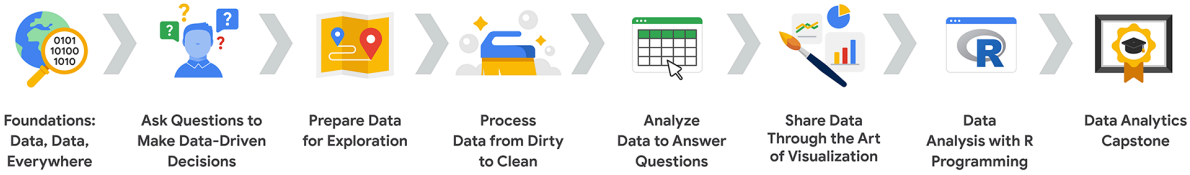
Program description and Course 1 overview: Set your expectations

to the Google Data Analytics Certificate

Every day, the amount of data out there grows and grows. So the ability to interpret it effectively is more important than ever before. Data analytics is becoming one of the fastest-growing and most rewarding career choices in the world.
Currently, there are nearly 500,000 open jobs in data analytics, with a median entry-level salary of $92,000 and a 20% annual growth rate [Source: Lightcast™ US Job Postings (2022: Jan. 1, 2022 - Dec. 31, 2022)]. Companies in all kinds of industries need qualified data analysts to solve problems and help make the best possible business decisions. And once you complete this program, you'll be prepared to make smart, strategic, data-driven recommendations for organizations of all kinds.
Throughout the courses in this program, you'll complete many assignments and projects based on both the practical activities and the day-to-day life of a data analyst. Along the way, you'll learn how to ask the right questions and understand objectives. You'll also discover how to effectively clean and organize large amounts of data to make it ready for high-quality analysis. On top of that, you'll gain experience using all kinds of tools and techniques that will help you recognize patterns and uncover relationships between data points. Further, to help you communicate the results of your analysis, you'll learn how to design visuals and dashboards. There's even an opportunity to create a case study, which you can highlight in your resume to demonstrate what you have learned to potential employers.

Program overview

The program is composed of eight courses:



Course 3: Prepare data for exploration; Course 4: Process data from dirty to clean; Course 5: Analyze data to answer questions; Course 6: Share data through the art of visualization; Course 7: Data analysis with R programming; Course 8: Data analytics capstone project: Complete a case study.

1. **Foundations: Data, Data, Everywhere** (this course)
2. Ask Questions to Make Data-Driven Decisions
3. Prepare Data for Exploration
4. Process Data from Dirty to Clean
5. Analyze Data to Answer Questions
6. Share Data Through the Art of Visualization
7. Data Analysis with R Programming
8. Google Data Analytics Capstone: Complete a Case Study

Foundations: Data, Data, Everywhere is the first course in this program.

Course 1 content

Each course is broken into modules. Here's a quick overview of the skills you'll gain in each of the four Course 1 modules.

Module 1: Introducing data analytics and analytical thinking

Data helps us make decisions in both everyday life and in business. In this part of the course, you'll learn how data analysts use a variety of tools and skills to inform those decisions. You'll also get to know more about this course and the overall program expectations.

Module 2: The wonderful world of data

In this part of the course, you'll learn about the data life cycle and data analysis process. They are both relevant to your work in this program and on the job. You'll also be introduced to applications that help guide data through the data analysis process.

Module 3: Set up your data analytics toolbox

Spreadsheets, query languages, and data visualization tools are all a big part of a data analyst's job. In this part of the course, you'll learn the basic concepts to use them for data analysis. You'll also understand how they work through interesting examples.

Module 4: Become a fair and impactful data professional

In this part of the course, you'll examine different types of businesses and the jobs and tasks that analysts do for them. You'll also learn how a Google Data Analytics Certificate will help you meet many of the requirements for an analyst position with these organizations.

