

ICTQual AB



Qualification Specification

ICTQual AB Level 6 Diploma in Occupational Health and Safety Engineering 360 Credits – Three Years



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Qualification Specification about

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About ICTQual AB's

ICTQual AB is a distinguished awarding body based in the United Kingdom, dedicated to fostering excellence in education, training, and skills development. Committed to global standards, ICTQual AB's provides internationally recognized qualifications that empower individuals and organizations to thrive in an increasingly competitive world. Their offerings span diverse industries, including technical fields, health and safety, management, and more, ensuring relevance and adaptability to modern workforce needs.

ICTQual AB's delivers high-quality educational solutions through a network of Approved Training Centres worldwide. Their robust standards and innovative teaching methodologies equip learners with practical knowledge and skills for personal and professional growth. With a mission to inspire lifelong learning and drive positive change, ICTQual AB's continuously evolves its programs to stay ahead of industry trends and technological advancements.

Course Overview

The **ICTQual AB Level 6 Diploma in Occupational Health and Safety Engineering** is a premier, internationally recognized qualification meticulously mapped to UK academic and industry benchmarks. This three-year program serves as a comprehensive gateway for individuals aspiring to master the complexities of workplace protection. By blending rigorous engineering principles with health and safety management, the course ensures that learners are not just administrators of safety, but architects of secure industrial environments.

Designed to evolve with the shifting global landscape, the diploma bridges the gap between foundational theory and high-level technical application. Over the course of 360 credits, students delve into the mechanics of hazard identification, the psychology of workplace safety, and the legislative frameworks that govern international industry. Whether you are a newcomer to the field or a seasoned professional aiming to validate your expertise, this qualification provides the professional pedigree and technical depth required to lead safety initiatives in high-stakes corporate and industrial sectors.

Objectives

The primary objectives of this qualification are to:

- **Equip** learners with a profound understanding of the engineering principles used to mitigate physical, chemical, and biological workplace hazards.
- **Develop** advanced analytical skills for conducting complex risk assessments and forensic accident investigations.
- **Foster** the ability to design, implement, and manage integrated Health and Safety Management Systems (HSMS) that comply with global standards like ISO 45001.

Aims

The programme aims to:

- Provide a structured academic pathway that balances theoretical knowledge with practical, industry-relevant application.
- Ensure graduates possess the competence to maintain legal compliance within various international jurisdictions.
- Support the professionalization of the health and safety workforce by producing practitioners capable of critical thinking and ethical decision-making.

Targeted Audience

This diploma is strategically designed for a diverse range of candidates:

- **Aspiring Safety Professionals:** Individuals seeking a robust, multi-year academic foundation to enter the HSE (Health, Safety, and Environment) profession.
- **Experienced Practitioners:** Safety officers and coordinators currently in the field who require a Level 6 qualification to transition into Safety Engineering or senior management roles.
- **Technical Specialists:** Engineers and supervisors from other disciplines looking to specialize in occupational health and safety to enhance their versatility.

Certification Framework

Qualification title	ICTQual AB Level 6 Diploma in Occupational Health and Safety Engineering 360 Credits – Three Years
Course ID	HS&E0008
Total Qualification Time	3600
Guided Learning Hours	1800
Grading Type	Pass / Fail
Competency Evaluation Assessment	Coursework / Assignments / Verifiable Experience The assessment and verification process for ICTQual AB’s qualifications involves two key stages: Internal Assessment and Verification: <ul style="list-style-type: none">✓ Conducted by the staff at the Approved Training Centre (ATC) to ensure learners meet the required standards through continuous assessments.✓ Internal Quality Assurance (IQA) is carried out by the centre’s IQA staff to validate the assessment process. External Quality Assurance: <ul style="list-style-type: none">✓ Managed by ICTQual AB’s verifiers, who periodically review the centre’s assessment and IQA processes. Verifies that assessments are conducted to the required standards and ensures consistency across centres

Entry Requirements

To enrol in ICTQual AB Level 6 Diploma in Occupational Health and Safety Engineering 360 Credits – Three Years, learner must meet the following entry requirements:

- ✓ **Age Requirement:** Learners must be at least 18 years old at the time of registration.
- ✓ **Educational Background:** Learners should have a high school diploma, A-levels, or equivalent qualification. Learners with prior vocational or technical qualifications in engineering, health and safety, or related fields are also encouraged to apply.
- ✓ **Professional Experience:** The course is suitable for both freshers and experienced learners. Experienced learners with prior work in occupational health and safety, engineering, or industrial environments can benefit from advanced learning pathways within the programme.
- ✓ **English Proficiency:** Learners must demonstrate proficiency in English, as the programme is delivered in English.

Qualification Structure

This qualification comprises 36 mandatory units, totalling 360 Credits. Candidates must successfully complete all mandatory units to achieve the qualification.

