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# Google IT Automation with Python Professional Certificate

Learn in-demand skills like Python, Git, and IT automation to advance your career



Instructor: Google Career Certificates

**Top Instructor**

**Enrolled**

Already enrolled

**578,112** already enrolled

### Professional Certificate - 6 course series

Earn a career credential that demonstrates your expertise

4.8 ★ (32,492 reviews)

## Beginner level

No previous experience necessary

**6 months at 10 hours a week**

### Flexible schedule

Learn at your own pace

[View all courses](#)

## What you'll learn

- ✓ Automate tasks by writing Python scripts
- ✓ Manage IT resources at scale, both for physical machines and virtual machines in the cloud
- ✓ Use Git and GitHub for version control
- ✓ Analyze real-world IT problems and implement the appropriate strategies to solve those problems

### Skills you'll gain

- Using Version Control Troubleshooting & Debugging Python Programming Configuration Management Automation

### Details to know



## Shareable Certificate

Add to your LinkedIn profile



English

Subtitles: English, Arabic, +12 more




**75%** of certificate graduates report positive career outcome<sup>1</sup>


## Advance your career with in-demand skills

- Receive professional-level training from Google
- Demonstrate your technical proficiency
- Earn an employer-recognized certificate from Google


**Get exclusive access to career resources upon completion**



**Resume review**  
Improve your resume and LinkedIn with personalized feedback








**Interview prep**  
Practice your skills with interactive tools and mock interviews



**Career support**  
Plan your career move with Coursera's job search guide

Enrolled

Connect with 150+ U.S. hiring organizations in Google's Employer Consortium



<sup>1</sup>Positive career outcome (e.g., new job, promotion, or raise) within six months of completion. Based on program graduate survey, United States 2022.

## Professional Certificate - 6 course series

This beginner-level, six-course certificate, developed by Google, is designed to provide IT professionals with in-demand skills -- including Python, Git, and IT automation -- that can help you advance your career.

Knowing how to write code to solve problems and automate solutions is a crucial skill for anybody in IT. Python, in particular, is now the most in-demand programming language by employers.

This program builds on your IT foundations to help you take your career to the next level. It's designed to teach you how to program with Python and how to use Python to automate common system administration tasks. You'll also learn to use Git and GitHub, troubleshoot and debug complex problems, and apply automation at scale by using configuration management and the Cloud.

This certificate can be completed in about 6 months and is designed to prepare you for a variety of roles in IT, like more advanced IT Support Specialist or Junior Systems Administrator positions. Upon completion, you can share your information with potential employers, like Deloitte, Target, Verizon, and of course, Google.

We recommend that you have Python installed on your machine. For some courses, you’ll need a computer where you can install Git or ask your administrator to install it for you.

If you’d like to learn the fundamentals of IT support, check out the beginner level Google IT Support Professional Certificate.

Check out all Google Career Certificates here.

Applied Learning Project

Learn how to program with Python with no previous knowledge of coding required and you’ll use Python to automate common system administration tasks

Learn to use Git and GitHub, to troubleshoot and debug complex problems

Apply automation at scale by using configuration management and the Cloud

Practice your technical skills with hands-on projects including a capstone project where you’ll use your new knowledge to solve a real-world IT problem

Read less

**Crash Course on Python**

Course 1 • 26 hours • **4.8** ★ (31,230 ratings)

▼

**Using Python to Interact with the Operating System**

Course 2 • 25 hours • **4.7** ★ (5,480 ratings)

▼

**Introduction to Git and GitHub**

Course 3 • 15 hours • **4.8** ★ (6,686 ratings)

▼

**Troubleshooting and Debugging Techniques**

Course 4 • 16 hours • **4.6** ★ (2,633 ratings)

▼

**Configuration Management and the Cloud**

Course 5 • 14 hours • **4.8** ★ (2,270 ratings)


▼

**Automating Real-World Tasks with Python**

Course 6 • 17 hours • **4.8** ★ (2,174 ratings)

▼

**Instructor**




Top Instructor

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Google

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**Offered by**



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## Earn a career certificate

Add this credential to your LinkedIn profile, resume, or CV

https://www.coursera.org/professional-certificates/google-it-automation

2/5

## Why people choose Coursera for their career

◀

Felipe M.

