

# Industry Fundamentals and Occupational Safety (2013)

Demonstrate employability skills required by business and industry. AC-IFOS-1

- 1 Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities. AC-IFOS-1.1
- 2 Demonstrate creativity by asking challenging questions and applying innovative procedures and methods. AC-IFOS-1.2
- 3 Exhibit critical thinking and problem solving skills to locate, analyze and apply information in career planning and employment situations. AC-IFOS-1.3
- 4 Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity. AC-IFOS-1.4
- 5 Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply team work skills. AC-IFOS-1.5
- 6 Present a professional image through appearance, behavior and language. AC-IFOS-1.6

Understand and practice construction safety. AC-IFOS-2

- 1 Demonstrate knowledge of use and care of PPE. AC-IFOS-2.1
- 2 Demonstrate a basic knowledge of OSHA and its regulations. AC-IFOS-2.2
- 3 Demonstrate a basic knowledge of safety as related as relates to personal safety, aerial work, electricity, and fire. AC-IFOS-2.3

Understand and apply math concepts as applied to construction. AC-IFOS-3

- 1 Demonstrate knowledge and application of measuring. AC-IFOS-3.1
- 2 Apply basic math computations to construction settings. AC-IFOS-3.2
- 3 Apply basic geometric calculations including the 3-4-5 rule. AC-IFOS-3.3
- 4 Demonstrate knowledge and application of area and volume calculations. AC-IFOS-3.4

Utilize basic hand and power tools in a

- 1 Demonstrate knowledge of rules and regulations regarding the safe use of hand and power tools AC-IFOS-4.1

**professional and safe manner** AC-IFOS-4

**2 Demonstrate knowledge of the care and maintenance of hand and power tools.** AC-IFOS-4.2

**3 Demonstrate knowledge of proper usage techniques of hand and power tools.** AC-IFOS-4.3

**Demonstrate knowledge of construction drawings terms, components, and symbols.** AC-IFOS-5

**1 Demonstrate knowledge of construction drawings terms.** AC-IFOS-5.1

**2 Demonstrate knowledge of construction drawings components.** AC-IFOS-5.2

**3 Demonstrate knowledge of construction drawings symbols.** AC-IFOS-5.3

**Explain and implement safe rigging procedures.** AC-IFOS-6

**1 Demonstrate the knowledge of basic rigging equipment.** AC-IFOS-6.1

**2 Demonstrate the knowledge of basic rigging communication.** AC-IFOS-6.2

**3 Demonstrate the knowledge of basic rigging safety.** AC-IFOS-6.3

**Understand hazards associated with materials handling.** AC-IFOS-7

**1 Demonstrate knowledge of the importance of proper materials handling.** AC-IFOS-7.1

**2 Demonstrate the ability to develop a pre-task plan.** AC-IFOS-7.2

**3 Demonstrate the ability to use proper materials handling techniques.** AC-IFOS-7.3

**4 Demonstrate the ability to choose appropriate materials handling equipment for a given task.** AC-IFOS-7.4

**5 Demonstrate the ability to recognize hazards and follow appropriate safety procedures associated with materials handling.** AC-IFOS-7.5

**Demonstrate knowledge of the different forms of communication used in the construction industry.** AC-IFOS-8

**1 Demonstrate knowledge of interpreting written and verbal instructions.** AC-IFOS-8.1

**2 Demonstrate the ability to effectively communicate using verbal and written skills.** AC-IFOS-8.2

**3 Demonstrate the ability to effectively communicate using electronic communication devices.** AC-IFOS-8.3

**Develop an understanding of construction careers and describe the principal fields of specializations (i.e. Carpentry, masonry, plumbing, electrical, welding,**

**1 Identify education requirements for construction occupations and locations where programs of study are available.** AC-IFOS-9.1

**2 Match construction job titles with qualifications and responsibilities.** AC-IFOS-9.2

**3 Participate in activities related to career interests.** AC-IFOS-9.3

precision machining)  
and identify associated  
career  
opportunities. AC-IFOS-  
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Examine how SkillsUSA  
is a co-curricular part of  
career and technical  
education through  
leadership  
development, school  
and community service  
projects, and  
competitive events. AC-  
IFOS-10

- 1 Explain the purpose, mission, objectives, motto, colors, official dress and other distinguishing characteristics of SkillsUSA. AC-IFOS-10.1**

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- 2 Explain how participation in SkillsUSA can promote lifelong responsibility for community service, professional growth and development. AC-IFOS-10.2**

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- 3 Explore the impact and opportunities that SkillsUSA can develop to bring business and industry together with education in a positive working relationship through innovative leadership and career development programs. AC-IFOS-10.3**

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- 4 Explore the local, state, and national opportunities available to students through participation in SkillsUSA, including but not limited to conferences, competitions, community service, philanthropy, and other SkillsUSA activities. AC-IFOS-10.4**