Interview Questions and Suggested Answers to:

ENGINEERING INTERVIEW

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PASSMYINTERVIEW

Q. Tell me about yourself and why you would make a good engineer within this role?

Sample Answer:

I am someone who is extremely passionate about engineering and I have a thorough understanding of the requirements of this role. Having studied the job description and the person specification in detail, I am confident I have the necessary experience and attributes to carry out this engineering role to the standards necessary whilst operating with safety at the forefront of my mind at all times. I am a solid problem-solver, a great communicator and someone who will work tirelessly to solve difficult and complex problems quickly and efficiently. I understand you need someone who can be trusted to carry out the required technical and practical engineering work, and if you hire me for this role, I am confident you will be more than satisfied with my strong work ethics, technical knowledge and practical abilities.

Q. What qualities do you need to become a competent engineer?

Sample Answer:

The qualities needed are many and varied. However, for me, the 9 most important qualities an engineer will need in this particular role are being able to operate safely at all times whilst following rules and procedures; an analytical approach to working; an ability to remain calm under pressure; an ability to evaluate complex problems on a small, medium or large scale; great communication skills, because most people you communicate with will not understand technical jargon; a willingness to take responsibility for your actions; an ability to plan ahead and organize tasks efficiently; a desire to continually evaluate and improve systems to make them more efficient; and also a personal desire to keep up-to-date with industry developments and to also develop yourself professionally as your time within the role progresses.

Q. As our engineer, you will be faced with problems to solve on a regular basis. Talk me through the basic steps of problem-solving?

Sample Answer:

I always use the same, fundamental steps when solving any form of engineering problem. These are: DEFINING THE PROBLEM and gaining CLARITY of the issue; CONFIRMING the exact problem by utilizing all relevant facts and information available; DIAGNOSING the problem; RECTIFYING the cause and then the TETSING stage. Depending on the circumstances or situation, I would also consider the TRAINING stage. Training may have to carried out by the end user of they needed to be trained in the correct operation of the tool, resource or system that encountered the initial problem.

Q. Why have you chosen to be an engineer with our company?

Sample Answer:

I have chosen your company for three specific reasons. The first reason is that you are a company who is highly-respected within the industry. This is important to me because I take great pride in my work and it's important for me to work for reputable organization. The second reason is that you have a strong track record of safety. I have high professional standards and I want to be working for a company who takes safety very seriously. Finally, having studied your organization in detail in the build-up to this interview, I see you as a forward-thinking and innovative company who will clearly be around for many years to come. If successful, I plan to stay with you for many years to come and be a part of your successful engineering team.

Q. How would you manage your time and prioritize your tasks as part of a fast-changing and fast-developing engineering project?

Sample Answer:

Being organized is absolutely vital during any engineering project, no matter how fast it is moving. Thankfully, I am naturally an extremely organized person who likes to keep check-lists of everything I do. This allows me to manage my time in segments, so I know exactly how much time I need to spend on each specific project area. I guess you could say I am quite a meticulous planner and worker, which is quite a positive strength to have when managing projects. I would also ensure I communicated effectively at all times during the project, and whilst I am not a massive lover of meetings, I do see these an essential part of any engineering project as this allows you to prioritize collectively what comes next as part of the bigger picture. I also like to plan quite far ahead, as this allows me to visualize what might be coming next s part of the project, and it also allows me to consider any possible threats to the project and potential problems we all might face along the way. Finally, at the end of each working day, I take a few moments to reflect to see if my performance, or the performance of the team, could be improved in any way. If I do all of that, my project management skills are continually improving and developing.

Q. What do you enjoy most/least about engineering?

Sample Answer:

The aspects I most enjoy about engineering is having the ability to make a significant difference to an organization by the work I carry out during a particular project I am a part of, or whilst completing a complex engineering task. It is quite a unique privilege to be able to analyse and solve problems for your employer. I also like the challenge the role brings, because you really have to utilize an innovative and creative way to creating project plans and also whilst solving complex engineering issues as and when

they arise. In respect of the least enjoyable aspects, I would have to say it's the continuous professional development commitments that come with the role, simply because these take you away from working on the important things you need to do for your employer. Having said that, if it wasn't for the continuous professional development aspect, and also keeping up to date with industry developments, you would not be able to operate safely or carry out your role diligently and professionally.

Q. What type of engineering work do you get the most satisfaction from?
Sample Answer:
It would have to be the type of engineering problems where I can have a significant impact on people's lives for the long-term. For example, in a previous role I was tasked with working as part of an engineering design team who developed plans for a children's ward at the local hospital. Once the project was completed, and the ward built, we were invited along to the opening day to see how our contribution to the project was going to make a big difference to children's lives. Those are the type of projects I get the most satisfaction from.