What to expect

Each module includes a series of lessons with many types of learning opportunities. These include:

- **Videos** for instructors to teach new concepts and demonstrate the use of tools
- **In-video questions** that pop up from time to time to help you to check your understanding of key concepts and skills
- **Step-by-step guides** you can use to follow along with instructors as they demonstrate tools
- **Readings** to explore topics more in-depth and build on the concepts from the videos
- **Discussion forums** to share, explore, and reinforce lesson topics
- **Discussion prompts** to promote thinking and engagement in the discussion forums
- **Practice quizzes** to prepare you for graded quizzes
- **Graded quizzes** to measure your progress and give you valuable feedback

This program was designed to let you work at your own pace—your personalized deadlines are just a guide. There is no penalty for late assignments. To earn your certificate, you simply need to complete all of the work.

If you miss two assessment deadlines in a row, or if you miss an assessment deadline by two weeks, you'll see a **Reset deadlines** option on the **Grades** page. Click it to switch to a new course schedule with updated deadlines. You can use this option as many times as you need—it won't remove any progress you've already made in the course, but you may find new course content if the instructor updated the course after you started. If you cancel a subscription and then reactivate it, your deadlines will automatically reset.

Throughout the program, you'll be assessed with graded quizzes and activities. Both are based on the wide variety of learning materials and activities that reinforce the important skills you'll develop. And both can be taken more than once.

Congratulations on choosing to become part of the wonderful world of data analytics!

Helpful resources and tips

As a learner, you can choose to complete one or multiple courses in the Google Data Analytics Certificate program. However, to obtain the certificate, you must complete all eight courses in the program and submit all graded assignments. This reading describes what is required to obtain a certificate, as well as best practices for you to have a successful learning experience on Coursera.

Course completion to obtain a certificate

To receive your official Google Data Analytics Certificate, you must:

- Pass all graded assignments in all eight courses of the certificate program. Each graded assignment is part of a cumulative graded score for the course, and the passing grade for each course is 80%.

AND **one** of the following:

- Pay the course certificate fee,
- Be approved for Coursera Financial Aid, **or**
- Complete the certificate through an educational institution, employer, or agency that's sponsoring your participation.

Evaluate your current data analytics skills

If you're a learner who has some experience with data analytics, you may wish to bypass this certificate program and proceed directly to a more advanced program such as the Google Advanced Data Analytics Certificate or the Google Business Intelligence Certificate. Determine whether you're ready for one of these programs in an upcoming reading, Evaluate your current data analytics skills.

Healthy habits for successfully completing the certificate

Here are some best practices to help you successfully complete the courses in the program:

- **Plan your time:** Setting regular study times and following them each week helps 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.
- **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. If you miss two assessment deadlines in a row, or if you miss an assessment deadline by two weeks, you'll see a **Reset deadlines** option on the **Grades** page. Click it to switch to a new course schedule with updated deadlines. You can use this option as many times as you need.
- **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 will advance your knowledge, create more opportunities for you in this high-growth field, and help you qualify for jobs.

- **Follow along with instructors:** Each instructional video with an onscreen software or programming demonstration has a corresponding step-by-step guide. This guide is a reading that outlines each step an instructor performs in the video. You'll also find additional information in the guide that explains the purpose of the concepts covered, why a step is done a certain way, and tips for using the tool.
- **Take notes:** Notes will help you remember 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 that you can compare to your own work. Although there are often many different ways to complete an assignment, exemplars offer you guidance and inspiration about how to complete the activity.
- **Build your career identity**: Your career identity is the unique value you bring to the workforce. Watch this video to learn about the key components of career identity and write your own career identity statement. Discovering and defining your own career identity makes you better equipped to choose a career path that aligns with your strengths, values, and goals and is more effective in your chosen profession.
- **Study together:** It can be hard to find the time to progress through a Google Career Certificate with all life's distractions. Register for Study Group – live study sessions hosted Monday through Thursday that offer you dedicated time and space to focus on your coursework alongside a community of your peers.
- **Connect with other learners:** If you have a question, chances are, you're not alone. Reach out in the discussion forum to ask for help from other learners in this program. You can also visit Coursera's private Google Data Analytics Community to expand your network, discuss career journeys, and share experiences. Check out the quick start guide.
- **Update your profile:** Update 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 and files 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 tools to collaborate within their teams and organizations. If you need more information about using a particular type of document, 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

Module, 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:

- **Module glossaries:** At the end of each module's content, you can review a glossary of terms from that module. The module 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.

