

Introduction to Industrial Technology (2023)

basic safety 1

- 1 Identify causes of accidents and the impact of accident costs. 1.1
- 2 Follow safe behavior procedures on and around ladders, scaffolds and stairs. 1.2
- 3 Follow safe behavior procedures around electrical hazards. 1.3
- 4 Demonstrate the use, care and inspection of appropriate personal protective equipment (PPE). 1.4
- 5 Explain the importance of hazard communications (HazCom) and material safety data sheets (MSDSs). 1.5
- 6 Respond to hazardous-materials and hazardous-waste emergency situations accordance with regulatory requirements. 1.6
- 7 Follow safety procedures required for lifting heavy objects. 1.7
- 8 Demonstrate a working knowledge of safety education, environment, and enforcement for life and work. 1.8
- 9 Apply safe practices while using tools and equipment. 1.9
- 10 Apply safe practices for housekeeping, dress, fire, chemicals & personal protection while working in a shop. 1.10
- 11 Describe fire prevention and firefighting techniques. 1.11
- 12 Explain the purpose of OSHA and how it promotes safety on the job. 1.12

Industrial math 2

- 1 Add, subtract, multiply, and divide whole numbers, fractions, decimals and percentages. 2.1
- 2 Use a standard ruler, a metric ruler, and a measuring tape to measure. 2.2
- 3 Demonstrate conversion skills for decimals and fractions. 2.3
- 4 Recognize and perform calculations using metric units of length, weight, volume and temperature. 2.4

Hand tools 3	1 Recognize and identify some of the basic hand tools and their proper uses in industrial trades. 3.1
	2 Demonstrate the safe use of common hand tools. 3.2
power tools 4	1 Recognize and identify some of the basic power tools and their proper uses in the industrial trades. 4.1
	2 Demonstrate the safe use of common power tools. 4.2
	3 Perform preventive maintenance on basic power tools used in the industrial trades. 4.3
blueprint reading 5	1 Perform the drafting principles needed to draw the basic geometric shapes. 5.1
	2 Develop a pictorial sketch of an object. 5.2
	3 Develop a multi-view drawing. 5.3
	4 Identify basic symbols used in blueprints. 5.4
	5 Identify various types of blueprint views used in Architecture and Construction, Engineering, Manufacturing, and Transportation. 5.5
Communication skills 6	1 Interpret information and follow instructions presented in both verbal and written form. 6.1
	2 Communicate effectively in on-the-job situations using verbal and written skills in various delivery modes (face-to-face, 6.2
	3 Create and complete various written documents used in industrial trades. 6.3
	4 Demonstrate knowledge and use of computer systems and word processing software in effective communication. 6.4
employability skills 7	1 Create and utilize employment documents including a resume and portfolio. 7.1
	2 Demonstrate job seeking and interview skills. 7.2
	3 Understand and respond to performance reviews. 7.3
21st century/foundation skills 8	1 Demonstrate critical thinking skills and the ability to solve problems using those skills. 8.1
	2 Define effective relationship skills. 8.
	3 Demonstrate a working knowledge of workplace issues such as sexual harassment, stress, and substance abuse. 8.3

4 Demonstrate the ability to achieve common goals through team work. 8.4

materials handling 9

1 Verify that health, safety, environmental, and government regulations are met. 9.1

2 Recognize hazards and follow safety procedures required for materials handling. 9.2

3 Demonstrate ability to load and unload materials properly and safely. 9.3