Mandatory Units	
Unit Ref#	Unit Title
Year 1 – Foundation Level	
HS&E0008-01	Introduction to Occupational Health and Safety
HS&E0008-02	Principles of Risk Assessment and Management
HS&E0008-03	Workplace Safety Legislation and Compliance
HS&E0008-04	Fundamentals of Fire Safety Management
HS&E0008-05	Personal Protective Equipment (PPE) in the Workplace
HS&E0008-06	Environmental Health and Safety Awareness
HS&E0008-07	Accident Investigation and Reporting Procedures
HS&E0008-08	Ergonomics and Human Factors in Safety
HS&E0008-09	Health and Safety Communication Skills
HS&E0008-10	Hazard Identification and Control Measures
HS&E0008-11	Basics of Industrial Hygiene
HS&E0008-12	Introduction to Emergency Preparedness and Response
Year 2 – Intermediate Level	
HS&E0008-13	Advanced Risk Assessment Techniques
HS&E0008-14	Fire Safety Systems and Evacuation Planning
HS&E0008-15	Safety Management Systems (ISO 45001)
HS&E0008-16	Workplace Safety Auditing and Inspection
HS&E0008-17	Electrical Safety in the Workplace
HS&E0008-18	Mechanical and Machinery Safety
HS&E0008-19	Environmental Protection and Sustainability Practices
HS&E0008-20	Occupational Health Monitoring and Surveillance
HS&E0008-21	Safety Leadership and Team Management
HS&E0008-22	Hazardous Materials and Chemical Safety
HS&E0008-23	Noise, Vibration, and Occupational Stress Management
HS&E0008-24	Construction and Industrial Safety Practices
Year 3 – Advanced Level	
HS&E0008-25	Strategic Health and Safety Management
HS&E0008-26	Advanced Fire Risk Management and Prevention
HS&E0008-27	Safety Culture Development and Behavioural Safety
HS&E0008-28	Advanced Accident Investigation and Root Cause Analysis
HS&E0008-29	Ergonomic Risk Management in Industrial Settings
HS&E0008-30	Emergency Planning and Crisis Management
HS&E0008-31	Safety Performance Metrics and KPI Analysis
HS&E0008-32	Legal Compliance and Occupational Safety Standards
HS&E0008-33	Environmental Health and Safety Policy Development
HS&E0008-34	Health and Safety Project Planning and Implementation
HS&E0008-35	Leadership in Occupational Safety Engineering
HS&E0008-36	Capstone Project in Occupational Health and Safety Engineering

Centre Requirements

To ensure quality training delivery, centres must adhere to the following standards:

1. Centre Approval

- ✓ Centres must be formally approved by ICTQual AB's before delivering this qualification.
- ✓ Approval involves a review of facilities, policies, and staff qualifications.

2. Qualified Staff

- ✓ **Tutors:** Must hold a Bachelor's Degree (Level 6) or higher in Occupational Health and Safety Engineering, Fire Safety, or a relevant technical discipline, and possess a minimum of 5 years of professional industrial experience alongside a recognized formal teaching or assessor qualification.
- ✓ **Assessors:** Must hold a recognized assessor qualification (e.g., CAVA, AVRA) or equivalent)
- ✓ **Internal Quality Assurers (IQAs):** Must hold a recognized IQA qualification (e.g. Level 4 Award in the IQA and Level 4 Certificate in Leading the IQA) and experience to oversee assessment standards.

3. Learning Facilities

Centre must offer:

- ✓ Private study areas and internet-enabled workspaces (for blended or physical delivery)
- ✓ Academic and pastoral support for learners
- ✓ Administrative support must be available to manage enrolment, tracking, and learner queries efficiently

4. Health and Safety Compliance

- ✓ All training facilities must comply with health and safety regulations.
- ✓ Centres must conduct regular risk assessments for practical activities.

5. Learning Resources

- ✓ **Course Materials:** Approved textbooks, study guides, and digital content must align with the qualification standards.
- ✓ **Assessment Tools:** Templates and guidelines must be provided to ensure standardized evaluation processes.
- ✓ **E-Learning Support:** Centres offering online or blended learning must implement an effective Learning Management System (LMS).

6. Assessment and Quality Assurance

- ✓ Centres must ensure assessments meet ICTQual AB's competency standards.

- ✓ Internal quality assurance (IQA) must be conducted to maintain consistency.
- ✓ External verifiers from ICTQual AB's will review assessment and training practices.

7. Learning Support

- ✓ **Qualification Guidance:** Support for coursework and assignments.
- ✓ **Career Pathway Assistance:** Information on progression opportunities in Occupational Health and Safety Engineering or Fire Safety sectors.
- ✓ **Accessibility Support:** Accommodations for learners with disabilities or language barriers.

8. Policies and Compliance

Centres must uphold the following policies in accordance with ICTQual AB's standards:

- ✓ Equality, Diversity, and Inclusion Policy.
- ✓ Health and Safety Policy.
- ✓ Safeguarding and Learner Protection Policy.
- ✓ Complaints and Appeals Procedure.
- ✓ Data Protection and Confidentiality Policy.

9. Reporting Requirements

- Centres must provide ICTQual AB's with regular reports on learner registrations, progress, and certification outcomes.
- Assessment records must be maintained for external auditing and quality assurance purposes.

Support for Candidates

Centres should ensure that materials developed to support candidates:

- ✓ Facilitate tracking of achievements as candidate's progress through the learning outcomes and assessment criteria.
- ✓ Include information on how and where ICTQual AB's policies and procedures can be accessed.
- ✓ Provide mechanisms for Internal and External Quality Assurance staff to verify and authenticate evidence effectively.

This approach ensures transparency, supports candidates' learning journeys, and upholds quality assurance standards.

Assessment

This qualification is competence-based, requiring candidates to demonstrate proficiency as defined in the qualification units. The assessment evaluates the candidate's skills, knowledge, and understanding against the set standards. Key details include:

1. Assessment Process:

- ✓ Must be conducted by an experienced and qualified assessor.
- ✓ Candidates compile a portfolio of evidence that satisfies all learning outcomes and assessment criteria for each unit.

2. Types of Evidence:

- ✓ Observation reports by the assessor.
- ✓ Assignments, projects, or reports.
- ✓ Professional discussions.
- ✓ Witness testimonies.
- ✓ Candidate-produced work.
- ✓ Worksheets.
- ✓ Records of oral and written questioning.
- ✓ Recognition of Prior Learning (RPL).

