

# What is engineering design?

- Engineering design is the process of creating a product to meet a need.
- The product could be a:
  - completely new product.
  - modification of an existing product.

## Notes

Let's get started!

The engineering design process is similar to the scientific process. It is a systematic approach used to create a product that successfully performs the intended purpose.

The engineering design process is easier to understand if we see it graphically.

## Teacher's Notes

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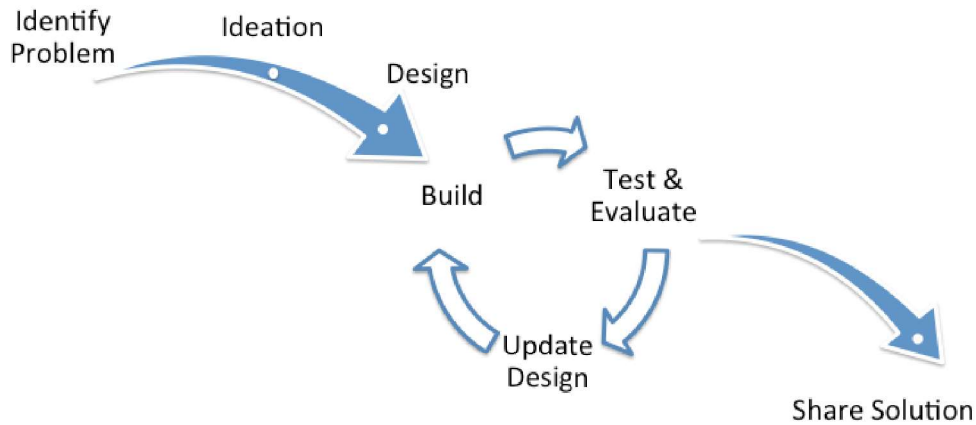
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# The Engineering Design Process



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## Notes

Discuss each step of the process:

1. Determine what the exact problem is that you are trying to solve.  
This step is sometimes known as Ask.
2. Ideation is determining lots of possible ways to solve the problem. Ideation is also known as brainstorming.  
This step is sometimes known as Imagine.
3. Design is combining all of the ideas you generated into what you feel is the best way to solve the problem.  
This step is sometimes known as Plan.
4. Engineers build prototypes to test their solutions.  
This step is sometimes known as Create.
5. The first thing you build might not be the best solution, so often you must iterate or make improvements to your design.  
This step is sometimes known as Improve.
6. After a satisfactory solution is developed, you share your solution with others. This often results in starting the process over again to improve the solution.

## Teacher's Notes

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