

| Sr. No. | Topics |
|---------|--|
| 1 | Safety Management: <ul style="list-style-type: none">• Basic Principal of Electrical Accident Prevention• Fundamentals and Dangers from Electricity• Tool Box Talk (TBT), PTW Permit to work (PTW) and Lock Out Tag Out (LOTO) |
| 2 | Hazards Identification & Risk Assessment (HIRA) and assignment |
| 3 | Safe Work Method Statement (SWMS) based on story board – Basic Concept & Assignments |
| 4 | Machine guarding & Safety Interlocks <ul style="list-style-type: none">• Types of guarding & Illustration with equipment's (Air Handling Unit, Air compressors)• Inherently safe Design principles for guarding• Various types of interlock devices• Performance Level (PL)• Safety Integrity Level (SIL) |
| 5 | Risk mitigation measures in machineries <ul style="list-style-type: none">• Light curtain• Two hand control• Laser scanner• Pressure sensitive edges• Safety Relay & PLC |
| 6 | Safe Work Method Statement (SWMS) – Assignment Status Review |

-
- | | |
|---|--|
| 7 | Risk mitigation measures in the Material handling equipments & infrastructures <ul style="list-style-type: none">• Material Handling - Safety interlocks in EOT crane, BOPT, Goliath crane, Forklifts, High Reach stacker, Scissor lifts, Man lifter, Mobile crane etc.• Infrastructures- DG Set, STP (Sewage Treatment Plant) |
|---|--|
-
- | | |
|---|--|
| 8 | Material handling <ul style="list-style-type: none">• Types of Lifting & safe working Load, Lifting |
|---|--|
-
- | | |
|---|---|
| 9 | Safe Work Method Statement (SWMS) - Assignments Presentation by Participants |
|---|---|
-
- | | |
|----|---|
| 10 | Assessment: Safety Commitment, Training Feedback and SITRUST Online Examination |
|----|---|

Sr. No. DAY 1 – Topics

1 **Safety Management and HIRA (Hazard Identification and Risk Assessment)**

- Safety management
- Hazard identification & Risk assessment of various machineries
- SWMS (Safe Work Method Statement) introduction to groups
- Case Studies & Importance of Safe Work Method Statement

Break

2 **Machine guarding & Safety Interlocks**

- Standards and Legal requirements in machine safety
- Safety while maintenance in machineries
- Types of guarding & Illustration with equipment's (AHU, Air compressors)
- Inherently safe Design principles for guarding
- Various level of interlock guarding
- Performance Level (PL)
- Safety Integrity Level (SIL)
- Short online quiz

Sr. No. DAY 2 – Topics

3 Risk mitigation measures in machineries

- Light curtain – Illustration with practical machineries
- Two hand control – Illustration with practical machineries
- Laser scanner – Illustration with practical machineries
- Emergency button – Illustration with practical machineries
- Safety Relay & PLC and implementation in a practical machine

Break

4 Risk mitigation measures in material handling equipments

- Types of Lifting & safe working Load
- Lifting tools& tackles
- Safety interlocks in EOT crane, BOPT, Goliath crane, Forklifts, High Reach stacker, Scissor lifts, Man lifter, Mobile crane etc.

5 Assignments - SWMS Discussion & Review

6 Safety Commitment, Feedback and Assessment

SITRUST™ - 3 Hours Online Manufacturing Safety Training Module 1: Machine Safety in Industries

siemens.co.in

| Sr. No. | Topics | Duration |
|------------------------|--|------------------|
| 1 | Machine guarding and safety Interlocks <ul style="list-style-type: none">Machine Safety ISO & IEC StandardsPerformance Level (PL) & Safety Integrity Level (SIL)Types of guarding & Safety Interlocks | 1.5 Hours |
| Break (10 Mins) | | |
| 2 | Machine Safety Risk Mitigation Measures <ul style="list-style-type: none">Emergency button, Light curtain, Two hand control and Laser scannerAutomation solution for a safe machine | 1.5 Hours |

Who Should Attend? - Professionals from all across Industry Sectors

SITRUST™ - 3 Hours Online
Manufacturing Safety Training
Module 2: Material Handling Safety

siemens.co.in

| Sr. No. | Topics | Duration |
|------------------------|---|------------------|
| 1 | Material Handling Safety <ul style="list-style-type: none">Lifting methods & Safe working loadLifting tools & tackles | 1.5 Hours |
| Break (10 Mins) | | |
| | <ul style="list-style-type: none">Safety interlocks for material handling equipment | 1.5 Hours |

Who Should Attend? - Professionals from all across Industry Sectors

SITRUST™ - 3 Hours Online Manufacturing
Safety Training Module 3: Hazard
Identification & Risk Assessment and
Preparation of Safe Work Method Statement

siemens.co.in

| Sr. No. | Topics | Duration |
|------------------------|---|------------------|
| 1 | Hazard Identification & Risk Assessment <ul style="list-style-type: none">Hazard IdentificationRisk Assessment and As Low As Reasonably Practicable (ALARP) | 1.5 Hours |
| Break (10 Mins) | | |
| 2 | Safe Work Method Statement (SWMS) <ul style="list-style-type: none">Fundamentals of Safe Work Method StatementMethod to Prepare SWMS | 1.5 Hours |

Who Should Attend? - Professionals from all across Industry Sectors

SITRUST™ - 3 Hours Online Manufacturing Safety Training Module 4: Fire Safety

siemens.co.in

| Sr. No. | Topics | Duration |
|------------------------|---|------------------|
| 1 | Basics of Fire safety <ul style="list-style-type: none">• Fire triangle and Fire extinguishing principles• Basic material properties related to fire safety• MSDS (Material Safety Data Sheet) & its importance• Classes of fire• Electrical Fire & AFDD (Arc Flash Detection Device) | 1.5 Hours |
| Break (10 Mins) | | |
| 2 | Fire Detection and Fire Suppression System <ul style="list-style-type: none">• Types of Fire extinguishers and their selection• Fire hydrant system and fire pump room• Fire hoses and nozzles• Fire detectors and alarming system• Gas based fire suppression• Emergency evacuation and first aid related to fire incident | 1.5 Hours |

Who Should Attend? - Professionals from all across Industry Sectors