

ISE → syllabus

Module 1 - Introduction to industrial safety.

Terminologies used: accident, safety, hazard, safety devices, safety guards, necessity, precautions, caution, appliance, slip, trip, fall, ladders & scaffolding, unsafe acts, reason for accidents, material safety data sheet (MSDS), OSHA, WHO. Lockout & tagout procedures.

Safe material handling & storage.

Module 2 - Fire safety.

Introduction, class A, B, C, D & E fire.

Fire triangle. Fire extinguishers, fire hazards, analysis, prevention of fire, fire protection & fire prevention, steps after occurrence of fire, Portable fire extinguisher, fire detection, fire alarm & firefighting system, safety sign boards, instruction on portable fire extinguishers.

Module 3 - Mechanical safety:

personal protecting equipment (PPE), safety guards, safety while working with machines, tools like lathe, drill press, power & band saw, grinding machine. Safety during welding, forging & pressing. Safety while handling material, compressed gas cylinders, corrosive substance & portable mechanical tools.

Module 4 - Electrical safety:

introduction to electrical safety, electric hazards, prevention of electrical accidents, PPE used. AC & DC current shocks, safety precaution against shocks, electrical portable electrical tools, domestic & industrial electrical safety procedures. field visits

Module 5 - Chemical safety & other safety checks:

introduction to chemical safety, labelling of chemicals, acid hoods, handling of acids, eye washers & showers, hazardous waste disposal, check list for LPG installation, safety precaution, using CNG fire prevention & safety audit, field visit.