



# SAFEPRAC

SAQA US: 117701 & 120303  
 NQF Level: 5  
 SAQA Credits: 16  
 SAIOSH CPD Credits: 5  
 Duration: 10 Days

## Course description

**SAFEPRAC** is the ultimate practicable course in Occupational Health and Safety Management. **SAFEPRAC** is based on Unit Standards 117701 & 120303 and is aligned with ISO 14001:2015, ISO 45001:2018 & ISO 31000: 2018 clause requirements. It is the only Safety Management course available where students are being exposed to on-site practical experience as part of the course. Upon successful completion of **SAFEPRAC**, the student will be able to apply for SAIOSH Technical Membership.

## Course outcome

**SAFEPRAC** will enable students to:  
 Facilitate the development, implementation and maintenance of a Safety, Health and Environment management system in line with the ISO 14001:2015 and ISO 45001:2018 clause requirements.

## Course Content

### WEEK 1

#### MODULE 1 – SAFETY

#### Unit 1: Safe Work Environment

- 1.1 Site Planning and Layout.
- 1.2 Access Control.
- 1.3 Stacking and storage \Housekeeping.
- 1.4 General Safety Regulation 1986 – GSR 8 Stacking of articles.

#### Unit 2: Machinery and Work Equipment

- 2.1 Introduction.
- 2.2 Suitability of Work Equipment and CE Marking.
- 2.3 Use and Maintenance of Equipment with Specific Risks.
- 2.4 User Responsibilities.
- 2.5 Hand-Held Tools.
- 2.6 Controls for handheld tools.
- 2.7 Hand-Held Power Tools.
- 2.8 Mechanical Machinery Hazards.
- 2.9 Mobile Work Equipment.
- 2.10 Other Safety Devices.
- 2.11 Application of Safeguards to a Range of Machines.

#### Unit 3: Electrical Safety

- 3.1 Introduction
- 3.2 Hazard and Risk Associated with Use of Electricity at Work.
- 3.3 Electrical hazards and injuries.
- 3.4 Electric shock and burns.
- 3.5 Treatment of Electrical Shock.
- 3.6 Electrical Fires and Explosions.
- 3.7 Electrical Arcing.
- 3.8 Static Electricity.
- 3.9 Secondary Hazards.
- 3.10 Control Measures.

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- 3.11 Selection and Suitability of Equipment.
- 3.12 Advantages and Limitations of Protective Systems.
- 3.13 Maintenance Strategies.
- 3.14 Inspection Strategies.
- 3.15 Portable Electrical Appliance Testing.
- 3.16 Electricity in South Africa (Colour Coding, SANS 10142 single phase and three phase).

**Unit 4: Lifting Equipment**

- 4.1 Introduction.
- 4.2 Definitions.
- 4.3 Training DMR 18(11).
- 4.4 Recertification.

**Unit 5: Working at Heights**

- 5.1 Introduction.
- 5.2 Definitions.
- 5.3 Protection Against Falls or Fall Prevention.
- 5.4 Fragile Roofs and Surfaces.
- 5.5 Protection Against Falling Objects.
- 5.6 Fall Protection Plans.
- 5.7 Access Equipment.

**Unit 6: Pressure equipment**

- 6.1 Definitions.
- 6.2 Basic Precautions.
- 6.3 Basic Safety Considerations.
- 6.4 Basic Safety features of a Gas Installation and Gas Cylinder.

**Unit 7: Fire hazard and controls.**

- 7.1 Elements of a fire and the Fire Triangle.
- 7.2 Classification of Fire.
- 7.3 Principles of Heat Transmission and Fire Spread.
- 7.4 Fire Risk Assessment.
- 7.5 Flammable Liquid Storage.
- 7.6 Fire Detection and Warning.
- 7.7 Means of Escape in Case of Fire.
- 7.8 Principles of Fire Protection in Buildings.
- 7.9 Provision of Fire Fighting Equipment.
- 7.10 Maintenance and Testing of Fire Fighting Equipment.
- 7.11 Planning for an Emergency and Training Staff.

**Unit 8: Confined Space Hazards and Risk**

- 8.1 Definition.
- 8.2 General Safety Regulation 5 (GSR).
- 8.3 Hazards of Confined Space.
- 8.4 Control Measures for Confined Space Work.
- 8.5 Monitoring Arrangements.
- 8.6 Emergency Arrangements.

