Google Technical Program Manager Interview Questions

Google needs no introduction. Businesses across the globe, no matter how big or small, use Google products. These technologies, which are used more than anything else, are driven by the Product Managers and Program Managers at Google. The technical program management team looks after the Google products through all stages, from the conception of its idea to its launch.

Every software developer, coding engineer, or product/program manager would want the Googler tag, but cracking a technical program manager interview at Google is not a piece of cake. The questions are complex and specific to Google and are multi-dimensional. However, it can be achieved through a strategic prep plan and lots of hard work.

Interview Kickstart can help you with your interview prep to land a Technical Program Manager role at Google. Sign up to learn more.

This article will cover key information related to the TPM role at Google, along with some interview questions to help you with your prep. Here’s what we’ll cover:

- What does Google look for in a technical program manager?
- Google technical program manager interview process and timeline
- Google technical program manager interview questions
- Tips to prepare for Google technical program manager interview
- FAQs on Google technical program manager interview

What Does Google Look for in a Technical Program Manager?

Technical Program Managers at Google are responsible for handling all aspects of technical projects in their organization. They handle the program’s initiation, following the process and providing support in case any issue arises.

"We are not simply looking for engineers to solve the problems they already know the answers to; we are interested in engineers who can work out the answers to questions they have not come across before." — Google
This applies to every engineering role at Google, irrespective of the domain or seniority. For the tech program manager role:

- Some engineering expertise will be required, i.e., you should have prior work experience as a software engineer or developer.
- You will have to have the ability to explain complex technical concepts to your audiences.
- Experience in senior leadership that involved defining and delivering on a product roadmap would be beneficial.
- You would make a good fit if you are creative, innovative, detail-oriented, self-motivated, and have a habit of following up through the project.
- Interviewers will be looking at your approach to the questions more than the answers themselves. So keep your thoughts clear and listen to the question carefully before answering.

*Recommended Reading:* [How Hard Is It to Get a Job at Google?](https://www.google.com)

**Google Technical Program Manager Interview Process and Timeline**

Typically, the process of interviews at Google for the Product Manager role has three rounds.

**The first round is the Recruiter Round.** The recruiter calls you to understand your motivations and expectations from the role. For example, they would ask you questions like "Why do you want to work for Google?" or "Why do you want to leave your current organization?" or "Why do you want to work as a Technical Project Manager?"

They would also ask you about your work experience. The recruiters are looking for character more than skills at this stage. Therefore, be honest, clear, and keep a positive perspective.

After this round, if the recruiter is satisfied with your profile for the role, HR will schedule your phone screen. They will let you know who will be interviewing you and the resources needed for the interview.

**The second round would be the Tech Phone Screen.** In this round, you are interviewed by the current technical program manager at Google for about 30-45 minutes. This phone interview will be a mix of technical and behavioral questions. If you get through this round, you will hear from the recruiter in a week or two.
The third round will be the On-site. These days this round is also called the Virtual On-site interview round. Typically, this round will include 4 to 5 interviews consisting of technical and behavioral questions, but you could also end up with all 5 being technical. Be prepared for a multi-dimensional interview. An interviewer starting with a behavioral question can also catch you off-guard with a technical question. Each interview will take roughly 30-45 minutes, with 5-10 minutes in the end to answer any questions you may have.

**Recommended Reading:** [Google Interview Guide](#)

**Topics to Prepare for Google Technical Program Manager Interview**

Here are a few topics that you can prepare for your TPM interview at Google. First, you should get acquainted with data structures and algorithms. These are essential to crack coding interview questions at Google.

Data structures you should know:

- Arrays
- Linked Lists
- Stacks
- Queues
- Trees
- Graphs
- Heaps
- Hash sets
- Hash maps

Algorithms you should know:

- Breadth-first search
- Depth-first search
- Binary search
- Quicksort
- Merge Sort
- Dynamic programming

You will also face some system design related problems. Read [System Design Interview Preparation Tips](#) to get a detailed understanding of how to prep yourself.
In addition to these, also make it a point to **brush up on all your past projects**. You can expect many discussions on topics like how you solved a problem and how you managed a team. Keep examples around these themes ready.

**Did you know?** The average salary of a Google Technical Program Manager in the US is $168,620 (Indeed). However, with companies like Google, the offer you receive will depend on how well you exhibit your value and negotiate. To learn more, check out *The Ultimate Guide to Salary Negotiation at FAANG*.

### Google Technical Program Manager Interview Questions

There are typically three kinds of questions asked at Google for a Technical Program Manager Role: Program Sense, Technical, and Behavioral. In this section, we’ve covered some sample interview questions asked at Google, so you can practice your interview skills by preparing for these questions.

#### Program Sense Interview Questions for Google Technical Program Managers

Program sense questions assess your ability to manage risks, meet deadlines, manage changes, etc. These questions are focused on your technical program manager capabilities by recreating your past day-to-day work experiences.

