



# Course Outline

## Fall Protection

EM 385 Competent Person — 24 hrs

Course #6438

VG2.0 20220125

### Course start — Day 1

#### Course Introduction

(30 minutes)

- 1.1 Instructor Introduction
- 1.2 The Purpose of the Course
- 1.3 Course Requirements
- 1.4 Course Completion
- 1.5 Student Record

#### Working At Height

(40 minutes)

- 2.1 Evolution of Fall Protection
- 2.2 Hazard Identification
- 2.3 Respecting Heights
- 2.4 Facts of Workplace Falls
- 2.5 Fall Dynamics

### 10 minute break

#### Fall Protection Oversight

(30 minutes)

- 3.1 Regulatory Bodies
- 3.2 Consensus Groups
- 3.3 Safety Associations and Organizations
- 3.4 Company Program
- 3.5 Conducting Due Diligence

#### Systems and Planning

(45 minutes)

- 4.1 Defining Fall Protection
- 4.2 Fall Protection Selection
- 4.3 Elimination of Fall Hazards
- 4.4 Passive Systems
- 4.5 Restraint Systems
- 4.6 Arrest Systems
- 4.7 Administrative Controls
- 4.8 Fall Protection Plans
- 4.9 Fall Hazard Survey

### 10 minute break

#### Anchor Points

(35 minutes)

- 5.1 Component Overview
- 5.2 Anchorage Types
- 5.3 Strength Requirements
- 5.4 Anchorage Connectors

#### Workshop #1 Anchor Points

(40 minutes)

- Students will be given the opportunity to discover the working specifications of select anchorage connectors
- Students will be challenged to complete an assessment on the usability of the anchor points presented to them

### 45 minute break / lunch

#### Body Support

(25 minutes)

- 6.1 Component Overview
- 6.2 Body Belts
- 6.3 Full Body Harness
- 6.4 Harness Considerations
- 6.5 Harness Applications
- 6.6 Harness Inspection and Fitting

#### Workshop #2

##### Full Body Harnesses

(60 minutes)

- Students will complete a harness pre-use inspection, donning, and partner check
- Students will be challenged to assess the proper fit of different individuals in harnesses

### 10 minute break

#### Connectors (Part 1)

(15 minutes)

- 7.1 Component Overview
- 7.2 Snaphooks and Carabiners
- 7.3 Lanyards

#### Workshop #3

##### Connector Compatibility

(30 minutes)

- Students will be challenged to assess various combinations of system components to determine the compatibility of the connections

### 10 minute break

#### Connectors (Part 2)

(45 minutes)

- 7.4 Free Fall Distance
- 7.5 Energy Absorbers
- 7.6 Clearance Requirements



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### Course start — Day 2

**Connectors (Part 3)**  
(40 minutes)

- 7.7 Self-Retracting Devices
- 7.8 Vertical Lifelines
- 7.9 Horizontal Lifelines

### 10 minute break

**Workshop #4 Vertical Systems**  
(35 minutes)

- Students will examine and use a VLL system. The exercise will include a review of manufacturer's user instructions to answer challenge questions regarding specifications

**Workshop #5 Horizontal Systems**  
(35 minutes)

- Students will be challenged to set-up a temporary HLL system at floor level. The exercise will include a review of manufacturer's user instructions to determine clearance requirements for the system

**Workshop #6 Climbing and Positioning**  
(35 minutes)

- Students will be challenged to answer a series of workbook questions regarding the working specifications of these connectors
- Students will be given the opportunity to complete a short climb using twin leg lanyards and a work positioning strap

### 10 minute break

**Descent and Rescue**  
(20 minutes)

- 8.1 Component Overview
- 8.2 Rescue Requirements
- 8.3 Suspension Trauma
- 8.4 Response Planning
- 8.5 Equipment and Techniques
- 8.6 Post Fall Protocol

**Workshop #7 Descent and Rescue**  
(30 minutes)

- Instructor will demonstrate both an emergency descent system and a basic rescue system to further expand students' understanding of this component

**Equipment Care**  
(25 minutes)

- 9.1 Equipment Care Principles
- 9.2 Inspection
- 9.3 Maintenance
- 9.4 Storage

### 45 minute break / lunch

**Workshop #8 End-User Inspections**  
(40 minutes)

- Students will be challenged to complete a series of end-user inspections on common fall protection equipment to determine their serviceability

**Work Applications**  
(30 minutes)

- 10.1 Regulatory Requirements
- 10.2 Construction and Industrial
- 10.3 Utilities and Communications
- 10.4 Transportation, Energy and Mining
- 10.5 Dropped Object Protection

### 10 minute break

**Workshop #9 System Analysis**  
(65 minutes)

- Students will be challenged to examine personal fall arrest systems to determine their acceptability for use

### 10 minute break

**Mid Course Review**  
(40 minutes)

- 11.1 Review for Sections 2–5 (crossword)
- 11.2 Review for Sections 6–9 (index cards)



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### Course start — Day 3

#### Engineering Manual 385

(40 minutes)

- 12.1 U.S. Army Corp of Engineers
- 12.2 Program Components
- 12.3 Key Roles
- 12.4 Essential Documents
- 12.5 Technical Standards
- 12.6 Fall Protection Requirements

### 10 minute break

#### Workshop #10 EM385 Fall Protection Standard

(120 minutes)

- Part A — Students will be provided with a copy of section 21 (fall protection) of the EM385 standard. Using this course resource booklet, students will be challenged to answer a variety of specific questions using this document in order to learn more about the requirements of the standard
- Part B — Students will be shown images of workers at-height using fall protection systems and will be challenged to identify possible contraventions of the standard

### 10 minute break

#### Fall Protection FAQs

(60 minutes)

- 13.1 Fall Protection Resources
- 13.2 Harness Selection
- 13.3 Capacity Rating
- 13.4 Energy Absorber Labels
- 13.5 Classes of Self Retracting Devices
- 13.6 Inspection of Self Retracting Devices
- 13.7 Leading Edge
- 13.8 Prompt Rescue
- 13.9 Rescue Planning

### 45 minute break / lunch

#### Fall Protection Planning

(30 minutes)

- 14.1 Developing a Plan

#### Workshop #11 Fall Protection Planning

(90 minutes)

- In small working groups, students will be challenged to examine a work at-height scenario and develop a fall protection plan for the given work situation

### 15 minute break

#### Summary and Review

(60 minutes)

- 15.1 Key Learning Concepts
- 15.2 Review Questions