



# STEM Careers

## Mechanical Engineer

**Job Description:** Plan and design engines, machines, and other mechanical equipment.

### What does a Mechanical Engineer do?

- Design roller coasters and other amusement park rides.
- Design surgical robots that improve precision and reduce incision size, blood loss, pain, and healing time.
- Design carbon fiber prosthetic blades for high-speed running.
- Investigate equipment failures and difficulties to diagnose problems and make recommendations for maintenance.
- Design equipment using computer aided design (CAD) programs and build the components using machine shop tools.
- Analyze structures for properties such as strength, weight, fatigue, and vibration to determine their safety.

### Your Interests:

- Are you good at math?
- Are you creative?
- Do you like to solve problems?
- Are you interested in how things work?
- Are you good at working with a team?

### Outlook: **Green**

Average Salary - \$37.03 hourly, \$77,020 annual  
Projected Job Openings - 75,700 over the next 10 years

### Education/Program of Study:

- Minimum Bachelor's Degree in Mechanical Engineering
- Other career titles include Product Designer

Sources:

O\*NET Online

[http://www.sciencebuddies.org/science-fair-projects/science-engineering-careers/ApMech\\_mechanicalengineer\\_c001.shtml?From=testb](http://www.sciencebuddies.org/science-fair-projects/science-engineering-careers/ApMech_mechanicalengineer_c001.shtml?From=testb)

[http://quest.arc.nasa.gov/people/cfs/generic/mechanical\\_engineer\\_113.pdf](http://quest.arc.nasa.gov/people/cfs/generic/mechanical_engineer_113.pdf)