`CASE STUDY ON ATTRIBUTES OF AN ENGINEER:

Engineers have diverse personalities and characteristics. When evaluating engineering candidates, employers must keep in mind that many personalities could make a good engineer and the hiring process should look for the best fit for a team's needs.

## **Interpersonal and Leadership Skills**

The traits of a good engineer start with the basics. Soft skills, such as honesty, trustworthiness, and an excellent work ethic are fundamental to any profitable employer-employee relationship.

## **Communication Skills**

A good engineer needs to communicate well, both orally and in writing. Everything from the problem definition to discussions of the possible solutions to the instructions for manufacturing or producing the final design must be accurately and clearly conveyed to others, including clients, team members, and the C-suite.

### **Mathematical Skills**

A qualified engineer should be good at math, at least through the level of calculus and trigonometry, and understand the importance of following the data when making design decisions.

### **Organization and Attention to Detail**

Engineers must be able to find and organize all pertinent data, and to use the information correctly. This requires a good memory and strict attention to detail.

### **Creativity & Curiosity to learn something new**

An engineer's creativity looks different to what we typically think of as artistic creativity. Rather than focusing on a message or a feeling, creative engineers solve practical problems, such as how to store more data in a smaller amount of memory. Engineers are curious folk like the child who takes apart a toaster to find out how it works. The innate curiosity of any high-quality engineer should drive them to figure out how to make something that works work even better.

### **Critical Thinking**

Engineering solutions must work in the real world, where complex variables compete. As a result, engineers need critical thinking skills, developed through experience and training, in order to solve open-ended problems that have no single right answer.