**Unit 9: Confined Space Hazards and Risk**

- 9.1 Introduction.
- 9.2 Hazards from Workplace Transport Operations.
- 9.3 Hazards from Mobile Work Equipment.
- 9.4 Control Measures for Safe Workplace Transport Operations.

**MODULE 2 - OCCUPATIONAL HEALTH**

**Unit 1: Occupational Health Service**

- 1.1 Introduction.
- 1.2 Definitions and Terminologies.
- 1.3 Occupational Health Service Overview.
- 1.4 Objectives of Occupational Health Services.
- 1.5 Function of Occupational Health Services.

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**Unit 2: The Principle of Occupational Health.**

- 2.1 Occupational Hygiene.
- 2.2 Occupational Medicine.
- 2.3 Primary Health Care (PHC).
- 2.4 Mental Health in the Workplace.

**Unit 3: Physical and Psychological Health Hazards and Risk Control.**

- 3.1 Noise.
- 3.2 Vibration.
- 3.3 Radiation.

**Unit 4: Chemical Health Hazards and Control**

- 4.1 Legislation.
- 4.2 General Regulations.
- 4.3 Chemicals.

**Unit 5: Biological Stressors<sup>75</sup>**

- 5.1 Definitions in terms of Hazardous Biological Agent Regulation 2022.
- 5.2 Hazard Groups of Hazardous Biological Agents.
- 5.3 Different forms of Hazardous Biological Agents that might be in the workplace and their related health hazards.

**Unit 6: Musculoskeletal Hazards and Risk Control**

- 6.1 Introduction.
- 6.2 Manual Handling Hazards, Risks and Control Measures.
- 6.3 Manually Operated Load Handling Equipment.
- 6.4 Powered Load Handling Equipment.
- 6.5 Powered Load Handling Equipment.

**MODULE 3 – ENVIRONMENTAL.****UNIT 1: Some Definitions and Terminologies.**

- 1.1 Corporate Social Responsibility.
- 1.2 Environment.
- 1.3 Environmental Aspect.
- 1.4 Environmental Condition.
- 1.5 Environmental Impact.
- 1.6 Environmental Management.
- 1.7 Life Cycle.
- 1.8 Pollution.
- 1.9 Contamination.
- 1.10 Sustainability.
- 1.11 Deforestation.

**UNIT 2: Understanding the Size of the Global Environmental Problem.**

- 2.1 Carbon Emissions and Climate Change.
- 2.2 Typical Climate Change Impacts.
- 2.3 How to Reduce Fossil Fuel Use by Putting Controls in Place.
- 2.4 Reduce (Mitigate) Global Warming and Climate Change.
- 2.5 Air Pollution and the Ozone Layer.
- 2.6 Ground Level Ozone Formation.
- 2.7 Ozone Depletion.

**UNIT 3: Energy**

- 3.1 Sources of Use of Energy and Energy Efficiency.
- 3.2 Coal, Oil and Gas – Origins and Main Sources of Supply.
- 3.3 Other Sources of Energy with Their Benefits and Limitations.
- 3.4 Importance of Energy Efficiency.
- 3.5 Water Resources.

**UNIT 4: Deforestation, Soil Erosion and Land Quality.**

- 4.1 Deforestation.
- 4.2 Ecosystem.
- 4.3 Biodiversity.

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- 4.4 Ecology.
- 4.5 Wetland.
- 4.6 Life Cycle Analysis.

**UNIT 5: Environmental Impact Assessment (EIA).**

- 5.1 What is an Environmental Impact Assessment?
- 5.2 The Source, Pathway, Receptor Model and Its Application to Risk Assessment.
- 5.3 Pollution.
- 5.4 Waste.

**UNIT 6: Environmental Performance Monitoring.**

- 6.1 Environmental Inspection.
- 6.2 Environmental Monitoring.

**WEEK 2**

**MODULE 4 – SHE MANAGEMENT SYSTEM.**

**UNIT 1: INTRODUCTION.**

- 1.1 What is a Management System.
- 1.2 What is a Health and Safety Management System.
- 1.3 Basic Elements of all Health and Safety Management Systems.
- 1.4 Successful health and safety management (HSG65) HSE Books.
- 1.5 Introduction to ISO 14001:2015 Environmental Management System.
- 1.6 Introduction to ISO 45001:2018 OH & S Management System.
- 1.7 What are Integrated Management Systems.
- 1.8 Annexure SL High Level Structure.