3. Learning Outcomes and Assessment Criteria:

- ✓ **Learning Outcomes:** Define what candidates should know, understand, or accomplish upon completing the unit.
- ✓ **Assessment Criteria:** Detail the standards candidates must meet to demonstrate that the learning outcomes have been achieved.

This framework ensures rigorous and consistent evaluation of candidates' competence in line with the qualification's objectives.

Unit Descriptors

HS&E0008-01- Introduction to Occupational Health and Safety

This unit provides a foundational understanding of occupational health and safety principles within industrial environments. Learners will explore the historical evolution of safety standards, the roles and responsibilities of stakeholders, and the socio-economic impact of workplace incidents. The curriculum emphasizes developing a proactive safety culture and establishing the core competencies required for effective health and safety management systems.

Learning Outcome:

Assessment Criteria:

- | | |
|--|---|
| 1. Understand the fundamental principles of occupational health and safety engineering. | 1.1 Explain the core principles and objectives of occupational health and safety engineering within modern industrial and organisational contexts.
1.2 Critically examine the relationship between hazard prevention, risk control, and operational performance in occupational environments.
1.3 Evaluate the application of engineering and administrative controls in maintaining workplace health and safety standards.
1.4 Apply advanced occupational health and safety principles to analyse workplace scenarios involving multiple interacting risk factors. |
| 2. Identify key hazards and risks in diverse workplace environments. | 2.1 Differentiate between physical, chemical, biological, ergonomic, and psychosocial hazards present in varied occupational settings.
2.2 Conduct systematic hazard identification and risk evaluation activities using recognised occupational health and safety methodologies.
2.3 Assess the potential consequences and likelihood of workplace risks across diverse operational environments.
2.4 Recommend appropriate control measures and monitoring strategies to minimise identified workplace hazards and risks. |
| 3. Explain the role and responsibilities of a health and safety professional. | 3.1 Critically analyse the professional duties and legal responsibilities of occupational health and safety practitioners within organisational structures.
3.2 Evaluate the contribution of health and safety professionals in promoting compliance, risk reduction, and organisational resilience.
3.3 Interpret the importance of leadership, communication, and decision-making in professional |

- health and safety practice.
- 3.4 Apply professional judgement in responding to workplace health and safety challenges involving ethical and operational considerations.
- 4. Recognise the importance of a strong safety culture and ethical practice.**
- 4.1 Critically evaluate the characteristics and organisational impact of a positive workplace safety culture.
- 4.2 Assess the influence of employee behaviour, leadership commitment, and communication on safety performance outcomes.
- 4.3 Examine ethical principles and professional accountability in occupational health and safety decision-making processes.
- 4.4 Develop strategies to strengthen ethical conduct and continuous safety improvement within organisational environments.
- 5. Familiarise with international occupational health and safety standards.**
- 5.1 Interpret the structure, purpose, and application of internationally recognised occupational health and safety standards and frameworks.
- 5.2 Critically assess the role of international standards in improving organisational compliance and risk management practices.
- 5.3 Analyse the relationship between regulatory requirements, management systems, and continuous improvement processes.
- 5.4 Apply relevant international occupational health and safety standards to workplace compliance and performance evaluation activities.
- 6. Appreciate the professional value of the ICTQual AB Diploma in Occupational Health and Safety Engineering.**
- 6.1 Critically examine the professional and occupational relevance of advanced qualifications in occupational health and safety engineering.
- 6.2 Assess the contribution of the diploma towards professional competence, ethical practice, and career progression within the sector.
- 6.3 Evaluate the significance of continuous professional development in maintaining effective occupational health and safety practice.
- 6.4 Reflect on the application of acquired knowledge and advanced competencies in supporting organisational health and safety objectives.

HS&E0008-02- Principles of Risk Assessment and Management

Learners are introduced to the systematic process of identifying, evaluating, and prioritizing workplace risks. This unit covers various qualitative and quantitative risk assessment methodologies, the hierarchy of controls, and the implementation of mitigation strategies. Students will gain practical skills in developing comprehensive risk registers and monitoring control effectiveness to ensure a safe and sustainable working environment for all personnel.

Learning Outcome:

Assessment Criteria:

1. Apply basic risk assessment methodologies to workplace hazards.

- 1.1 Interpret the principles and stages of recognised occupational risk assessment methodologies used within workplace environments.
- 1.2 Apply systematic risk assessment techniques to identify hazards and evaluate associated workplace risks.
- 1.3 Analyse workplace activities and operational conditions to determine factors influencing risk exposure and control effectiveness.
- 1.4 Select and justify appropriate risk assessment approaches in relation to specific occupational scenarios and organisational requirements.

2. Identify, evaluate, and prioritise occupational risks effectively.

- 2.1 Differentiate between varying categories and levels of occupational risk across diverse working environments.
- 2.2 Critically evaluate the likelihood and severity of identified workplace hazards using recognised risk evaluation criteria.
- 2.3 Prioritise occupational risks based on potential impact, legal significance, and operational consequences.
- 2.4 Apply analytical judgement to interpret risk data and support informed occupational safety decision-making.

3. Develop simple and practical risk management plans.

- 3.1 Design practical risk management plans that address identified workplace hazards and organisational safety objectives.
- 3.2 Determine suitable risk treatment strategies and resource requirements for effective hazard control implementation.
- 3.3 Evaluate the effectiveness and feasibility of proposed control measures within operational workplace contexts.