Q. What would you say has been your greatest success when using your skills to solve an engineering problem?
Sample Answer:
It would have to be an engineering design problem I worked on as part of team in my previous job. I was part of a twelve-person engineering team who were tasked with providing a disabled-lift solution for a number of care homes within our region. It was an extremely complex task, simply because we had to work to a set budget whilst also maintaining safety standards and conforming to the relevant regulations. After 5 weeks hard work, we managed to collectively come up with a suitable solution that made a significant and positive impact to the living lives of many disabled people across the country. Although I am very comfortable working alone as an engineer, I find the collective and collaborative team approach to tasks extremely rewarding, especially when they end up making such a difference to people's lives.

Q. What new engineering skills have you learned or developed during the past 12 months?
Sample Answer:
In my spare time, I have been studying an introduction to process control and instrumentation via the online learning platform Udemy.com. Although I specialize in an entirely different field of engineering, I have been keen to broaden my skillset and knowledge as I feel these additional skills will assist me overtime as I become more and more involved in different engineering projects. My appetite and hunger

for knowledge and has never diminished and I feel strongly I will continue to learn new skills as my time progresses. As the saying goes, knowledge is power, and I feel more and more suitably qualified to meet the modern demands of the engineering world as it develops and progresses.

Q. How do you keep on top of developments from within the engineering industry?
Sample Answer:
I dedicate a set amount of time each month to keep up-to-date with relevant engineering developments. Firstly, I subscribe to the Journal of Engineering and Applied Sciences and this contributes to me meeting my CPD obligations. I am also part of an engineering forum on LinkedIn.com, which I receive notifications about periodically. I find this is a useful resource if I need to find some advice on how to tackle a particular issue that is outside of my area of expertise. Finally, I sometimes attend engineering talks which I received notifications about from the website Ted.com. Sometimes, these talks are not too far away from my hometown, so I will sometimes go along and do some networking whilst I am at the event.

Q. What would you do in this situation? Two clients want to work with you. One client is a new, larger client who wants to spend a significant amount of money with you. The second client, although much smaller, has used you many times in the past. However, they only have a small budget to spend on projects. Which one would you choose to work with if you only had the resources to deliver one project, and why?
Sample Answer:
I would choose the smaller client every time, for the simple reason their reliable business would mean more to me than working with a larger, more risker client who could pull the plug on any future projects at any given time. Whilst the financial reward would be extremely tempting, I personally would opt for the smaller client due to the reliability and consistent usage factors. There is also the possibility that the smaller client could grow into a larger one in the future, and they would most probably still use your engineering services as they developed and grew, due to the relationship and trust that had been built up over time.

Q. What safeguards do you put in place to ensure the work you do is both safe and compliant?
Sample Answer:
I basically do two things at the end of every engineering task I work on. Firstly, I utilize my ‘error-free’ check sheet. This is something one of my first tutors at university shared with the class one day, and it’s

a vital resource for ensuring everything is safe, correct and compliant. Secondly, I get a second pair of experienced eyes to look over my work as this not only provides a reassuring confirmation that my work is safe, but having another engineer analyse my work might find a better and more efficient way of achieving the desired results. The bottom line is, I take safety and compliance extremely seriously and I would always utilize my 'double-check method' for ensuring all work I do is both safe and compliant.

Q. Describe you worked as part of a team to complete a difficult project or task?
Sample Answer:
In my previous job I volunteered to work with 5 other members to complete a difficult project that had fallen by the wayside due to a contractor going out of business. The task required all 5 of us to work closely together to integrate a new software system with the client's website. We only had four days to complete the task in accordance with the specification and the client's requirements. Time was of the essence and we needed to work hard to get everything done to a professional standard. We started out by reading the client brief carefully and then I decided to take the lead and allocate specific tasks based on each team members capabilities and area of expertise. We then set timescales for each team member to reach, which would ensure the task got completed in time. Throughout the four-day working period, we all supported each other as and when required in order to motivate each other through regular communication. The end result was the project was completed on time and to a high standard, much to the satisfaction of the client.

Q. Tell me about a time when you worked under pressure to complete a difficult task?
Sample Answer:
I was working in the office on a project for my manager when she came in and announced the client, whom I was working on the project for, had changed their mind about the project specifications. I only had 7 days left to complete the project as the timeline for completion remained the same. I needed to start the project again, from scratch. In order to meet the deadline, I needed to ask another member of the team to assist me with some technical aspects of the change to the specifications. After finding a suitably qualified person to help me, I briefed them on what was required, and more importantly, the timeline for completion. We both set to work on the new project with enthusiasm, rigor and determination. As the deadline was approaching, I had the feeling I was not going to complete the project on time, so I decided to work from home the hours needed to meet the target. I am the type of person who does not like to let my employer down, so I didn't really mind putting in the extra hours. My colleague and I managed to finish and deliver the project to the client with literally two hours to spare. I felt proud of the

fact we managed to complete the project to specifications, despite the numerous challenges we faced along the way. The client was more than pleased with the work and they used the company again for future projects, which was great to see!

Q. You are in a meeting with a number of non-technical stakeholders. How do you present an engineering concept to them so that they understand?

