

Principles of Construction (2025)

Construction Trades 7130.D1

- 1 Comply with OSHA-10 training requirements. Explain the safety obligations of workers, supervisors, and managers to ensure a safe workplace. 7130.D1.1**
- 2 Review basic mathematical functions and explain their applications to the construction trades. 7130.D1.2**
- 3 Identify and explain specific applications of hand tools that are widely used in the construction industry, such as hammers, saws, levels, pullers, and clamps. 7130.D1.3**
- 4 Provide detailed descriptions of commonly used power tools, such as drills, saws, grinders, and sanders. Review applications, proper use, safety, and maintenance. Demonstrate power tool use in on-the-job settings. 7130.D1.4**
- 5 Discuss basic terms for construction drawings, components, and symbols. Explain the different types of drawings and interpret and use drawing dimensions. 7130.D1.5**
- 6 Explain how ropes, chains, hoists, loaders, and cranes are used to move material and equipment from one location to another on a job site. 7130.D1.6**
- 7 Identify the roles of individuals and companies in the construction industry. 7130.D1.7**
- 8 Recognize hazards associated with materials handling and explain proper materials handling techniques and procedures. 7130.D1.8**

Construction Industry 7130.D2

- 1 Recognize direct job opportunities in the - construction field. 7130.D2.1**
- 2 Recognize indirect job opportunities in the -construction field. 7130.D2.2**
- 3 Become familiar with new residential building products. 7130.D2.3**
- 4 Understand the connection between residential construction and related fields. 7130.D2.4**
- 5 Understand the importance of safety training and education in the construction industry. 7130.D2.5**

	6 Understand the relationship between worker’s compensation insurance and safety record. 7130.D2.6
	7 Understand and appreciate the roles that OSHA and INSafe play in the construction industry. 7130.D2.7
	8 Understand the hazards involved in the residential construction industry. 7130.D2.8
	9 Understand basic drafting/drawing techniques and how to apply them to - working drawings. 7130.D2.9
	10 Understand the relationship between individual building components and a structure as a whole. 7130.D2.10
	11 Utilize different resources to understand building component’s applications and their limitations. 7130.D2.11
	12 Understand basic print reading for the construction industry. 7130.D2.12
Career Navigation 7130.D3	1 Explore career opportunities related to the program of study and understand how they relate to the global economy and marketplace. 7130.D3.1
	2 Understand the specialized skills needed for different career opportunities related to the program of study. 7130.D3.2
	3 Examine licensing, certification, and credentialing requirements for different career opportunities related to the program of study. 7130.D3.3
	4 Identify a career goal and develop an action plan, including opportunities available while in high school, for obtaining the specialized skills and credentials needed for a career related to the program of study. 7130.D3.4
Leadership and Employability Skills 7130.D4	1 Demonstrate professionalism by meeting expectations of promptness, attendance, being prepared, completing tasks, and following safety procedures. 7130.D4.1
	2 Demonstrate the skills needed to successfully collaborate within teams, departments, and organizations. 7130.D4.2
	3 Demonstrate an awareness and understanding of responsible, ethical, and professional networking. 7130.D4.3
	4 Examine personal, wellness, and stress management strategies. 7130.D4.4
College and Career Readiness Skills 7130.D5	1 Demonstrate computer literacy skills and basic computer functions. 7130.D5.1

-
- 2 Communicate clearly, effectively, and with reason through speaking, writing, using visuals, and active listening in formal and informal settings.** 7130.D5.2
-
- 3 Demonstrate decision-making and problem-solving skills using critical thinking and relevant math and data knowledge.** 7130.D5.3
-
- 4 Demonstrate research, study skills, and self-learning strategies needed to be successful in a career pathway.** 7130.D5.4