Find the course and certificate glossaries using the course's Resources tab. Access and download the certificate glossaries, then save them on your computer. To access the **Data Analytics Certificate program glossary**, click the following link and select **Use Template**.
Link to the glossary: Google Data Analytics Certificate glossary
OR
If you don't have a Google account, download the glossary directly from the following attachment.
Data Analytics Certificate glossary
DOCX File

Course feedback

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

- Click thumbs-up for materials that are helpful.
- Click thumbs-down for materials that are not helpful.

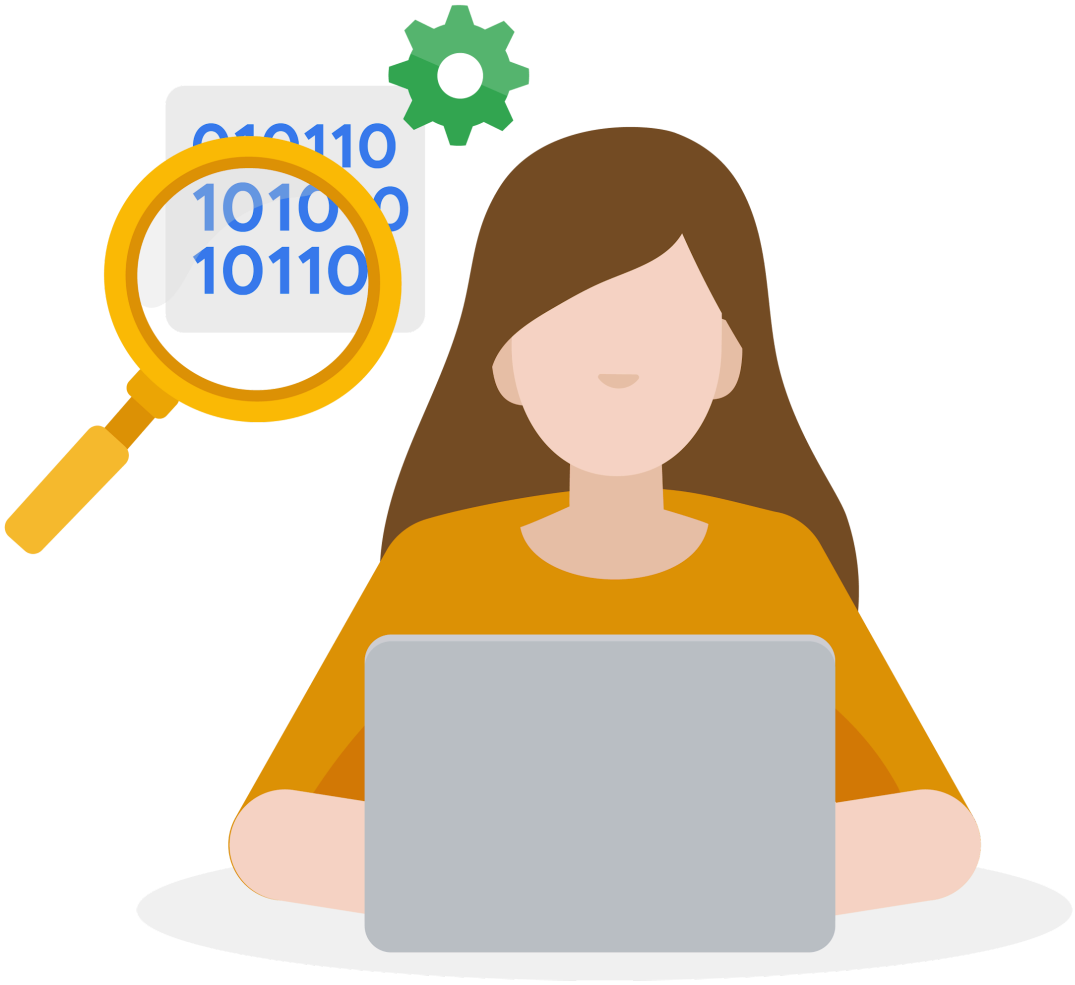
If you want to flag a specific issue with an item, click the flag icon, select a category, and enter an explanation in the text box. This feedback goes to the course development team and isn't visible to other learners. All feedback received helps to create even better certificate programs in the future.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