1. How would you decide on a KPI (Key Performance Indicator) in building a system, and how would you improve it?
2. If your project has gone over the decided budget, what will you do?
3. A resource indicates that they do not have time to work on an important project. What would you do in such a situation?
4. If you were to implement a GDPR program for Google Services, how would you do it?
5. What steps would you take for opening up a restaurant on a business campus?

#### Technical Interview Questions for Google Technical Program Managers

Google’s engineering managers and technical leads will assess your technical skills throughout the interview. They will judge you on your capabilities to work on high-end technical projects. Various technical scenarios and challenges will be presented to you, and you would have to give a solution for them.

These questions require a strong knowledge of system design concepts:
1. What are the top three technology trends that will change the tech landscape in the next decade?
2. Tell me about a time when you worked on a project with a tight deadline.
3. There is a fire in a data center. What will you do?
4. How would you approach reducing security vulnerability resolution times across software products?
5. Google wants to award its 5 trillionth query with some prize. How would you design such a technology solution?
6. Design Google Drive.
7. Design a code deployment software.
8. Design a stockbroker.
10. Design Whatsapp.
11. Design a system that uploads and tags pictures on a travel website.
12. What do you know about MTBF?
13. Explain what happens after you enter a URL in your browser.
14. How does the cloud work?
15. What is Ethernet?
16. Difference between UDP and TCP?
17. Describe the TCP protocol?
18. Explain the ABC technology mentioned in your resume.

Recommended Reading: Google Interview Questions

Coding Interview Questions for Google Technical Program Managers

Coding questions are relatively fewer at Google interviews for managerial positions. However, you still need to be ready to face a few of them.

1. Write a program to find whether an integer is a palindrome.
2. Parse all lines in a CSV file with a given string.
3. Write a program to select two numbers whose sum is lower than a target number.
4. Write a program to reverse a string without any built-in functions.
5. Implement a queue into an array.

Check out Top 29 Google Interview Questions to Crack the Coding Interview for more.

Behavioral Interview Questions for Google Technical Program Managers
A technical Program manager is a highly functional and essential role where you will closely work with engineers, product managers, data scientists, and system designers. Behavioral questions will assess your ability to work well in a team and decide whether you are fit for the work culture at Google.

1. Tell me about a time when you solved a conflict at work.
2. Which of the company principles is your greatest strength?
3. How do you move forward with stakeholders who want to do one thing one way but don't think that is the right way to do it?

**Recommended Reading:**

*9 Behavioral Interview Questions Commonly Asked at the Google Interview*

*Behavioral Interview Questions for Software Developers*

**Tips for Google Technical Program Manager Interview**

While the general FAANG interview tips apply, the Google Technical Program Manager Interview needs some additional tips. To ensure that you make the right impression during the interview, take care of the following:

- **Communication:** Communicate with clarity. Carefully listen to the question and ask clarifying questions. Present your solutions in a structured way. Always remember — your approach to answering the question is more important than the answer.
- **Solve through ambiguity:** You must show the interviewers that you can navigate ambiguity by properly using requirement documents and product roadmap.
- **Present complex technical solutions:** Make sure you can comfortably explain technical details to your team.
- **Manage stakeholders:** Actively show the interviewers that you can manage stakeholders by constantly keeping them on track.
- **Creativity:** Present innovative and creative ideas to solve users' problems.
- **Execution:** Show the interviewers how to solve the problems before they become a hurdle and successfully execute the product’s idea.
- **Design scalability:** Design your system within 20 minutes, then talk about how you can scale it, make it efficient and reliable.
Concrete and quantitative solutions: Be ready to calculate the cost of the system you designed; as a technical program manager, you should also consider that you can not go over budget.

Keep in mind these additional points while answering the interview questions:

- Exhibit traits that Google values (for this, ensure that you learn about the work culture at Google and that you are a good fit).
- Show that you are an emergent leader.
- Show you can navigate ambiguity whenever they arise.
- Show that you have a vision for the products that will help the end-users.
- Show that you are a team player.

Ready to Nail Your Google Technical Program Manager Interview?

If you’re unsure about how to start your prep, let Interview Kickstart be your guide.

As pioneers in the field of technical interview prep, we have trained over 9,000 experienced software engineers to crack the toughest coding interviews and land jobs at their dream companies, such as Google, Facebook, Apple, Netflix, Amazon, and more!

We have the most comprehensive, well-structured curriculum and unmatched teaching methods. That’s not all. Our instructors are tech leads and hiring managers from FAANG+ companies who provide industry-relevant training and guidance.

Sign up for our FREE webinar to learn more!

FAQs on Google Technical Program Manager Interviews

1. What happens internally after the Google Technical Program Manager interview?

First, all the interviewers are asked to send in their feedback, and then they are reviewed by the recruiters. If approved, it then goes to the hiring committee. Finally, it goes to the senior officer to sign the offer letter.

2. What if I did poorly in one interview round at Google? Can I still get in?

Yes, you still can. Unfortunately, it is impossible to impress all 4-5 interviewers. However, since everyone else's feedback is also taken into consideration, you still have a chance.