

# Industrial Technology

Students will examine how engineering and technology helps improve, manage and control natural and engineered environments. **IND1**

---

- 1 Illustrate the purpose and impact of engineering and technology on society and the environment. **IND1.1****
  - 2 Apply the universal systems model when studying areas of applied sciences, technology engineering and manufacturing. **IND1.2****
- 

Students will investigate the evolution of engineering, technology and trade and industry on products, structures and systems. **IND2**

---

- 1 Analyze technological advancements throughout time periods in history. **IND2.1****
  - 2 Investigate inventions and innovations of products, processes, materials and tools. **IND2.2****
  - 3 Evaluate how technology inventions and innovations have impacted (positive/negative) the society and the environment. **IND2.3****
- 

Students apply safety practices in the lab and on worksites. **IND3**

---

- 1 Demonstrate safe practices and procedures with tools and equipment. **IND3.1****
  - 2 Demonstrate appropriate use of personal protective equipment. **IND3.2****
  - 3 Demonstrate safety concerns according to local policies and procedures. **IND3.3****
  - 4 Analyze hazardous materials procedures and OSHA. **IND3.4****
- 

Students apply and adapt appropriate workplace behaviors and characteristics to prepare for careers. **IND4**

---

- 1 Analyze education and skill requirements for engineering and technology and related professions. **IND4.1****
- 2 Report the outlook, demand, and projected wages for engineering, technology and trade and industry careers. **IND4.2****
- 3 Research, analyze and use data for work assignments. **IND4.3****
- 4 Exhibit a responsible work ethic. **IND4.4****
- 5 Demonstrate accepted standards for ethical behavior. **IND4.5****
- 6 Establish a personal career goal and develop objectives for achieving the goal. **IND4.6****

---

**7 Create a continuing education plan that identifies further education and training options.** IND4.7

---

**8 Prepare for exams leading to certifications recognized by business and industry.** IND4.8

---

**9 Evaluate resources that keep workers current in the career field.** IND4.9