Evaluate your current data analytics skills

The Google Data Analytics Certificate program is designed for anyone who wants to gain the skills required to become an entry-level data analyst. If that sounds like you, move on to the next item in this course, Commit to completing the program. However, if you already have some experience with data analytics, you may consider earning the Google Advanced Data Analytics Certificate or the Google Business Intelligence Certificate instead. In this reading, you'll learn more about the knowledge and skills you need for one of the advanced certificate programs. You'll also discover more about those programs and why they might be a great next step for you!

Data analytics knowledge and skills

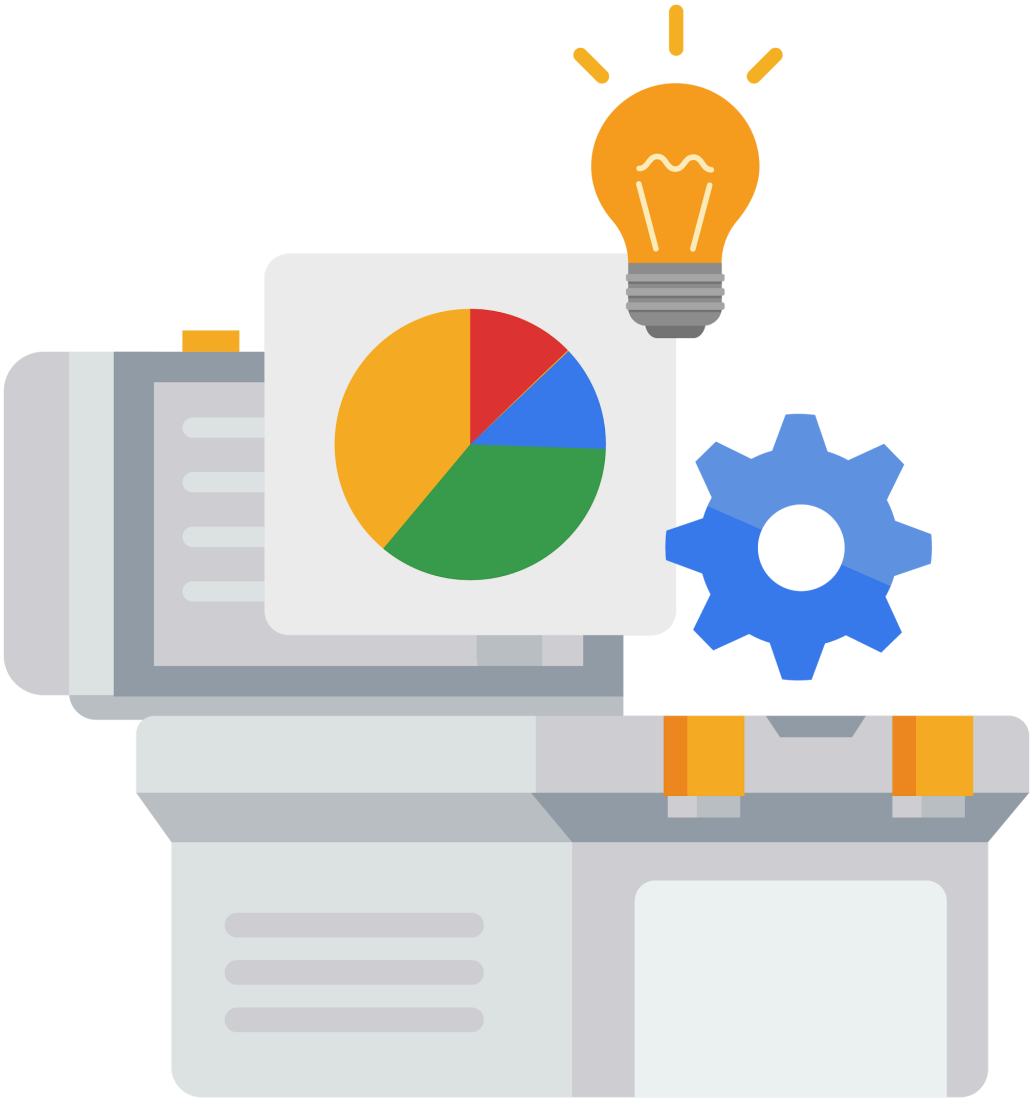
Data analysts must have a comprehensive understanding of the data analytics process, as well as the technical skills that allow them to complete the data analysis process. In this section, you'll consider questions about the data analytics process and specific technical skills to determine your readiness for the advanced certificate programs.



