










Get started with the course

-  **Video:** Introduction to Course 4
5 min
-  **Reading:** Helpful resources and tips
20 min
-  **Reading:** Course 4 overview
20 min
-  **Video:** Welcome to week 1
1 min
-  **Video:** The role of statistics in data science
3 min
-  **Video:** Statistics in action: A/B testing
6 min
-  **Video:** Descriptive statistics versus inferential statistics
4 min
-  **Discussion Prompt:** Share your initial thoughts on statistics
10 min
-  **Practice Quiz:** Test your knowledge: The role of statistics in data science
3 questions

Descriptive statistics

Calculate statistics with Python



Review: Introduction to statistics

Helpful resources and tips

As a learner, you can choose to complete one or multiple courses in this program. However, to obtain the Google Advanced Data Analytics Certificate, you must complete all of the courses. This reading describes what is required to obtain a certificate and best practices for you to have a good learning experience on Coursera.






Course completion to obtain a certificate

To submit graded assignments and be eligible to receive a Google Advanced Data Analytics Certificate, you must:

- Pay the [course certificate fee](#)  or apply and be approved for a Coursera [scholarship](#) .
- Pass all graded quizzes in the certificate with a score of at least 80%. Each graded quiz in a course is part of a cumulative grade for that course.








Healthy habits for course completion

Here is a list of best practices that will help you complete the courses in the program in a timely manner:

- Plan your time:** Setting regular study times and following them each week can help you make learning a part of your routine. Use a calendar or timetable to create a schedule, and list what you plan to do each day in order to set achievable goals. Find a space that allows you to focus when you watch the videos, review the readings, and complete the activities.
- Work at your own pace:** Everyone learns differently, so this program has been designed to let you work at your own pace. Although your personalized deadlines start when you enroll, feel free to progress through the program at the speed that works best for you. There is no penalty for late assignments; to earn your certificate, all you have to do is complete all of the work. You can extend your deadlines at any time by going to **Overview** in the navigation panel and selecting **Switch Sessions**. If you have already missed previous deadlines, select **Reset my deadlines** instead.
- Be curious:** If you find an idea that gets you excited, act on it! Ask questions, search for more details online, explore the links that interest you, and take notes on your discoveries. The steps you take to support your learning along the way will advance your knowledge, create more opportunities in this high-growth field, and help you qualify for jobs.
- Take notes:** Notes will help you remember important information in the future, especially as you're preparing to enter a new job field. In addition, taking notes is an effective way to make connections between topics and gain a better understanding of those topics.
- Review exemplars:** Exemplars are completed assignments that fully meet an activity's criteria. Many activities in this program have exemplars for you to compare to your own work. Although there are often many ways to complete an assignment, exemplars offer you guidance and inspiration about how to complete the activity.
- Chat (responsibly) with other learners:** If you have a question, chances are, you're not alone. Use the [discussion forums](#)  to ask for help from other learners taking this program. You can also visit Coursera's [Global Online Community](#) . Other important things to know while learning with others can be found in the [Coursera Honor Code](#)  and [Code of Conduct](#) .
- Update your profile:** Consider [updating your profile](#)  on Coursera to include your photo, career goals, and more. When other learners find you in the discussion forums, they can click on your name to access your profile and get to know you better.

Documents, spreadsheets, presentations, and labs for course activities


To complete certain activities in the program, you will need to use digital documents, spreadsheets, presentations, and/or labs. Data analytics professionals use these software applications to collaborate within their teams and organizations. If you need more information about using a particular tool, refer to these resources:


- [Microsoft Word: Help and learning](#) : Microsoft Support page for Word
- [Google Docs](#) : Help Center page for Google Docs
- [Microsoft Excel: Help and learning](#) : Microsoft Support page for Excel
- [Google Sheets](#) : Help Center page for Google Sheets
- [Microsoft PowerPoint: Help and learning](#) : Microsoft Support page for PowerPoint
- [How to use Google Slides](#) : Help Center page for Google Slides
- [Common problems with labs](#) : Troubleshooting help for Qwiklabs activities

Weekly, course, and certificate glossaries

This program covers a lot of terms and concepts, some of which you may already know and some of which may be unfamiliar to you. To review terms and help you prepare for graded quizzes, refer to the following glossaries:

- Weekly glossaries:** At the end of each week's content, you can review a glossary of terms from that week. Each week's glossary builds upon the terms from the previous weeks in that course. The weekly glossaries are not downloadable; however, all of the terms and definitions are included in the course and certificate glossaries, which are downloadable.
- Course glossaries:** At the end of each course, you can access and download a glossary that covers all of the terms in that course.
- Certificate glossary:** The certificate glossary includes all of the terms in the entire certificate program and is a helpful resource that you can reference throughout the program or at any time in the future.

You can access and download the certificate glossaries and save them on your computer. You can always find the course and certificate glossaries using the course's [Resources](#)  tab. To access the **Advanced Data Analytics Certificate glossary**, click the following link and select *Use Template*.



- Link to the glossary: [Advanced Data Analytics Certificate glossary](#) 

OR

- If you don't have a Google account, you can download the glossary directly from the following attachment.

 **Advanced Data Analytics Certificate glossary**
DOCX File

Data Analytics Certificate glossary


If you completed the original [Google Data Analytics Certificate](#) , you may recognize some overlap with several of the glossary terms in this program. Refer to the Data Analytics Certificate glossary, linked in the [Resources](#)  tab, to review these foundational terms and concepts. The definitions of some terms in the Data Analytics Certificate glossary differ from the definitions of the same terms in this program since the Advanced Data Analytics Certificate builds upon the concepts taught in the previous program.

Course feedback

Providing feedback on videos, readings, and other materials is easy. With the resource open in your browser, you can find the thumbs-up and thumbs-down symbols.

- Click **thumbs-up** for materials you find helpful.
- Click **thumbs-down** for materials that you do not find helpful.

If you want to flag a specific issue with an item, click the flag icon, select a category, and enter an explanation in the text box. This feedback goes back to the course development team and isn't visible to other learners. All feedback received helps to create even better certificate programs in the future.

For technical help, visit the [Learner Help Center](#) .