

# Industrial Engineering

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# The Need

- Fiercely competitive market.
- Increased customers demands.
- Challenge for industries to produce quality goods at minimum cost.
- Greatly be useful to meet the modern day challenges.

# Definition of IE by American Institute of Industrial Engineers

- *Industrial Engineering is concerned with the design, improvement and installation of integrated system of men, materials and equipment. It draws upon specialized knowledge and skills in the mathematical, physical sciences together with the principles and methods of engineering analysis and design to specify, predict and evaluate the results to be obtained from such system.*

# Objective

- **Developing methods for improving operations and controlling production cost**
- **Developing ways of reducing costs.**
- **Researching ways of improving efficiency of processes.**
- **Improving production processes and ensuring worker safety.**

# Techniques of Industrial Engineering

- **Method Study.**
- **Time Study.**
- **Motion Economy.**
- **Value Analysis.**
- **Inventory Control.**
- **Job Evaluation.**
- **Material Handling Analysis.**
- **Ergonomics (Human Engineering).**
- **System Analysis.**
- **Operations Research Techniques.**

Thanks