First, evaluate your knowledge of the data analytics process by considering whether the following statements apply to you:

1. I have a thorough understanding of data-driven decision-making and how it helps organizations guide their business strategy based on facts.
2. I'm able to ask questions and make hypotheses about business problems and use them to guide me through the data analysis process.
3. I know the steps to verify data credibility and perform data validation.
4. I understand data modeling and know how organizations use it as a tool to understand their data.
5. I can select and design visualizations that help me effectively communicate analysis insights to stakeholders.

If the previous statements apply to you, you probably know the basics of the data analysis process. Continue reading to evaluate your technical skills.



Data analysts use a variety of tools, including software and programming languages, to analyze data. You will be most successful in an advanced certificate program if you're able to use spreadsheets, SQL, Tableau, and R, which are covered in this program. Consider whether the following statements apply to you:

1. I'm able to join data from multiple sources to use for data analysis.
2. I can sort data in both a spreadsheet and a database.
3. I'm able to clean data by ensuring it contains no duplicate or incorrect entries and is in the correct format.
4. I know how to create data visualizations using a spreadsheet, Tableau, and R.
5. I can write a SQL command that would select several columns from a table.

6. I understand packages in R and can select and install the packages I need to complete specific tasks.

Choose your next certificate program

If you confidently answered “yes” to all of the questions in the previous section, you might choose to pursue the Google Advanced Data Analytics Certificate or Google Business Intelligence Certificate to further your knowledge of data analytics.
In the Google Advanced Data Analytics Certificate program, you’ll build on your data analytics skills and explore what it means to be a data scientist throughout seven courses. You’ll enhance your Tableau skills. And you’ll learn another programming language, Python, and practice using it to prepare, process, clean, analyze, and visualize data. Finally, you’ll delve into statistics and use statistical techniques such as regression and machine learning to answer business questions. This program is ideal for individuals preparing for data science or more advanced data analytics roles.
The Google Business Intelligence Certificate program is composed of three courses, which will expand your knowledge through practical, hands-on projects featuring tools and platforms such as BigQuery, Dataflow, and Tableau. You’ll learn about data management and the systems required to successfully manage it in a business environment. Throughout the program, you’ll discover how to design and interpret dashboards that provide dynamic, live data insights to stakeholders. The Google Business Intelligence Certificate program is ideal for individuals seeking entry-level business intelligence roles.

Key takeaways

If you’re already familiar with the data analytics concepts and skills presented in the Google Data Analytics Certificate, you may wish to proceed directly to the more advanced programs:

- **Google Advanced Data Analytics Certificate**
- **Google Business Intelligence Certificate**

If you’re not sure which program to take, feel free to explore each of them. You can return to the Google Data Analytics Certificate program at any time if you decide it’s the best starting point for you!