
INDUSTRIAL TECHNOLOGY

STANDARDS FOR SUCCESS

- Standard 1 **COMMUNICATION**
The student will understand and utilize multiple, modern communication systems.
- Standard 2 **CONSTRUCTION**
The student will understand properties of materials and apply principles of design, assembly, and finishing processes used in industry.
- Standard 3 **MANUFACTURING**
The student will understand and apply the principles and processes involved in the production of products.
- Standard 4 **EXPLORATORY TECHNOLOGY**
The student will explore, integrate, and apply current technologies to career development.
- Standard 5 **SAFETY**
The student will demonstrate the use of lifelong safety habits in the use of machines, tools, and processes in all endeavors.
- Standard 6 **TRANSPORTATION**
The student will understand and apply skills related to multiple modes of transportation for people and products.
- Standard 7 **ENGINEERING**
The student will understand and apply engineering principles.

COMMUNICATION

STANDARD 1: The student will understand and utilize multiple, modern communication systems.

In order to meet the standard, the student will be able to:

- 1.1 Read, interpret, and create drawings using universally accepted drawing conventions and standards.
- 1.2 Use sketching techniques, conventional drawing instruments and computer-aided drawing systems to produce drawings.
- 1.3 Use various graphic arts processes in the design and production of visual image products.
- 1.4 Incorporate imaging processes and systems in the production of visual images that record, entertain, illustrate, communicate, and/or interpret information.
- 1.5 Research a variety of career clusters and understand the evolving career opportunities within communication oriented careers.

CONSTRUCTION

STANDARD 2: The student will understand properties of materials and apply principles of design, assembly, and finishing processes used in industry.

In order to meet the standard, the student will be able to:

- 2.1 Understand the nature and impact of designing and building structures.
- 2.2 Acquire knowledge of construction and product technology.
- 2.3 Research a variety of career clusters and understand the evolving career opportunities within the construction industry.

MANUFACTURING

STANDARD 3: The student will understand and apply the principles and processes involved in the production of products.

In order to meet the standard, the student will be able to:

- 3.1 Understand the nature and impact of producing and changing raw materials into finished products.
- 3.2 Acquire knowledge of manufacturing technology.
- 3.3 Research a variety of career clusters and understand the evolving career opportunities within the manufacturing industry.
- 3.4 Develop skills related to metal work and manufacturing.

EXPLORATORY TECHNOLOGY

STANDARD 4: The student will explore, integrate, and apply current technologies to career development.

In order to meet the standard, the student will be able to:

- 4.1 Understand and experiment with physical, mathematical, and chemical processes in a technical world.
- 4.2 Explore technical and trade applications.
- 4.3 Research a variety of careers and understand the evolving career opportunities within industrial technology.

SAFETY

STANDARD 5: The student will demonstrate use of lifelong safety habits in the use of machines, tools, and processes in all endeavors.

In order to meet the standard, the student will be able to:

- 5.1 Demonstrate safe use of lab tools, equipment, and supplies.
- 5.2 Demonstrate the practical application of safety practices that can be used in everyday life.
- 5.3 Research a variety of career clusters and understand the evolving career opportunities within safety oriented careers.

TRANSPORTATION

STANDARD 6: The student will understand and apply skills related to multiple modes of transportation for people and products.

In order to meet the standard, the student will be able to:

- 6.1 Demonstrate an understanding of modes of transportation.
- 6.2 Acquire knowledge of transportation technology related skills.
- 6.3 Follow industry-approved procedures for a specific area.
- 6.4 Demonstrate an understanding of energy and power technology.
- 6.5 Research a variety of careers and understand the evolving career opportunities within the transportation industry.

ENGINEERING

STANDARD 7: The student will understand and apply engineering principles.

In order to meet the standard, the student will be able to:

- 7.1 Demonstrate an understanding of the theory and application of electronics.
- 7.2 Apply concepts of engineering research, design, and problem solving.
- 7.3 Use modern technology and processes to explore complex engineering problems.
- 7.4 Explore a variety of career clusters and understand the evolving career opportunities within engineering.
- 7.5 Demonstrate an understanding of the theory and application of engineering physics.