Engineer: problem solving and engineers design products

<u>Design</u>



Engineer is A person who designs, builds, or maintains engines, machines, or structures and a qualified person in a branch of engineering, especially as a professional engineer. Engineers figure out new ways to design, create, or improve almost everything around you. It might sound complicated, but you have most likely acted as an engineer before without even knowing It!

If you like math and science, solving problems, thinking creatively or are curious about the world around you and how things work, you are already on your way to coming an engineer and they are able to solve problems and focus on making things work more efficiently and effectively. Engineers apply the theories and principles of science and mathematics to research and develop economical solutions to technical problems. Their work Is the link between perceived social needs and commercial applications.

Engineers design products, machinery to build those products, plants in which those products are made, and the systems that ensure the quality of the products and the efficiency of the workforce and manufacturing process. Engineers design, plan, and supervise the construction of buildings, highways, and transit systems. They develop and Implement improved ways to extract, process, and use raw materials, such as petroleum and natural gas.

They develop new materials that both improve the performance of products and take advantage of advances in technology. They harness the power of the sun, the Earth, atoms, and electricity for use in supplying the Nation's power needs, and create millions of products using power. They analyze the Impact of the products they develop or the systems they design on the environment and on people using them.

Engineering knowledge Is applied to Improving many things, Including the quality of healthcare, the safety of food products, and the operation of financial systems. The engineer adapts the findings to Human being usage. He is the central connection between science & culture order to reach that, Just like the dynamic & fast changing world demands a more complex role for an engineer. Also, technical skills must be good in non-technical skills like Communication Problem solving Management

To be mastered in Engineering there are the Main Skills as: Logical thinking Problem-solving skills Communication skills Design skills Organizational, management and administrative skills.