FREE CERTIFICATIONS · @CHALKESAHIL

24 free certifications for developers, verified

This list is for students and early-career developers who want free proof of skills for a resume. Every item was checked on its official page on 28 Nov 2026, and on that day both the course and the certificate or badge were free. Terms can change, so open the link and confirm before you start.

How to use this PDF

1. Pick the section closest to the job you want and finish two items there before moving on.
2. Open the official link first and confirm it is still free, since providers change their terms.
3. Use the same email for every account so your certificates and badges stay easy to find.
4. Add each one to LinkedIn under Licenses and certifications the day you earn it.
5. In interviews, talk about what you built during the course, not just the certificate name.

INSIDE

01 Cloud and Linux
2 certifications

02 AI and ML
4 certifications

03 Data analysis
4 certifications

04 Web development
3 certifications

05 Programming
4 certifications

06 Cybersecurity
2 certifications

07 Networking and DevOps
2 certifications

08 Databases
3 certifications

SECTION 01 / 08

Cloud and Linux

Cloud jobs start with two things: knowing what cloud services do and being comfortable on a Linux server, because most cloud machines run Linux. These two free options cover both without asking for a credit card.

01 AWS Educate digital badges

Easy

AWS Educate, Amazon's free cloud learning programme for students and beginners, with self-paced courses, labs and badges.

AWS Educate teaches cloud basics through self-paced videos and free hands-on labs, so you practise inside real AWS services instead of only reading about them. The official page says it is completely free, needs no credit card, and is open to anyone regardless of education or experience. Learners as young as 13 can sign up with just an email address. Topics change over time, so browse the catalogue after you sign in and pick an introductory cloud course first. No prior cloud knowledge is needed. Completion is proved by a shareable digital badge that you can post on your profile. Hours depend on the course you choose, and the page does not give one number.

> **Sample answer**
> https://aws.amazon.com/education/awseducate/

> **Interview tip.** Catch: this is a learning badge, not the paid AWS Certified Cloud Practitioner exam, so list it as a badge, not an AWS certification.

02 Linux Essentials

Medium

Cisco Networking Academy, a free self-paced course on using and managing Linux from the command line.

Linux Essentials teaches the command line: moving around the file system, working with files and folders, permissions, users, and basic scripting. These are the same skills you use the moment you log in to a cloud server over SSH, the secure remote login tool. The official page lists it as free, self-paced and about 70 hours long, so plan it over a few weeks. You need a free Networking Academy account and no earlier Linux experience. Finishing the course earns a digital badge, which is what proves completion. The page also lists the badges you can earn before you begin, so you can check the reward up front.

> **Sample answer**
> https://www.netacad.com/courses/linux-essentials

> **Interview tip.** On a resume, pair it with one small project, such as a shell script that backs up a folder, so the badge has proof behind it.

Test yourself

1. Write down three things you can do on a Linux server today that you could not do before these courses.
2. Explain in two sentences why most cloud servers run Linux.

SECTION 02 / 08

AI and ML

Recruiters see a lot of AI certificates, so pick ones where you actually write code. These four make you train models, check them for fairness and build an agent, all free.

03 Intro to Machine Learning

Easy

Kaggle Learn, a short free course where you build your first machine learning models in Python.

You learn how a model learns from data, how to explore a dataset, how to build a decision tree model, and how to check it on data it has not seen, called validation. It then covers underfitting and overfitting, which is when a model is too simple or memorises the training data, and finishes with random forests and a Kaggle competition. The official page estimates 3 hours to earn the certificate and says it is no cost, like all Kaggle Learn courses. It builds on Kaggle's Python course, so basic Python is the prerequisite. Completing the lessons and their exercises earns a Kaggle course certificate.

> **Sample answer**
> https://www.kaggle.com/learn/intro-to-machine-learning

> **Interview tip.** In interviews, explain overfitting in your own words; that tells the interviewer more than the certificate does.

04 Intro to Deep Learning

Easy

Kaggle Learn, a free course on building and training neural networks with TensorFlow and Keras.