- 4. Implement control measures to reduce hazards to acceptable levels**
 - 3.4 Produce structured risk management documentation that aligns with organisational procedures and compliance expectations.
 - 4.1 Apply the hierarchy of control to implement proportionate and effective workplace hazard reduction measures.
 - 4.2 Assess the operational suitability and limitations of engineering, administrative, and personal protective controls.
 - 4.3 Coordinate the implementation of control measures in accordance with organisational safety procedures and legal requirements.
 - 4.4 Evaluate the effectiveness of implemented controls through observation, monitoring, and performance review activities.

- 5. Monitor and review risk assessments to support continuous improvement**
 - 5.1 Conduct systematic monitoring and review activities to evaluate the ongoing effectiveness of workplace risk assessments.
 - 5.2 Analyse workplace incident data, inspection findings, and performance indicators to identify opportunities for improvement.
 - 5.3 Recommend corrective and preventive actions based on risk review outcomes and changing workplace conditions.
 - 5.4 Apply continuous improvement principles to enhance organisational risk management practices and safety performance.

- 6. Understand the relevance of risk assessment in the 360 Credits Occupational Safety Diploma**
 - 6.1 Critically examine the role of risk assessment in supporting professional competence within occupational health and safety practice.
 - 6.2 Evaluate the significance of risk assessment methodologies in achieving organisational compliance and operational safety objectives.
 - 6.3 Analyse the integration of risk management principles within the broader framework of occupational safety engineering education.
 - 6.4 Reflect on the application of risk assessment knowledge and competencies developed through the diploma programme in professional practice.

HS&E0008-03- Workplace Safety Legislation and Compliance

This unit examines the legal frameworks and regulatory requirements governing occupational health and safety at national and international levels. Learners will analyze statutory duties, enforcement procedures, and the consequences of non-compliance. The course focuses on interpreting legislative texts, maintaining rigorous documentation, and ensuring organizational policies align with current safety laws to protect both the workforce and the employer.

Learning Outcome:

Assessment Criteria:

1. Understand key occupational health and safety laws and regulations.

- 1.1 Interpret the purpose, structure, and scope of key occupational health and safety legislation applicable to workplace environments.
- 1.2 Critically analyse the relationship between statutory requirements, organisational policies, and occupational safety management practices.
- 1.3 Evaluate the impact of legal frameworks on workplace safety standards, employee welfare, and organisational accountability.
- 1.4 Apply relevant legislative principles to occupational scenarios involving complex health and safety considerations.

2. Interpret legal responsibilities for learners and employers.

- 2.1 Critically examine the legal duties and responsibilities of employers, employees, and learners within occupational settings.
- 2.2 Analyse the implications of legal accountability and duty of care in maintaining safe and compliant workplace practices.
- 2.3 Assess the role of communication, supervision, and training in supporting compliance with occupational health and safety obligations.
- 2.4 Apply legal and ethical reasoning when addressing workplace situations involving shared responsibilities and safety concerns.

3. Apply compliance procedures to meet statutory requirements.

- 3.1 Implement workplace compliance procedures in accordance with applicable occupational health and safety legislation and organisational policies.
- 3.2 Evaluate the effectiveness of compliance systems in supporting regulatory conformity and operational risk reduction.
- 3.3 Apply inspection, reporting, and monitoring procedures to maintain statutory compliance within workplace activities.

4. Maintain records in accordance with regulatory obligations.

3.4 Recommend improvements to organisational compliance practices based on identified legal and operational requirements.

4.1 Interpret regulatory requirements relating to occupational health and safety documentation and record management practices.

4.2 Prepare and maintain accurate workplace records in accordance with legal, organisational, and professional standards.

4.3 Evaluate the importance of record accuracy, confidentiality, and traceability in supporting compliance and accountability.

4.4 Apply appropriate documentation procedures to workplace incidents, inspections, risk assessments, and corrective actions.

5. Recognise consequences of non-compliance in industrial and corporate settings.

5.1 Critically assess the legal, financial, operational, and reputational consequences associated with workplace non-compliance.

5.2 Analyse the impact of regulatory breaches on employee wellbeing, organisational performance, and stakeholder confidence.

5.3 Evaluate case scenarios involving occupational health and safety failures and identify contributory compliance deficiencies.

5.4 Recommend preventive strategies to minimise the likelihood and impact of non-compliance within workplace environments.

6. Enhance professional credibility through legal and regulatory awareness.

6.1 Critically examine the importance of legal knowledge and regulatory awareness in professional occupational health and safety practice.

6.2 Evaluate the contribution of compliance competence towards professional integrity, organisational trust, and ethical responsibility.

6.3 Apply current legal and regulatory knowledge to support informed occupational health and safety decision-making.

6.4 Reflect on the role of continuous legal awareness and professional development in maintaining effective workplace safety practice.

HS&E0008-04- Fundamentals of Fire Safety Management

Focusing on the chemistry of fire and prevention strategies, this unit covers fire risk assessment, detection systems, and emergency evacuation planning. Learners will study the classification of fires, the appropriate use of extinguishing agents, and structural fire protection measures. The objective is to equip students with the technical knowledge to manage fire hazards and ensure robust emergency readiness.

