



Engineering

About the Program

Students in Engineering are introduced to various fields of science, technology, engineering, and mathematics to understand the interrelationship between each discipline. The students will use the Engineering Design Process through hands-on learning opportunities in studying mechanical, fluid, thermal, and electrical systems. Teamwork is also an integral part to enforce real-world applications and work related concepts and skills as it applies to robotics, data acquisition, spatial applications, electrical measurement, manufacturing processes, materials engineering, mechanical drives, pneumatics, process control systems, quality control, and computer programming.

Course Sequence

- Principles of Applied Engineering
- Principles of Technology
- Engineering Mathematics

Career Opportunities

- Aerospace Engineer
- Agricultural Engineer
- Automotive Engineer
- Biomedical Engineer
- Chemical Engineer
- Civil Engineer
- Computer Engineer
- Drafting and Design Engineer
- Electrical Engineer
- Environmental Engineer
- Geological Engineer
- Marine Engineer
- Mechanical Engineer
- Petroleum Engineer
- Software Engineer

Design Process

1. Define the Problem
2. Brainstorm
3. Research & Generate Ideas
4. Identify Criteria & Constraints
5. Explore Possibilities
6. Select an Approach
7. Develop a Design Proposal
8. Model or Prototype
9. Test & Evaluate
10. Refine
11. Create or Make
12. Communicate Results