A neural network is a model made of layers of simple units that learn patterns from data. This course shows you how to build one with Keras, the easy interface on top of TensorFlow, train it with stochastic gradient descent, which nudges the weights step by step to reduce error, and use techniques such as dropout to stop overfitting. You work on structured, table-style data. The official page estimates 4 hours to earn the certificate and says it is no cost. You should be comfortable with Python, and Intro to Machine Learning first makes it much easier. Finishing the lessons and exercises earns a Kaggle course certificate.

> **Sample answer**
> https://www.kaggle.com/learn/intro-to-deep-learning

> **Interview tip.** Put it on LinkedIn together with the notebook you built, so a recruiter can open real code.

05 Intro to AI Ethics

Easy

Kaggle Learn, a free course on designing AI systems that are fair, transparent and built around people.

The course covers human-centred design for AI, how bias creeps into a model at any stage, four different ways to define fairness, and model cards, which are short documents that explain what a model does and where it fails. The exercises use small real examples, such as a model that flags toxic text and one that judges credit card applications. The official page estimates 4 hours to earn the certificate and says it is no cost. Basic Python helps with the exercises. Completing the lessons earns a Kaggle course certificate.

> **Sample answer**
> https://www.kaggle.com/learn/intro-to-ai-ethics

> **Interview tip.** Good talking point for product and AI roles: be ready to explain one way bias got into a model and how you would catch it.

06 AI Agents Course certificate

Medium

Hugging Face, a free course on understanding, using and building AI agents, with two free certificates.

An AI agent is a program where a language model decides which tools to call to finish a task. The course goes from what agents are to building and deploying your own. The official page says the certification process is completely free and has no deadline. You can earn a fundamentals certificate by completing Unit 1, or a certificate of completion by finishing Unit 1, one of the use case assignments and the final challenge. Each chapter is designed for one week at about 3 to 4 hours of work. You need a free Hugging Face account to push and load models and create Spaces, which are small hosted apps.

> **Sample answer**
> https://huggingface.co/learn/agents-course/unit0/introduction

> **Interview tip.** Go for the full certificate of completion, not only the fundamentals one; the final challenge is what you can show in an interview.

Test yourself

1. What is the difference between a model that underfits and one that overfits?
2. Describe one tool an AI agent might call and why it would need it.

SECTION 03 / 08

Data analysis

Data roles test whether you can clean, shape and explain data. These four free options cover pandas, charts and the basic analysis workflow, and each ends in a certificate or badge.

07 Pandas

Easy

Kaggle Learn, a free hands-on course on pandas, the main Python library for working with tables of data.

You learn to read and write data files, select rows and columns, use summary functions and maps to transform values, group and sort data, handle data types and missing values, and rename and combine tables. Every lesson has a short coding exercise, so you practise each skill right after reading about it. The official page estimates 4 hours to earn the certificate and says it is no cost. It builds on Kaggle's Python course, so you should know basic Python first. Completing the lessons and exercises earns a Kaggle course certificate.

> **Sample answer**
> https://www.kaggle.com/learn/pandas

> **Interview tip.** Interviewers often ask you to group data live; practise groupby until you can write it without looking.

08 Data Visualization

Easy

Kaggle Learn, a free course on making charts in Python with the seaborn library.

You learn line charts for trends over time, bar charts and heatmaps to compare groups, scatter plots to see how two values relate, and histograms and density plots to see how values are spread. A lesson on choosing the right chart type and styling it is followed by a final project and a guide to creating your own notebooks. The official page estimates 4 hours to earn the certificate and says it is no cost. Very little Python is needed to start. Completing the lessons and exercises earns a Kaggle course certificate.

> **Sample answer**
> https://www.kaggle.com/learn/data-visualization

> **Interview tip.** Add your final project notebook link next to the certificate; one clear chart says more than the course name.

09 Data Analytics Essentials

Medium

Cisco Networking Academy, a free self-paced introduction to data analytics.

The course introduces the work of a data analyst: collecting data, cleaning it, analysing it and presenting what it shows, with common beginner tools. It suits someone who wants an analyst role but has not done structured analysis before. The official page lists the course as free, self-paced and about 30 hours long. You need a free Networking Academy account, and no earlier analytics background is expected. Finishing the course earns a digital badge, and the page shows the badges you can earn before you enrol.

> **Sample answer**
> https://www.netacad.com/courses/data-analytics-essentials

> **Interview tip.** List it under Licenses and certifications on LinkedIn as a badge from Cisco Networking Academy, with the month you earned it.