**UNIT 2: PDCA CYCLE**

- 2.1 Plan- Do-Check-Act (PDCA) ISO 45001:2018.
- 2.2 Contents of the International Standard.

**UNIT 3: IMPLEMENTATION OF INTEGRATED MANAGEMENT SYSTEM**

- Clause 1: Scope.
- Clause 2: Normative References.
- Clause 3: Terms & Definitions.
- Clause 4: Context of the Organization.
- Clause 5: Leadership.
- Clause 6: Planning.
- Clause 7: Support.
- Clause 8.1: Operational Planning and Control.
- Clause 9: Performance Evaluation.
- Clause 10: Improvement.

**MODULE 5 – RISK MANAGEMENT (In line with planning stage of ISO system)**

**UNIT 1: WHAT IS RISK.**

- 1.1 Introduction.
- 1.2 Definitions.
- 1.3 The Concept of Risk.
- 1.4 Types of Risk.
- 1.5 The Nature of Risks.
- 1.6 The Risk Management Process.
- 1.7 Risk Assessment in Detail.
- 1.8 Risk Assessment in Integrated Environmental Management.
- 1.9 When to Use the Risk Assessment and the Risk Management Process.
- 1.10 Benefits of Risk Assessment and the Risk Management Process.

**UNIT 2: ISO 31000: 2018.**

- 2.1 Introduction.
- 2.2 Nature of Management Systems.
- 2.3 Structure and Approach of ISO 31000.
- 2.4 Guidance Provided in ISO 31000 – Principles.
- 2.5 Guidance Provided in ISO 31000 – Framework.
- 2.6 Guidance Provided in ISO 31000 – Process.

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- 2.7 Comparison of ISO 31000 Against Annex SL.
- 2.8 Relevance of ISO 31000 for Risk Professionals.

**UNIT 3: RISK ASSESSMENT.**

- 3.1 Forms of Risk Assessment.
- 3.2 Types of Risk Assessments.
- 3.3 Special cases.

**UNIT 4: SAFE SYSTEM OF WORK.**

- 4.1 What is a safe system of work.
- 4.2 Legal requirements.
- 4.3 Assessment of what safe systems of work are required.
- 4.4 Development of safe systems.
- 4.5 Preparation of safe systems.
- 4.6 Documentation.
- 4.7 Communication and training.
- 4.8 Monitoring safe systems.
- 4.9 Definition of and specific examples of safe systems of work.

**UNIT 5: PERMIT TO WORK.**

- 5.1 Introduction.
- 5.2 The principles that apply to permits to work.
- 5.3 Permit to work procedures.
- 5.4 Work requiring a permit.
- 5.5 Typical work tasks that might require a permit to work.

**UNIT 6: SAFE WORK PROCEDURES.**

- 6.1 Overview.
- 6.2 Legal Requirements and ISO Standard Reference, Definitions and Terminologies.
- 6.3 Safe Work Procedure.
- 6.4 What is a safe work procedure.
- 6.5 Developing safe work procedures.

**UNIT 7: EMERGENCY PROCEDURES AND ARRANGEMENTS FOR CONTACTING THE EMERGENCY SERVICES.**

- 7.1 Introduction.
- 7.2 Points to include in emergency procedures.
- 7.3 Supervisory duties.
- 7.4 Assembly and roll-call.
- 7.5 Contacting the emergency services.
- 7.6 Testing and training for emergencies.

**UNIT 8: REQUIREMENTS FOR, AND EFFECTIVE PROVISION OF FIRST AID IN THE WORKPLACE.**

- 8.1 Introduction.
- 8.2 Aspects to consider.
- 8.3 Impact on first aid provision if risks are significant.
- 8.4 Contents of the first aid box.
- 8.5 Appointed persons.

**THEORETICAL ASSESSMENT**

Formative Assessment (Open book test)  
Summative Assessment (Closed book test)

**PRACTICAL ASSESSMENT**

In-class Practical Assessments (Week 2 of course)  
On-site Practical Assignments (To be completed 30 days after course completion)

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