Learning Outcome:

- 1. Understand fire behaviour, hazards, and prevention strategies.**

Assessment Criteria:

- 1.1** Critically analyse the principles of fire behaviour, including ignition sources, fuel interactions, combustion processes, and methods of fire spread within occupational environments.
 - 1.2** Evaluate the nature and impact of common fire hazards associated with industrial, commercial, and organisational activities involving complex operational conditions.
 - 1.3** Assess the effectiveness of fire prevention strategies through the application of hazard identification, risk reduction measures, and safe system controls.
 - 1.4** Apply advanced understanding of fire dynamics and workplace hazards to recommend appropriate preventive actions aligned with occupational health and safety requirements.
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- 2. Develop basic fire safety and emergency response plans.**
 - 2.1** Develop structured fire safety and emergency response plans that address workplace hazards, evacuation procedures, communication systems, and emergency coordination requirements.
 - 2.2** Evaluate the suitability and effectiveness of emergency response arrangements in relation to organisational size, operational activities, and identified fire risks.
 - 2.3** Apply relevant legal, organisational, and safety management principles when designing workplace fire emergency procedures and response protocols.
 - 2.4** Review and refine fire safety plans through the analysis of simulated emergency scenarios, risk assessments, and organisational preparedness requirements.

3. Identify and use appropriate fire-fighting equipment safely.

- 3.1 Critically examine the classification, operational functions, and limitations of different types of fire-fighting equipment used within workplace environments.
- 3.2 Assess the suitability of fire-fighting equipment in relation to specific fire classes, workplace hazards, and operational risk conditions.
- 3.3 Demonstrate the safe selection, inspection, and use of fire-fighting equipment in accordance with organisational procedures and recognised safety standards.
- 3.4 Evaluate the effectiveness of fire-fighting equipment maintenance and inspection practices in supporting workplace emergency preparedness and compliance obligations.

4. Promote fire safety awareness among learners and colleagues

- 4.1 Critically evaluate the importance of fire safety awareness in developing responsible workplace behaviour and reducing organisational fire risks.
- 4.2 Design and communicate fire safety information and awareness activities appropriate to the needs of learners, employees, and workplace stakeholders.
- 4.3 Assess the impact of training, communication methods, and behavioural practices on workplace fire safety culture and emergency preparedness.
- 4.4 Apply professional communication and leadership skills to encourage active participation in workplace fire prevention and safety improvement initiatives.

5. Conduct basic fire drills and preparedness exercises.

- 5.1 Plan and coordinate workplace fire drills and preparedness exercises in accordance with organisational emergency procedures and safety requirements.
- 5.2 Evaluate the effectiveness of evacuation arrangements, emergency communication systems, and employee response behaviours during fire preparedness activities.
- 5.3 Apply systematic monitoring and observation techniques to identify weaknesses and areas for improvement within fire drill exercises.

6. Apply fire safety principles in line with Occupational Health and Safety Engineering standards.

5.4 Produce detailed evaluations and recommendations following preparedness exercises to strengthen organisational fire safety performance and emergency readiness.

6.1 Interpret occupational health and safety engineering principles relevant to workplace fire prevention, control, and emergency management practices.

6.2 Evaluate the integration of fire safety management systems within broader occupational health and safety frameworks and organisational risk management strategies.

6.3 Apply fire safety engineering principles to workplace scenarios involving multiple hazards, operational constraints, and compliance considerations.

6.4 Recommend evidence-based fire safety improvements that support continuous improvement, legal compliance, and organisational safety objectives.

HS&E0008-05- Personal Protective Equipment (PPE) in the Workplace

This unit provides detailed insights into the selection, use, and maintenance of Personal Protective Equipment (PPE). Learners will evaluate the limitations of PPE as a control measure and study the standards for head, eye, respiratory, and body protection. The curriculum emphasizes training requirements, fit testing, and the legal obligations of employers and employees regarding equipment compliance and care.

Learning Outcome:

Assessment Criteria:

1. Identify different types of PPE and their correct usage.

- 1.1 Critically examine the categories, functions, and operational limitations of personal protective equipment used across diverse occupational environments.
- 1.2 Differentiate between types of PPE in relation to specific workplace hazards, exposure levels, and task requirements.
- 1.3 Assess the suitability of selected PPE for protecting workers against physical, chemical, biological, ergonomic, and environmental risks.
- 1.4 Apply correct procedures for the safe use, fitting, adjustment, and inspection of PPE in accordance with workplace safety standards and operational requirements.

2. Evaluate PPE effectiveness for specific hazards.

- 2.1 Critically evaluate the effectiveness of PPE as a control measure within the hierarchy of risk control strategies.
- 2.2 Assess the relationship between workplace hazards, exposure conditions, and the performance capabilities of different PPE solutions.
- 2.3 Analyse operational factors that may reduce PPE effectiveness, including human behaviour, environmental conditions, compatibility issues, and equipment limitations.
- 2.4 Recommend appropriate PPE solutions based on hazard assessments, regulatory requirements, and organisational safety objectives.

3. Ensure proper selection, maintenance, and storage of PPE.

- 3.1 Apply systematic procedures for the selection of PPE based on workplace risk assessments, task demands, and user requirements.
- 3.2 Evaluate maintenance, cleaning, inspection, and replacement procedures to ensure the continued effectiveness and reliability of PPE.
- 3.3 Assess the impact of incorrect storage, misuse, and inadequate maintenance on PPE performance and workplace safety outcomes.
- 3.4 Develop procedures for the safe management, storage, and monitoring of PPE in accordance with organisational and regulatory requirements.

4. Promote correct PPE usage among learners and teams.

- 4.1 Critically analyse the role of communication, supervision, and behavioural practices in supporting effective PPE compliance within workplace environments.
- 4.2 Design workplace awareness and instructional activities that encourage the consistent and correct use of PPE among employees and learners.
- 4.3 Evaluate barriers to PPE compliance, including organisational culture, human factors, and operational challenges affecting worker behaviour.
- 4.4 Apply leadership and professional communication techniques to promote positive attitudes towards PPE use and workplace safety responsibilities.