10 Intro to Data Science

Easy

Cisco Networking Academy, a short free course on what data science is and how it is used.

This is a gentle starting point. It explains what data science means, how organisations use data to make decisions, and what kinds of roles exist in the field, so you can decide whether to go deeper. It is mostly concepts rather than heavy coding. The official page lists it as free, self-paced and about 6 hours long. You need a free Networking Academy account and no prerequisites. Completing the course earns a digital badge, which the page lists before you start.

> **Sample answer**
> https://www.netacad.com/courses/introduction-data-science

> **Interview tip.** Catch: it is an overview, so pair it with a hands-on course like Kaggle Pandas before calling yourself job ready.

Test yourself

1. How would you handle missing values in a column of ages?
2. Which chart would you use to show sales across 12 months, and why?

SECTION 04 / 08

Web development

Web development certificates matter only when they come with projects. These three make you build real pages and programs before you get anything.

11 Responsive Web Design

Hard

freeCodeCamp, a free verified certification on HTML and CSS for building modern web pages.

Responsive design means a page that works on any screen size, from phone to desktop. The course teaches HTML and CSS fundamentals, modern layout, design, accessibility, which means making pages usable for people with disabilities, and responsive techniques, through many small workshops and labs. To earn it you complete the five required certification projects, then pass the certification exam. freeCodeCamp says the exam runs in a desktop app you open at your own convenience, not at a test centre, and that the certification itself is free and verified, with a verification link and a QR code. The coursework is long; freeCodeCamp describes each new certification as about 300 hours. You need a free account and no prior coding.

> **Sample answer**
> https://www.freecodecamp.org/learn/responsive-web-design-v9

Interview tip. Host your five projects on GitHub Pages and link them under the certificate on your resume.

12 JavaScript Certification

Hard

freeCodeCamp, a free verified certification on core JavaScript for the web.

You learn variables, functions, objects, arrays and control flow, then how to change a web page with the DOM, which is the browser's model of the page, handle user events, and use asynchronous programming, functional programming and accessibility practices. To earn it you complete the five required certification projects, then pass the certification exam. freeCodeCamp says the exam runs in a desktop app you open at your own convenience, not at a test centre, and that the certification itself is free and verified, with a verification link and a QR code. Expect a long path; freeCodeCamp describes each new certification as about 300 hours of coursework. A free account is enough, and freeCodeCamp recommends doing Responsive Web Design first.

> **Sample answer**
> https://www.freecodecamp.org/learn/javascript-v9

Interview tip. Interviewers will ask about async code; be ready to explain promises and async/await using one of your projects.

13 JavaScript Essentials 1

Medium

Cisco Networking Academy, a free self-paced course on JavaScript programming basics.

This course teaches JavaScript as a programming language: variables, data types, operators, decisions with if statements, loops, functions and basic error handling. It focuses on the language itself more than on web pages, which makes it a good base before frameworks such as React. The official page lists it as free, self-paced and about 40 hours long. You need a free Networking Academy account, and no earlier programming is required. Completing the course earns a digital badge that the page lists before you enrol.

> **Sample answer**
> https://www.netacad.com/courses/javascript-essentials-1

> **Interview tip.** Pair it with the freeCodeCamp JavaScript projects; the badge shows study, the projects show you can build.

Test yourself

1. What changes in a page layout when you make it responsive?
2. Explain what the DOM is to someone who has never coded.

SECTION 05 / 08

Programming

Most placement tests are coding tests, so a solid base in one language pays off everywhere. These four free options cover Python and C# from beginner level.

14 Python (Kaggle Learn)

Easy

Kaggle Learn, a short free Python course aimed at people heading into data science.

You learn Python syntax, variables and numbers, functions and getting help, booleans and conditionals, lists, loops and list comprehensions, strings and dictionaries, and how to work with external libraries. Each lesson has an exercise that runs in your browser, so you do not install anything. The official page estimates 5 hours to earn the certificate and says it is no cost. If you have never coded, Kaggle suggests its Intro to Programming course first. Completing the lessons and exercises earns a Kaggle course certificate.

