SAFETY TECHNOLOGY

Competencies/Objectives

MODULE 75201-03 – INTRODUCTION TO SAFETY TECHNOLOGY

1. Explain the roles and responsibilities of a safety technician.
2. Explain important safety-related terms.
3. Explain the three levels of accident causation.
4. Explain the cost impact of accidents.
5. Describe the basic components of a safety program.
6. Explain the government regulatory requirements that affect the construction industry.

MODULE 75202-03 – HAZARD RECOGNITION, EVALUATION, AND CONTROL

1. Recognize unsafe acts and conditions on a work site.
2. Describe the techniques for recognizing hazards.
3. Evaluate the risk associated with identified hazards.
4. Describe the seven major methods for controlling hazards.

MODULE 75203-03 – RISK ANALYSIS AND ASSESSMENT

1. Explain the factors involved in analyzing performance.
2. Discuss the relationship between human behavior and work-site safety.
3. Explain the techniques used to coach and counsel workers with performance problems.
4. Explain the ABC model.

MODULE 75204-03 – INSPECTIONS, AUDITS, AND OBSERVATIONS

1. Describe the role and responsibility of the safety technician in on-site inspections, audits, and observations.
2. State the purpose of a safety inspection.
3. Explain how to conduct a safety audit.
4. Describe how to conduct an employee observation.

MODULE 75205-03 – EMPLOYEE MOTIVATION

1. Effectively communicate safety policies and procedures to all employees on a job site.
2. Describe the correct way to provide motivation, recognition, and discipline as needed.

MODULE 75206-03 – SITE-SPECIFIC ES&H PLANS

1. Evaluate hazard risks based on probability and consequences of outcome.
2. Identify specific job-site hazards and requirements using existing pre-bid planning checklists.
3. Modify your existing company Environmental Safety and Health (ES&H) program or Safety and Loss Prevention Manual to meet specific job conditions.
4. Describe coordination needed to implement your company’s ES&H plan with other entities.
5. Describe and explain administrative controls needed to make the plan effective.
MODULE 75207-03 – EMERGENCY-ACTION PLANS

1. Describe the types of emergencies that can occur on construction sites and at industrial facilities.
2. Describe the fundamental elements of an emergency-action plan.
3. Identify the correct procedures for dealing with the media.

MODULE 75208-03 – JSAs AND TSAs

1. Define job safety analysis.
2. Describe how to conduct a job safety analysis.
3. Describe the purpose of a task safety analysis.
4. Explain the difference between a job safety analysis and a task safety analysis.

MODULE 75209-03 – SAFETY ORIENTATION AND TRAINING

1. Effectively train all employees on a job site about safety policies and procedures.
2. Coordinate safety training programs.

MODULE 75210-03 – WORK PERMIT POLICIES

1. Describe the role and responsibility of the safety technician in relation to work permit policies.
2. State the purpose of work permit policies.
3. Explain the need for hot work permits.
4. Describe the safety technician’s role during the performance of hot work.
5. Explain the need for a lockout/tagout program.
6. Describe steps needed during the performance of lockout/tagout procedures.
7. Explain the need for confined-space permits.
8. Describe the safety technician’s role regarding confined-space work areas.
9. Describe some of the hazards involved when an excavation work permit is needed.
10. Describe the safety technician’s role during the performance of electrical hot work.

MODULE 75211-03 – CONFINED-SPACE ENTRY PROCEDURES

1. Describe three types of atmospheric hazards in confined spaces.
2. Demonstrate and explain atmospheric testing procedures for confined spaces.
3. Explain the confined-space entry permit system.
4. Explain the different roles and duties for people working in confined spaces.
5. Explain emergency procedures in confined spaces.
6. Explain rescue procedures for confined-space entry.

MODULE 75212-03 – SAFETY MEETINGS

1. Communicate safety issues and concerns to workers through safety meetings.
2. Prepare for and conduct an effective safety meeting.
3. Evaluate the quality of a safety meeting.

MODULE 75213-03 – ACCIDENT INVESTIGATION: POLICIES AND PROCEDURES

1. Explain the purposes and uses of accident investigations.
2. Identify the person responsible for conducting an accident investigation.
3. Complete an accident investigation form.
4. Explain the procedure for conducting accident investigation interviews.
MODULE 75214-03 – ACCIDENT INVESTIGATION: DATA ANALYSIS

1. Explain, in general, the methods commonly used for analyzing accident investigation information.
2. Explain at least three systematic approaches to accident investigation.

MODULE 75215-03 – RECORDKEEPING

1. Identify and follow OSHA and company requirements for recordkeeping.
2. Properly document work-related illnesses and injuries using OSHA Forms 300, 300A, and 301.
3. Explain how to manage safety and health records for a job site.

MODULE 75216-03 – OSHA INSPECTION PROCEDURES

1. Explain why OSHA inspects construction sites.
2. Describe the process for an on-site OSHA inspection.
3. Explain the role of the safety technician during an inspection.
4. Explain the difference between a focused inspection and a wall-to-wall inspection.
5. Explain suggested and required follow up resulting from an OSHA inspection.
6. Explain the consequences of OSHA citations, violations, and fines.
7. Explain the rights and responsibilities of employees and employers during an OSHA inspection.
8. Explain OSHA’s multi-employer work site inspection and citation procedures.

MODULE 75217-03 – ES&H DATA TRACKING AND TRENDING

1. List or describe traditional methods of measuring safety performance.
2. List or describe proactive methods of measuring safety performance.
3. Use benchmarks established by the participant’s firm, or corporate and industry best practices, analyze the data, and report the program strengths and areas needing improvement to site management.

MODULE 75218-03 – ENVIRONMENTAL AWARENESS

1. List or describe at least five types of environmental problems or issues that might arise on a typical construction site.
2. List or describe methods to prevent soil and water contamination when handling fuels and chemicals commonly found or used on construction sites.
3. List or describe ways to minimize the production of hazardous wastes on construction sites.
4. In general terms, explain hazardous waste shipping and manifest requirements.
5. List or describe the training and medical surveillance requirements for personnel who work with lead, asbestos, silica, or hazardous wastes.