5. Understand PPE legislation and compliance requirements.

- 5.1 Interpret the legal and regulatory requirements governing the provision, use, and management of PPE within occupational settings.
- 5.2 Critically assess employer and employee responsibilities in maintaining compliance with PPE legislation and workplace safety obligations.
- 5.3 Evaluate the implications of non-compliance with PPE requirements on organisational performance, worker safety, and legal accountability.
- 5.4 Apply legislative and organisational

requirements when implementing PPE procedures and compliance monitoring activities within workplace operations.

6. Integrate PPE practices into workplace safety management systems.

- 6.1 Critically evaluate the role of PPE management within integrated occupational health and safety management systems.
- 6.2 Develop PPE management procedures that align with organisational risk management strategies, operational controls, and safety objectives.
- 6.3 Assess the effectiveness of PPE monitoring, reporting, and review mechanisms in supporting continuous workplace safety improvement.
- 6.4 Apply advanced occupational health and safety principles to integrate PPE practices into broader organisational compliance and safety performance frameworks.

HS&E0008-06- Environmental Health and Safety Awareness

Focusing on the intersection of industrial operations and environmental protection, this unit explores waste management, spill control, and pollution prevention. Learners will examine environmental impact assessments and the integration of ISO 14001 standards into safety management. The unit aims to develop awareness of sustainable practices and the legal requirements for managing hazardous substances and environmental footprints.

Learning Outcome:

Assessment Criteria:

1. Recognise environmental hazards impacting workplace health and safety.

- 1.1 Critically examine the nature and sources of environmental hazards that may adversely affect workplace health, safety, and operational performance.
- 1.2 Differentiate between physical, chemical, biological, and environmental exposure risks within industrial, commercial, and organisational settings.
- 1.3 Assess the short-term and long-term consequences of environmental hazards on employee wellbeing, workplace conditions, and surrounding communities.
- 1.4 Apply systematic hazard identification techniques to evaluate environmental risks associated with workplace activities and operational processes.

2. Understand sustainability and environmental protection practices.

- 2.1 Critically evaluate the principles of sustainability and environmental protection within occupational health and safety management contexts.
- 2.2 Analyse the relationship between environmental responsibility, resource efficiency, and organisational risk management practices.
- 2.3 Assess the contribution of sustainable operational practices towards environmental preservation, regulatory compliance, and organisational performance improvement.
- 2.4 Apply environmental protection principles to workplace activities involving waste management, pollution prevention, and resource conservation measures.

3. Implement basic measures to minimise environmental risks.

- 3.1 Develop practical control measures to minimise environmental risks arising from workplace operations and industrial activities.
- 3.2 Evaluate the effectiveness of environmental risk reduction strategies in controlling pollution, hazardous emissions, and unsafe disposal practices.
- 3.3 Apply environmental monitoring and control procedures in accordance with organisational requirements and recognised environmental protection standards.
- 3.4 Recommend improvements to workplace environmental practices based on identified risks, operational requirements, and sustainability objectives.

4. Support organisational initiatives for environmental health and safety.

- 4.1 Critically analyse the role of organisational policies and initiatives in promoting environmental health and workplace safety performance.
- 4.2 Assess the effectiveness of employee participation and management commitment in supporting environmental health and safety objectives.
- 4.3 Apply communication and coordination strategies to contribute effectively to organisational environmental improvement programmes and safety campaigns.
- 4.4 Evaluate workplace initiatives designed to strengthen environmental compliance, occupational wellbeing, and sustainable operational practices.

5. Raise awareness of occupational health issues related to environmental exposure.

- 5.1 Critically examine the occupational health implications associated with exposure to environmental contaminants and hazardous workplace conditions.
- 5.2 Assess the impact of environmental exposure on worker health, productivity, and long-term occupational wellbeing across different workplace settings.
- 5.3 Develop awareness activities and informational guidance relating to occupational illnesses

associated with environmental hazards and unsafe practices.

5.4 Apply professional communication techniques to promote awareness of preventive measures and safe behaviours relating to environmental exposure risks.

6. Promote sustainable practices in alignment with industrial safety standards.

6.1 Critically evaluate the integration of sustainable practices within occupational health, environmental management, and industrial safety systems.

6.2 Assess the effectiveness of sustainable workplace practices in reducing operational risks, environmental impact, and resource inefficiencies.

6.3 Apply recognised industrial safety standards and environmental management principles to support sustainable organisational operations.

6.4 Recommend evidence-based strategies that promote continuous environmental improvement while maintaining workplace safety and regulatory compliance.

HS&E0008-07- Accident Investigation and Reporting Procedures

This unit equips learners with the analytical tools required to investigate workplace incidents and near-misses. Students will explore root cause analysis techniques, evidence collection, and interview protocols. The focus is on developing factual reports and implementing corrective actions to prevent recurrence, ensuring that organizational learning is maximized and statutory reporting requirements are met with precision.

Learning Outcome:

Assessment Criteria:

1. Understand the importance of accident investigation in occupational safety.

- 1.1 Critically evaluate the purpose and significance of accident investigation in improving workplace safety performance and organisational risk management.
- 1.2 Analyse the relationship between effective accident investigation processes, legal compliance, and continuous occupational health and safety improvement.
- 1.3 Assess the impact of workplace incidents on employees, organisational operations, productivity, and corporate reputation within industrial and commercial settings.
- 1.4 Apply occupational health and safety principles to explain how accident investigations contribute to hazard prevention and organisational learning.