> **Sample answer**
> https://www.kaggle.com/learn/python

> **Interview tip.** Quick win: finish this in a weekend, then use it as the base for Pandas and Intro to Machine Learning.

15 Python Certification

Hard

freeCodeCamp, a free verified certification on Python programming fundamentals.

The course teaches Python basics, loops and sequences, dictionaries and sets, error handling, classes and objects, and object-oriented programming, which means organising code around objects that hold data and behaviour. You build workshops such as a bill splitter and a Caesar cipher along the way. To earn it you complete the five required certification projects, then pass the certification exam. freeCodeCamp says the exam runs in a desktop app you open at your own convenience, not at a test centre, and that the certification itself is free and verified, with a verification link and a QR code. freeCodeCamp describes each new certification as about 300 hours of coursework. A free account is all you need, and no earlier coding is assumed.

> **Sample answer**
> https://www.freecodecamp.org/learn/python-v9

> **Interview tip.** Mention one certification project, such as the budget app, and explain the class design you chose.

16 Python Essentials 1

Medium

Cisco Networking Academy, a free self-paced Python course built with the OpenEDG Python Institute.

You learn to design, write and debug simple programs, think through problems step by step, and follow good programming practice in Python. The official page lists the course as free, self-paced and about 30 hours long, and says no prior experience is needed. You need a free Networking Academy account. Finishing the course earns a digital badge. The page also says the course prepares you for the PCEP, Certified Entry-Level Python Programmer, exam from the OpenEDG Python Institute, but that exam is a separate step and is not part of the free badge.

> **Sample answer**
> https://www.netacad.com/courses/python-essentials-1

> **Interview tip.** Catch: the free proof is the Cisco badge; do not list PCEP unless you actually take and pass that separate exam.

17 Foundational C# with Microsoft

Hard

freeCodeCamp with Microsoft, a free certification on C# programming basics.

C# is the main language for .NET, Microsoft's platform for web apps, desktop software and games. You learn variables, data types, decision logic, loops, methods, debugging and the basics of object-oriented programming. The lessons live on Microsoft Learn, where each section ends in a trophy. You verify each trophy on freeCodeCamp, and once all are verified you qualify for the certification exam. The freeCodeCamp page lists it as the Free Foundational C# with Microsoft Certification. A free freeCodeCamp account and a free Microsoft Learn account are the prerequisites.

> **Sample answer**
> https://www.freecodecamp.org/learn/foundational-c-sharp-with-microsoft

> **Interview tip.** Catch: link your Microsoft Learn profile to freeCodeCamp early, because the trophies must be verified before the exam opens.

Test yourself

1. What is the difference between a list and a dictionary in Python?
2. Explain object-oriented programming using a bank account as the example.

SECTION 06 / 08

Cybersecurity

Security roles want proof that you understand threats and how to defend devices. Both options here are free Cisco courses that end in a badge.

18 Introduction to Cybersecurity

Easy

Cisco Networking Academy, a short free course on the basics of staying safe online and how attacks work.

You learn what cybersecurity is, common threats such as malware and phishing, which is tricking people into giving away passwords or data, how to protect your own devices and data, and what careers exist in the field. It is a good first step before deeper security courses. The official page lists it as free, self-paced and about 6 hours long. You need a free Networking Academy account and no prerequisites. Completing the course earns a digital badge, listed on the page before you start.

> **Sample answer**
> https://www.netacad.com/courses/introduction-to-cybersecurity

> **Interview tip.** Good for any developer, not only security roles; mention it when an interviewer asks how you write secure code.

19 Endpoint Security

Medium

Cisco Networking Academy, a free course on protecting computers and devices, aimed at cybersecurity technician roles.

An endpoint is any device that connects to a network, such as a laptop, phone or server. This course looks at how those devices get attacked and the everyday work of keeping them protected, which is a core part of a security team's job.The official page frames it as a step towards becoming a cybersecurity technician and lists it as free, self-paced and about 27 hours long. You need a free Networking Academy account, and Introduction to Cybersecurity first makes it easier. Completing the course earns a digital badge shown on the page.

> **Sample answer**
> https://www.netacad.com/courses/endpoint-security

> **Interview tip.** Take Introduction to Cybersecurity first, then list both badges together to show a path, not a one-off.