Learner since 2018

"To be able to take courses at my own pace and rhythm has been an amazing experience. I can learn whenever it fits my schedule and mood."


● ○

Jennifer J.

Learner since 2020

"I directly applied the concepts and skills I learned from my courses to an exciting new project at work."


▶



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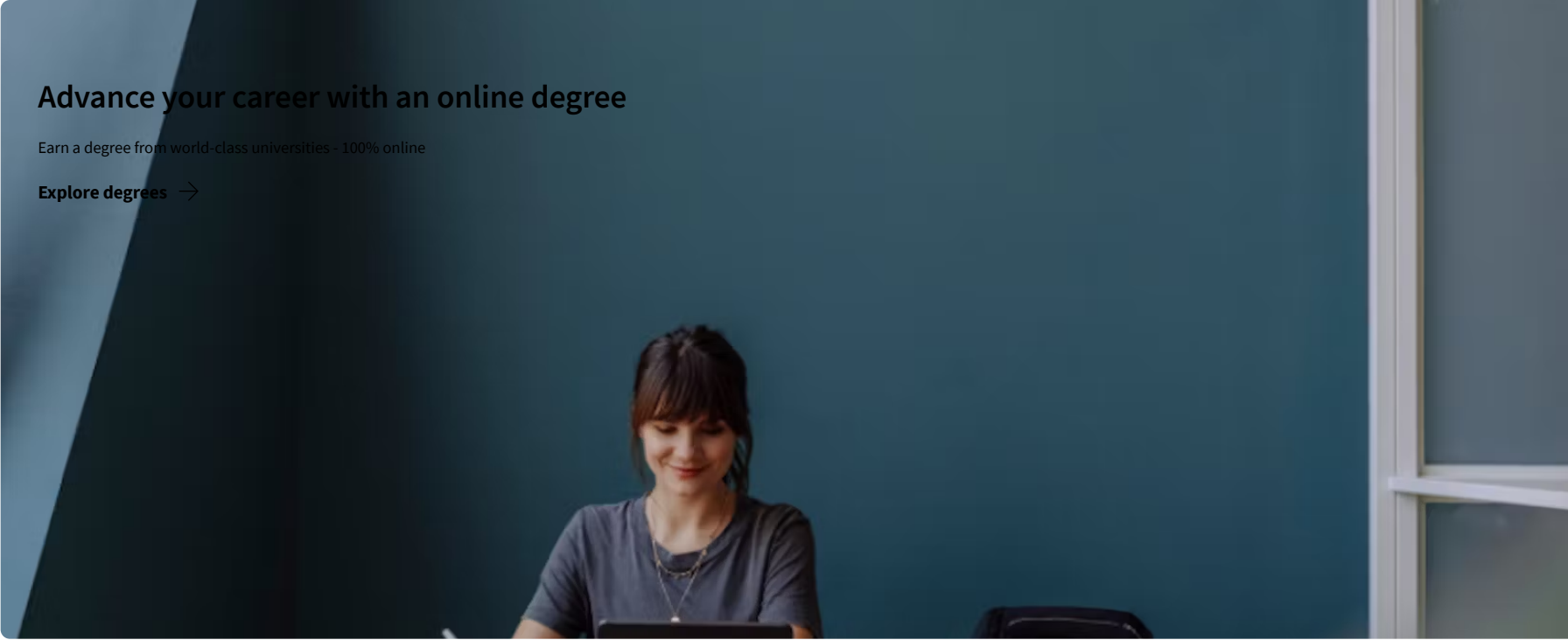
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## Frequently asked questions

▼

What is the refund policy?