2. Apply systematic procedures for accident analysis.

- 2.1 Apply structured accident investigation procedures to gather, verify, and evaluate information relating to workplace incidents and unsafe events.
- 2.2 Assess the effectiveness of investigation methodologies used to identify immediate causes, contributory factors, and systemic weaknesses within workplace operations.
- 2.3 Evaluate the role of evidence collection, witness interviews, and incident documentation in supporting accurate accident analysis outcomes.
- 2.4 Demonstrate the application of professional judgement and analytical techniques when conducting workplace accident investigations involving complex operational conditions.

3. Analyse causes of incidents using investigative techniques.

- 3.1 Critically analyse workplace incidents using recognised investigative models and root cause analysis techniques.
- 3.2 Differentiate between direct, indirect, behavioural, environmental, and organisational factors contributing to workplace accidents and near misses.
- 3.3 Evaluate patterns, trends, and contributory conditions associated with occupational incidents through systematic interpretation of investigation findings.
- 3.4 Apply analytical reasoning to determine underlying failures in workplace systems, procedures, and risk control measures contributing to incidents.

4. Prepare clear and accurate accident reports.

- 4.1 Prepare detailed and professionally structured accident investigation reports that accurately communicate findings, evidence, and conclusions.
- 4.2 Evaluate the importance of accuracy, objectivity, confidentiality, and legal compliance in workplace accident reporting practices.
- 4.3 Apply appropriate reporting formats and technical language to document workplace incidents in accordance with organisational and regulatory requirements.
- 4.4 Assess the effectiveness of accident reports in supporting decision-making, corrective actions, and organisational safety improvement initiatives.

5. Recommend corrective actions to prevent recurrence.

- 5.1 Develop corrective and preventive action recommendations based on the outcomes of workplace accident investigations and risk evaluations.
- 5.2 Critically assess the suitability and effectiveness of proposed control measures in addressing identified hazards and operational deficiencies.
- 5.3 Apply the hierarchy of control and continuous improvement principles when recommending strategies to prevent incident recurrence.
- 5.4 Evaluate the implementation and monitoring of

corrective actions to ensure sustained improvements in workplace health and safety performance.

6. Enhance organisational learning in occupational health and safety engineering.

- 6.1 Critically evaluate the role of organisational learning in strengthening occupational health and safety engineering practices and safety culture development.
- 6.2 Assess how accident investigation findings can be utilised to improve policies, procedures, training programmes, and operational controls.
- 6.3 Apply communication and knowledge-sharing strategies to promote workforce awareness and organisational learning from workplace incidents.
- 6.4 Recommend systems for continuous review and performance improvement that support proactive occupational health and safety management practices.

HS&E0008-08- Ergonomics and Human Factors in Safety

Learners will study the relationship between workers and their physical environment, focusing on preventing musculoskeletal disorders and enhancing productivity. This unit covers workstation design, manual handling techniques, and the psychological aspects of human error. By understanding human capabilities and limitations, students will learn to design tasks and environments that optimize safety, comfort, and overall system performance.

Learning Outcome:

Assessment Criteria:

1. Understand ergonomic principles and their impact on workplace safety.

- 1.1 Critically examine the principles of ergonomics and their application within occupational health and safety engineering environments.
- 1.2 Analyse the relationship between workplace design, human capability, task demands, and occupational safety performance.
- 1.3 Assess the impact of poor ergonomic practices on worker health, operational efficiency, and organisational productivity.
- 1.4 Apply ergonomic principles to evaluate workplace activities involving physical strain, repetitive movements, and human interaction with equipment and systems.

2. Identify human factors contributing to accidents and incidents.

- 2.1 Critically analyse human factors that contribute to workplace accidents, unsafe behaviours, and operational failures within occupational settings.
- 2.2 Evaluate the influence of fatigue, stress, communication failures, workload pressures, and organisational culture on human performance and safety outcomes.
- 2.3 Assess the interaction between human limitations, workplace systems, and environmental conditions in contributing to incidents and near misses.
- 2.4 Apply human factors analysis techniques to identify behavioural and organisational weaknesses affecting workplace safety performance.

3. Apply ergonomic solutions to improve productivity and safety.

- 3.1 Develop ergonomic improvement strategies to reduce workplace risks and enhance operational efficiency and employee wellbeing.
- 3.2 Evaluate the effectiveness of ergonomic interventions in minimising physical strain, improving task performance, and reducing injury rates.
- 3.3 Apply ergonomic assessment methods to modify workplace layouts, equipment use, and task procedures in line with operational requirements.
- 3.4 Recommend evidence-based ergonomic solutions that support productivity, safety performance, and sustainable workplace practices.

4. Promote learner awareness of musculoskeletal and ergonomic risks.

- 4.1 Critically evaluate the causes and occupational impact of musculoskeletal disorders and ergonomic-related workplace injuries.
- 4.2 Develop awareness activities and instructional guidance relating to safe working practices, posture management, and injury prevention measures.
- 4.3 Assess the effectiveness of workplace communication and training initiatives in improving awareness of ergonomic hazards and safe behaviours.
- 4.4 Apply professional communication and leadership skills to encourage proactive participation in ergonomic risk reduction practices among learners and employees.

5. Integrate ergonomic considerations into workplace design.

- 5.1 Critically assess the importance of ergonomics in workplace design, equipment selection, and operational planning processes.
- 5.2 Evaluate workplace environments to identify design deficiencies that may contribute to physical strain, inefficiency, or increased safety risks.
- 5.3 Apply ergonomic design principles to improve workstation layout, manual handling activities, and worker interaction with tools and machinery.

6. Support professional development in OHS engineering practices.

5.4 Recommend workplace design improvements that enhance employee comfort, operational effectiveness, and occupational safety compliance.