Test yourself

1. How would you explain phishing to a non-technical friend?
2. Name three ways to protect a laptop that connects to office Wi-Fi.

Networking and DevOps

Every backend and DevOps role assumes you know how computers talk to each other. These two free Cisco courses build that base from zero.

20 Networking Basics

Medium

Cisco Networking Academy, a free self-paced course on how computer networks work.

You learn how devices connect and communicate, what IP addresses are, how data moves across a network, and how home and small office networks are set up. These ideas come up in backend and DevOps interviews, for example when you are asked what happens when you type a URL. The official page lists it as free, self-paced and about 22 hours long. You need a free Networking Academy account and no earlier networking knowledge. Finishing the course earns a digital badge, listed on the page before you start.

> **Sample answer**
> https://www.netacad.com/courses/networking-basics

> **Interview tip.** Use it to answer the classic interview question of what happens when you open a website, step by step.

21 Networking Devices and Config

Medium

Cisco Networking Academy, a free course on network devices and setting them up, the next step after Networking Basics.

The full course name is Networking Devices and Initial Configuration. It covers the devices that make networks work, such as switches and routers, how they forward traffic, and how to do their first setup. This gives you the practical side of networking that DevOps and infrastructure teams use every day. The official page lists it as free, self-paced and about 22 hours long. You need a free Networking Academy account, and Networking Basics first is the natural order. Completing the course earns a digital badge shown on the page.

> **Sample answer**
> https://www.netacad.com/courses/networking-devices-and-initial-configuration

> **Interview tip.** Write the full course name on your resume, since the short title on this list is trimmed to fit.

Test yourself

1. What is the difference between a switch and a router?
2. Walk through what happens when you type a URL and press enter.

SECTION 08 / 08

Databases

Almost every backend and data interview has a SQL round. These three free options take you from your first query to window functions and database design.

22 Intro to SQL

Easy

Kaggle Learn, a free course on writing SQL queries, using Google BigQuery.

SQL is the language used to ask questions of a database. You learn the BigQuery workflow for big datasets, then SELECT, FROM and WHERE to pick data, GROUP BY, HAVING and COUNT to summarise it, ORDER BY to sort it, AS and WITH to keep queries readable, and joins to combine tables. Each lesson has an exercise on real public data. The official page estimates 3 hours to earn the certificate and says it is no cost. It builds on Kaggle's Python course, since the exercises run inside Python notebooks. Completing the lessons earns a Kaggle course certificate.

> **Sample answer**
> https://www.kaggle.com/learn/intro-to-sql

> **Interview tip.** Interviewers love the difference between WHERE and HAVING; make sure you can explain it with an example.

23 Advanced SQL

Medium

Kaggle Learn, a free follow-up course that takes your SQL past the basics.

Once basic queries feel easy, this course moves on to harder topics such as different kinds of joins and unions, analytic functions, also called window functions, which calculate values across related rows, working with nested and repeated data, and writing queries that run efficiently. These are common in data analyst and backend SQL rounds. The official page estimates 4 hours to earn the certificate and says it is no cost. Finish Intro to SQL first. Completing the lessons and exercises earns a Kaggle course certificate.

> **Sample answer**
> https://www.kaggle.com/learn/advanced-sql

> **Interview tip.** Practise one window function, like a running total, until you can write it from memory for interviews.

24 Relational Databases

Hard

freeCodeCamp, a free verified certification on relational databases.

A relational database stores data in tables that link to each other through keys. This certification teaches the fundamentals of relational databases, starting with the tools a developer uses, such as code editors, and working up to building and querying your own databases. To earn it you complete the five required certification projects, then pass the certification exam. freeCodeCamp says the exam runs in a desktop app you open at your own convenience, not at a test centre, and that the certification itself is free and verified, with a verification link and a QR code. freeCodeCamp describes each new certification as about 300 hours of coursework. You need a free account; doing the earlier freeCodeCamp certifications first helps but the page does not require it.

> **Sample answer**
> https://www.freecodecamp.org/learn/relational-databases-v9

> **Interview tip.** Show one database you designed, with its tables and keys, when an interviewer asks about your SQL experience.

Test yourself

1. Write a query that finds the top three customers by total order value.
2. Explain primary keys and foreign keys using a students and courses example.