



## 13.1 Engineering Design

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- *Engineering design is the process of devising a system, component, or process to meet desired needs. It is a decision making process in which the basic sciences and mathematics and engineering sciences are applied to convert resources optimally to meet a stated objective. Among the fundamental elements of the design process are the establishment of objectives and criteria, synthesis, analysis, construction, and testing....*



## 13.2 The Design Process

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1. Identify the problem
2. Define the working criteria/goals
3. Research and gather data
4. Brainstorm ideas
5. Analyze potential solutions
6. Develop and test models
7. Make decision
8. Communicate decision
9. Implement and commercialize decision
10. Perform post-implementation review