

Curriculum AWS Cloud Computing with AI

10+Years
of Building
Careers

Full-time: 16 weeks / 4 months

English

Remote

Start your career in cloud computing with AWS!

In our hands-on bootcamp, you'll gain end-to-end knowledge—from IT fundamentals to managing modern AWS infrastructures professionally—in just a few weeks. You'll build the exact cloud skills that today's companies are actively seeking.

Our experienced coaches provide personalized guidance and support, preparing you for roles such as Cloud Administrator, AWS Specialist, or DevOps Engineer—whether you're starting fresh or transitioning into tech. Through practical projects, dedicated mentoring, and access to educational vouchers, you'll establish a strong foundation for a successful career in cloud computing.

Future jobs for you:

- AWS Cloud Engineer
- Junior AWS Solutions Architect
- Infrastructure Engineer

Annual salary: €54,000 – €89,000

The curriculum shown here is an exemplary guide to course content. We reserve the right to slightly adjust content and schedule for didactic and organizational reasons, or to reflect current labor-market requirements. Any adjustments will not affect the quality or the learning outcomes of the course.

Tech Stacks

Core Services (Compute)

- Elastic Compute Cloud (EC2)
- Elastic Load Balancing
- Amazon EC2 Auto Scaling

Developer Services/Tools

- Amazon CloudFront (CDN)
- AWS Lambda (Serverless)
- AWS Cloud9
- Simple Notification service (SNS)
- Infrastructure as Code (IAC)
- Git, GitHub
- Databases: Amazon RDS, DynamoDB, Aurora
- AWS Cloudformation
- Terraform OSS & Cloud

SysOps

- AWS CloudTrail
- AWS Systems Manager
- AWS Config
- Amazon CloudWatch Logs & Events
- Service integration with Amazon Athena
- AWS Organizations
- AWS Trusted Advisor

Cloud Storage

- Amazon S3, Glacier, EBS, Instance Store, Amazon EFS
- AWS Storage Gateway
- Data Transfer & Migration

Final project

- Capstone Project

Networking

- OSI Models
- Protocols
- IP Subnetting
- Amazon virtual private cloud
- Amazon Route 53 (DNS)
- Securing & Troubleshooting
- VPC Connectivity options

Cloud Security

- Data Security/Cyber Threats
- Security lifecycle
- Threat mitigation
- IAM - Identity Management
- Security Compliance
- Multi-Factor Authentication (MFA)

Best Practices

- AWS Well-Architected Framework
- Multi-Factor Authentication (MFA)
- Cloud Adoption Framework
- WAF Principles (Web Application Firewall)

Artificial Intelligence (AI)

- Amazon Rekognition
- Amazon Q
- Prompt Engineering
- Gen AI

AWS Certification

- Exam Preparation & Certification
- Exam Blueprint, AWS White Papers

Soft Skills Development

Attention to Detail

Communication Ownership

Storytelling Resilience

Stakeholder Management

Research Skills Curiosity

Time Management

Problem Solving Teamwork

Creativity Adaptability

Analytical Thinking

★
Certificate
AWS Cloud
Practitioner

★
Certificate
AWS
re/Start

Practical Project

Implementation of acquired knowledge in a real-life scenario.

Supported Job Search

Our career team of 4 coaches actively run the Career Compass program that train and support job searches, and we organize regularly masterclasses and events with industry experts.

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AWS Cloud Computing with AI

Why now is the ideal time for further training

1 Why AWS Cloud Computing with AI is an important competency in Germany?

According to LinkedIn Skills im Trend 2026 (Deutschland), AI is Germany's fastest-growing skill area, while cloud computing remains one of Germany's most in-demand technology competencies.

At the same time, 86% of German companies already use cloud computing, with nearly all others planning or discussing its adoption.

As a result, AWS Cloud Computing with AI combines two of the key skills driving Germany's digital transformation: cloud computing and AI.



#1 AI Competence

Key Skills: Generative AI, LLMs, prompt engineering, chatbot development, transformers, CNNs, and RAG techniques (connecting LLMs to external data).

Relevance: Knowledge of AI application is required in almost all professions today, even outside the tech industry.

