glassdoor.co.in/Salaries/india-cloud-architect-salary-SRCH\_IL.0,5\_IN115\_KO6,21.htm?clickSource=searchBtn/.” Accessed October 31, 2022.

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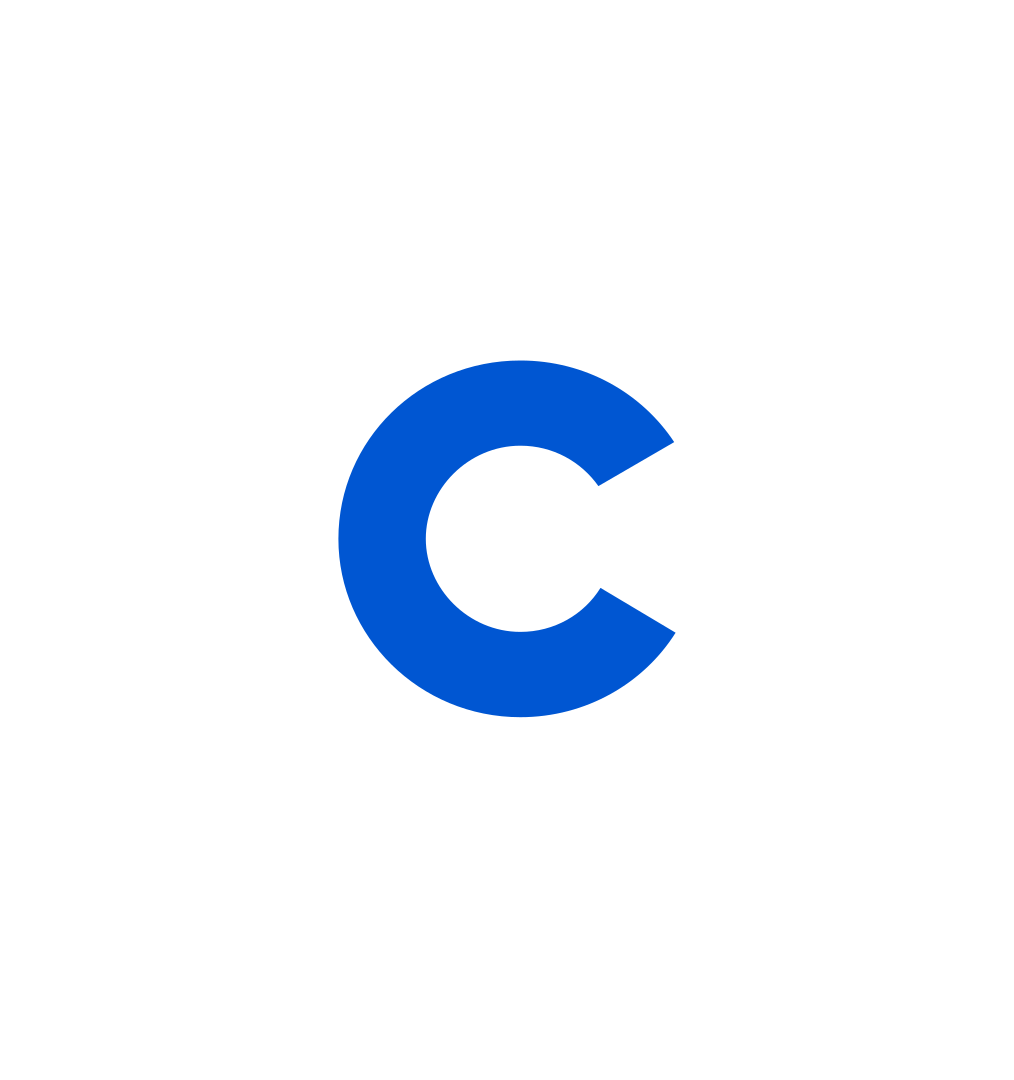
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