Sample Answer:

I would try to use visual explanations that they were all familiar with. For example, if the room was full of people who had a passion for cars, which lots of people do, I would use the construction of a car as the analogy when describing my engineering concept or project. For example, I might say:

"If you try to imagine a car travelling along the road, the wheels enable the car to travel forward based on their shape. If you apply the same principle to my engineering project, you will see that object A is able to move forward because of object B.", or something similar to that example that they can all relate to. I would also utilize drawings and diagrams, as the visual aspect is far easier to understand and follow.

Q. During your last engineering project, what problems did you encounter and how did you overcome them?

Sample Answer:

During my last engineering project, we encountered problems with a client who continually asked for changes to the specification at a reduced costs. The client was becoming increasingly demanding, and although we had made a couple of changes to the spec already, he kept asking for more. It got to the point where I felt the project was in danger of becoming unsafe if we made further changes, and so I decided to arrange a conference call with the client to discuss things and to explain my concerns. During the call, he started making demands again and he reminded me who was paying for the project. I remained calm and politely explained to him the consequences of cutting corners from a safety perspective and the potential ramifications if things went wrong. I also explained how it could impact negatively on his brand if anything dangerous happened and this would obviously cause issues from a negative news situation. As soon as I mentioned the potential problems, he changed his tone and agreed to stop requesting unreasonable demands. From my perspective, it is very important to be upfront and honest when dealing with clients during any project and safety must always come first, no matter what.

Q. Describe a time when there was conflict in a group and how did you overcome it?

Sample Answer:

I was working as part of a project a couple of years ago and I was a junior engineer at the time. There were, in my opinion, too many people involved in the project and this caused problems, conflict and barriers that all contributed to issues during the execution stage of the project. During one particular team meeting, things had come to a head and two members of the team started arguing in front of everyone else. I had had enough, and so I decided to get involved with a view to sorting things out quickly and also stopping the conflict dead in its tracks. Whilst they were arguing, I stood up in the meeting and said out loud in a firm but non-aggressive tone for everyone to be quiet. I then went on to explain that, as the junior engineer I was quite appalled at this behaviour and that I had serious concerns about the project missing important deadlines. I also stated that, unless we all started working collectively and positively as a group I would inform our CEO about the issues we were all facing. Although this was a last resort, I felt something drastic needed to be done, and it certainly had the desired impact. Once I finished saying what I wanted to say, everyone started clapping and other people in the room agreed with my concerns. This was a turning point in the project lifecycle and the project leader started to take control of the conflict and the issues to ensure the project got back on track. Four weeks down the line and we all managed to complete the project satisfactorily. I learned a tremendous amount from that experience, and whenever I now detect any form of conflict in a given work situation, I will take positive steps to stop it and resolve it.

Q. What are your weaknesses?

Sample Answer:

If I am being honest, I would say my weakness is my frustration when dealing with unreasonable clients who do not understand how important it is to operate safely at all times and to not cut corners during engineering projects. Whilst I a someone who understands businesses have tight budgets, I have a responsibility to them to make sure the work I do is safe. Having said that, although I do get frustrated with them, they would never know it as I will always act with the utmost professionalism and integrity at all times.

Q. Where do you see yourself in 5 years' time?

Sample Answer:

I am now at the stage in my career where I am looking for solid and stable employment where I can utilize my engineering skills and expertise and put them to good use. I want to work for you for a long period of time, and if I am successful, I see myself becoming an integral part of your engineering team. In fact, I would certainly be open to developing in the role and also training younger members of the engineering team up to the required standard as and when they join the organization.

Q. That's the end of your engineering interview, do you have any questions for the panel?

Sample Answer:

Thank you. Yes, I do:

Q. What are the most difficult challenges you have been facing from an engineering perspective over the last 12 months?

Q. If I am successful, what would you need me to concentrate on immediately within the first few things of starting?

Q. Do you have any exciting or new plans for the organization over the forthcoming 12 months?

How to Use These Interview Questions and Answers:

These interview questions and answers are intended to guide you in your preparation for your job interview. These questions have been picked by the PassMyInterview team because we believe that they are the best representative of what you will face in your interview.

The sample answers in this resource are collated from years of experience and research in the recruitment sector. The answers confidently display the appropriate qualities and competencies that the interviewer expects from successful candidates.

Read the sample answers carefully, and take note of what skills and competencies they demonstrate. You might notice that, when the question asks for examples, the answer uses the STAR method to construct the response:

Situation. Start off your response to the interview question by explaining what the 'situation' was and who was involved.

Task. Once you have detailed the situation, explain what the 'task' was, or what needed to be done.

Action. Now explain what 'action' you took, and what action others took. Also explain why you took this particular course of action.

Result. Explain to the panel what you would do differently if the same situation arose again. It is good to be reflective at the end of your responses. This demonstrates a level of maturity and it will also show the panel that you are willing to learn from every experience.

In order to get the best possible results, apply this system to your own examples and experiences in working life. These sample answers are intended to inspire you to create your own responses to the questions.

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