💡 Boost your productivity with AI agents.

2 Why companies are looking for AWS Cloud Engineers who understand AI?

Cloud powers modern business. AI is changing how it's built and managed. According to Bitkom, 41% of German companies already use AI, with another 48% planning adoption.

As cloud environments become more complex, companies seek AWS Cloud Engineers who can automate operations, optimize infrastructure, and use AI tools to build and manage secure, scalable cloud solutions.

Skills such as Infrastructure as Code, containerization, and cloud security are becoming essential for building reliable and scalable cloud environments.

#3 Cloud Infrastructure

Key skills: Cloud environments (design, deployment, and scaling), cloud services (e.g., AWS and Azure), Infrastructure as Code (IaC), containerization, and Linux.

Relevance: As Europe prioritizes European and German cloud infrastructure, organizations need professionals who can manage modern cloud environments, work across cloud platforms, and automate infrastructure using IaC.

3 AWS Cloud Computing Job postings in Germany

The demand for cloud engineers continues to grow. As of August 2026, Glassdoor lists more than 531 open AWS Cloud Engineer positions in Germany.

As of August 2026, there are more than 6,000 open positions for Cloud Engineer-related roles in StepStone, highlighting strong demand for professionals with cloud expertise.

Roles on StepStone	Job Postings (August 2026)
Cloud Engineer	1,667
Cloud Administrator	1,806
Infrastructure Engineer	1,832
Solution Architect	704

Sources & References

[LinkedIn Skills im Trend 2026](#)
[AWS Economic Impact Study 2026](#)
[Bitkom press release](#)

Curriculum AWS Cloud Computing mit KI



Vollzeit: 16 Wochen / 4 Monate

Englisch **Remote**

Starte deine Karriere im Cloud-Computing mit

AWS! In unserem praxisnahen Bootcamp lernst du in wenigen Wochen alles von den IT-Grundlagen bis zur professionellen Verwaltung moderner AWS-Infrastrukturen. Dabei entwickelst du genau die Cloud-Skills, die Unternehmen heute suchen.

Unsere Coaches begleiten dich persönlich und bereiten dich auf eine Karriere als Cloud Administratorin, AWS-Spezialistin oder DevOps Engineer vor – ob mit Vorkenntnissen oder als Quereinsteiger*in. Mit Projekten, Mentoring und Bildungsgutschein legst du den Grundstein für deine Zukunft im Cloud Computing.

Zukunftsjobs für dich:

- › **AWS Cloud Engineer**
- › **Junior AWS Solutions Architect**
- › **Infrastructure Engineer**

Jahresgehalt: 54.000 – 89.000 €

Tech Stacks

Core Services (Compute)

- Elastic Compute Cloud (EC2)
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Entwickler Services / Tools

- Amazon CloudFront (CDN)
- AWS Lambda (Serverless)
- AWS Cloud9
- Simple Notification service (SNS)
- Infrastructure as Code (IAC)
- Git, GitHub
- Datenbanken: Amazon RDS, DynamoDB, Aurora
- AWS Cloudformation
- Terraform OSS & Cloud

SysOps (Systembetrieb)

- AWS CloudTrail
- AWS Systems Manager
- AWS Config
- Amazon CloudWatch Logs & Events
- Service-Integration mit Amazon Athena
- AWS Organizations
- AWS Trusted Advisor

Cloud-Speicher

- Amazon S3, Glacier, EBS, Instance Store, Amazon EFS
- AWS Storage Gateway
- Datenübertragung & Migration

Abschlussprojekt

- Capstone-Projekt

Networking

- OSI Models
- Protocols
- IP Subnetting
- Amazon Virtual Private Cloud
- Amazon Route 53 (DNS)
- Security & Troubleshooting
- VPC Connectivity Options

Cloud Security

- Data Security / Cyber Threats
- Security Lifecycle
- Threat Mitigation
- IAM – Identity Management
- Security Compliance
- Multi-Factor Authentication (MFA)

Best Practices

- AWS Well-Architected Framework
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- Cloud Adoption Framework
- WAF Principles (Web Application Firewall)

Künstliche Intelligenz (KI)

- Amazon Rekognition
- Amazon Q
- Prompt Engineering
- Generative AI

AWS Certification

- Prüfungsvorbereitung & Zertifizierung
- Exam Blueprint, AWS Whitepapers

Soft Skills Development

Attention to Detail

Communication **Ownership**

Storytelling **Resilience**

Stakeholder Management

Research Skills **Curiosity**

Time Management

Problem Solving **Teamwork**

Creativity **Adaptability**

Analytical Thinking



Praxisprojekt

Umsetzung des erworbenen Wissens in einem realen Szenario.