If you subscribed, you get a 7-day free trial during which you can cancel at no penalty. After that, we don't give refunds, but you can cancel your subscription at any time. [See our full refund policy.](#)

▼

Can I just enroll in a single course?

Yes! To get started, click the course card that interests you and enroll. You can enroll and complete the course to earn a shareable certificate, or you can audit it to view the course materials for free. When you subscribe to a course that is part of a Certificate, you're automatically subscribed to the full Certificate. Visit your learner dashboard to track your progress.

▼

Is this course really 100% online? Do I need to attend any classes in person?

This course is completely online, so there's no need to show up to a classroom in person. You can access your lectures, readings and assignments anytime and anywhere via the web or your mobile device.

▼

Why is learning Python important?

The world of IT is changing rapidly and knowing how to write code to solve problems and automate solutions is a crucial skill for anybody in IT. Python, in particular, is now the [most in-demand programming language by employers](#). More than 530,000 U.S. job postings currently require Python proficiency, including 75,000 entry-level jobs, according to Burning Glass. The Google IT Automation with Python Professional Certificate will equip you with the latest job-ready skills to help you take your career to the next level.

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How long does it take to complete the Certificate?

The Google IT Automation with Python Professional Certificate can be completed in about 6 months.



What background knowledge is necessary?

This course requires no previous knowledge of programming. Familiarity with basic IT concepts, like operating systems, files and processes, networking and data management will be required in further courses. For learners with no IT background at all, we recommend taking the [Google IT Support Professional Certificate](#).

Do I need to take the courses in a specific order?

We highly recommend taking the courses in the order presented, as the content builds on information from earlier lessons.

What will I be able to do upon completing the Certificate?

This new beginner-level, six-course certificate, developed by Google, is designed to provide IT professionals with in-demand skills -- including Python, Git, and IT automation -- that can help you advance your career. The Google IT Automation with Python Professional Certificate can help prepare you for a variety of roles in IT, like more advanced IT Support Specialist or Junior Systems Administrator positions.

Upon completion of the program, you'll get access to career resources that can help you prepare your resume and practice interviewing. You'll also have the option to share your information with potential employers, like Walmart, Sprint, Hulu, Bank of America, Google (of course!), and more.

The Google IT Automation with Python Professional Certificate is designed to teach you to:

- Understand what Python is and why it's relevant to IT (different career pathways)
- Write scripts in Python
- Understand the role of Automation in IT
- Manage files and processes with Python
- Setup your own developer environment in Python
- Understand why version control is a fundamental tool for coding and collaboration
- Employ Git for version control
- Use and interact with GitHub
- Implement debugging techniques
- Manage scarce resources in your IT systems
- Manage virtual machines and resources in the cloud
- Use Python libraries to automate different processes
- Analyze real-world IT problems and implement the appropriate strategies to solve those problems

What hardware or software do I need to complete the Certificate?

The material requires a high-speed Internet connection, a modern web browser, and a desktop or laptop computer to complete the Qwiklabs/graded assessments. For the best experience, we strongly recommend that you have administrative privileges to modify OS permissions, that you can download your own editor, and that your machine is running a modern OS.

To really get the most out of this program, we strongly recommend that you have Python installed on your machine. For some courses, you'll need a computer where you can install Git or ask your administrator to install it for you.

Is the Google IT Automation with Python Professional Certificate licensed?

Yes, the content in the Google IT Automation with Python Professional Certificate is licensed under a Creative Commons Attribution 4.0 International License.

How much does this certificate cost?

In the U.S. and Canada, Coursera charges \$49 per month after the initial 7-day free trial period. The Google IT Automation with Python Certificate can be completed in less than 6 months at under 10 hours per week of part-time study, so most learners can complete the certificate for less than \$300 USD. In other countries where Google Career Certificates are available, your cost may be lower.



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