

## Mechanical Engineering

As one of the core engineering disciplines, mechanical engineering encompasses the design, building and testing of tools and machines. It is a broad profession concerned with activities such as energy conversion, power generation, design, and manufacturing. The Stony Brook University Mechanical Engineering curriculum provides students with the detailed mechanical engineering education and training required for immediate entry into the job market. It provides students with a core education in mathematics and the physical sciences along with a broad sequence of courses covering thermal processes and fluid mechanics, mechanical design, solid mechanics, and the dynamic behavior and control of mechanical systems.



### Transferable Skills

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- Abstract & formal reasoning
  - Mathematical analysis
  - Effective communication
  - Data sorting and prioritizing
  - Operation of scientific equipment
  - Laboratory skills
  - Computer-assisted design (CAD)
  - Analytical problem solving
  - Knowledge of professional and ethical standards
  - Multidisciplinary teamwork
  - Research
  - Organization and maintenance of accurate records

### Career Communities to Consider

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- IT & Engineering
  - Scientific Research & Academia
  - Business
  - Healthcare