Unterstützte Jobsuche

Unser vierköpfiges Karriere-Team leitet aktiv das „Career-Compass“-Programm, das bei der Jobsuche schult und unterstützt; zudem organisieren wir regelmäßig Masterclasses und Veranstaltungen mit Branchenexperten.

AWS Cloud Computing mit KI

Warum jetzt der ideale Zeitpunkt für Weiterbildung ist

1 Warum AWS Cloud Computing mit KI eine wichtige Kompetenz in Deutschland ist

Laut LinkedIn Skills im Trend 2026 (Deutschland) ist KI Deutschlands am schnellsten wachsende Kompetenz, während Cloud Computing eine der gefragtesten Technologiekompetenzen bleibt. Gleichzeitig nutzen bereits 86 % der deutschen Unternehmen Cloud Computing, fast alle übrigen planen oder diskutieren dessen Einführung. Dadurch vereint AWS Cloud Computing mit KI zwei der zentralen Kompetenzen, die Deutschlands digitale Transformation vorantreiben: Cloud Computing und KI.

2 Warum suchen Unternehmen nach AWS Cloud Engineers, die KI verstehen?

Cloud treibt moderne Unternehmen an. KI verändert, wie sie gebaut und verwaltet wird. Laut Bitkom nutzen 41 % der deutschen Unternehmen bereits KI, weitere 48 % planen die Einführung. Da Cloud-Umgebungen komplexer werden, suchen Unternehmen AWS Cloud Engineers, die Abläufe automatisieren, Infrastruktur optimieren und KI-Tools nutzen können, um sichere, skalierbare Cloud-Lösungen zu bauen und zu verwalten. Kompetenzen wie Infrastructure as Code, Containerisierung und Cloud-Sicherheit werden essenziell für zuverlässige, skalierbare Cloud-Umgebungen.

3 AWS Cloud Computing Stellenausschreibungen in Deutschland

Die Nachfrage nach Cloud Engineers wächst weiter. Mit Stand August 2026 listet Glassdoor mehr als 531 offene Stellen für AWS Cloud Engineer in Deutschland. Mit Stand August 2026 gibt es bei StepStone mehr als 6.000 offene Stellen im Bereich Cloud Engineering, was die starke Nachfrage nach Cloud-Expertise unterstreicht.

Jobs auf StepStone	Stellenausschreibungen (August 2026)
Cloud Engineer	1,667
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Solution Architect	704

LinkedIn News



#1 KI-Kompetenz

Schlüsselkompetenzen: Generative KI, LLMs, Prompt Engineering, Chatbot-Entwicklung, Transformer, CNNs und RAG-Techniken (Verknüpfung von LLMs mit externen Daten).

Relevanz: Wissen über KI-Anwendung wird heute in fast allen Berufen benötigt, auch außerhalb der Tech-Branche.

💡 Steigere deine Produktivität mit KI-Agenten.

#3 Cloud Infrastructure

Wichtige Kompetenzen: Cloud-Umgebungen (Design, Deployment, Skalierung), Cloud-Dienste (z. B. AWS und Azure), Infrastructure as Code (IaC), Containerisierung und Linux.

Relevanz: Da Europa europäische und deutsche Cloud-Infrastruktur priorisiert, benötigen Organisationen Fachkräfte, die moderne Cloud-Umgebungen verwalten, plattformübergreifend arbeiten und Infrastruktur mit IaC automatisieren können.

Sources & References

[LinkedIn Skills im Trend 2026](#)
[AWS Economic Impact Study 2026](#)
[Bitkom press release](#)