6.1 Critically evaluate the role of ergonomics and human factors knowledge in advancing professional competence within occupational health and safety engineering.

6.2 Assess the importance of continuous professional development in maintaining effective and current ergonomic and safety management practices.

6.3 Apply advanced occupational health and safety principles to address workplace challenges involving human performance and ergonomic risk factors.

6.4 Reflect on the contribution of ergonomic awareness and professional learning towards improving organisational safety culture and operational performance.

HS&E0008-09- Health and Safety Communication Skills

Effective safety management relies on clear communication. This unit explores various methods for delivering safety briefings, conducting inductions, and facilitating safety committee meetings. Learners will develop skills in conflict resolution, persuasive reporting, and digital communication strategies. The goal is to ensure that critical safety information is effectively disseminated and understood across all levels of an organization's hierarchy.

Learning Outcome:

Assessment Criteria:

1. Develop effective communication strategies for workplace safety.

- 1.1 Critically evaluate communication models and strategies used to convey occupational health and safety information within complex workplace environments.
- 1.2 Analyse the effectiveness of different communication methods in influencing safe behaviours, risk awareness, and compliance among diverse workforce groups.
- 1.3 Design structured communication strategies that address workplace hazards, operational risks, and varying levels of employee understanding.
- 1.4 Apply professional judgement to select appropriate communication channels that support clarity, accuracy, and accessibility of safety-related information.

2. Prepare safety briefings and instructional materials.

- 2.1 Develop structured safety briefings that communicate hazards, control measures, and procedural requirements in a clear and logically sequenced format.
- 2.2 Evaluate the suitability of instructional materials in supporting workforce understanding of occupational health and safety requirements and safe systems of work.
- 2.3 Apply technical and professional language to prepare accurate safety guidance aligned with organisational procedures and regulatory expectations.
- 2.4 Assess the effectiveness of safety briefings in improving hazard awareness, risk perception, and operational safety compliance.

3. Use clear and professional reporting for incidents and hazards.

- 3.1 Critically assess the importance of clarity, accuracy, and objectivity in occupational health and safety reporting systems.
- 3.2 Prepare detailed and structured reports on workplace incidents, hazards, and near misses in accordance with organisational and legal requirements.
- 3.3 Evaluate the role of professional communication in ensuring the reliability and usability of safety data for decision-making and investigation purposes.
- 3.4 Apply appropriate reporting standards and documentation practices to ensure consistency, traceability, and regulatory compliance in safety communication.

4. Promote a positive safety culture through communication.

- 4.1 Critically analyse the role of communication in shaping organisational safety culture and influencing employee attitudes towards risk and compliance.
- 4.2 Assess the effectiveness of communication-driven interventions in promoting behavioural change and strengthening workplace safety engagement.
- 4.3 Develop communication initiatives that reinforce shared responsibility, accountability, and proactive safety participation across all organisational levels.
- 4.4 Apply leadership and interpersonal communication techniques to foster trust, openness, and continuous improvement in safety culture development.

5. Facilitate learner engagement in health and safety programmes.

- 5.1 Critically evaluate factors influencing learner engagement, participation, and retention in occupational health and safety training programmes.
- 5.2 Design interactive communication approaches that enhance learner understanding of safety principles, hazard awareness, and risk management practices.
- 5.3 Assess the effectiveness of facilitation techniques in encouraging active participation

and applied learning within safety training environments.

5.4 Apply professional facilitation and communication skills to support inclusive, responsive, and learner-centred occupational safety education.

6. Strengthen professional credibility in occupational health and safety.

6.1 Critically examine the role of communication competence in establishing professional authority and credibility within occupational health and safety practice.

6.2 Evaluate how clear, consistent, and evidence-based communication enhances trust, compliance, and organisational safety performance.

6.3 Apply advanced communication skills to influence decision-making, policy implementation, and stakeholder engagement in safety management processes.

6.4 Reflect on continuous improvement in communication practice as a key factor in maintaining professional effectiveness in occupational health and safety engineering.

HS&E0008-10- Hazard Identification and Control Measures

This unit focuses on the technical ability to spot physical, chemical, and biological hazards before they lead to injury. Learners will apply various inspection techniques and utilize the hierarchy of controls—elimination, substitution, engineering, and administrative—to manage identified threats. Practical exercises emphasize the development of Safe Systems of Work (SSoW) and Permit-to-Work systems in high-risk industrial scenarios.

Learning Outcome:

- 1. Identify common workplace hazards across industries.**

Assessment Criteria:

- 1.1** Critically analyse the nature, characteristics, and sources of workplace hazards across diverse industrial, commercial, and service-based environments.
 - 1.2** Differentiate between physical, chemical, biological, ergonomic, psychosocial, and environmental hazards in relation to occupational exposure scenarios.
 - 1.3** Assess operational processes and workplace activities to systematically identify existing and potential hazards within complex working environments.
 - 1.4** Apply structured hazard identification techniques to evaluate risk conditions arising from equipment, materials, human interaction, and environmental factors.
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- 2. Apply control measures following the hierarchy of controls.**
 - 2.1** Critically evaluate the hierarchy of controls and its application in reducing workplace risks within occupational health and safety management systems.
 - 2.2** Apply appropriate control measures including elimination, substitution, engineering controls, administrative controls, and personal protective equipment based on risk assessment outcomes.
 - 2.3** Assess the suitability and feasibility of different control strategies in relation to workplace conditions, operational demands, and resource constraints.
 - 2.4** Implement structured decision-making processes to ensure hazard control measures are applied in a prioritised and legally compliant manner.

3. Evaluate the effectiveness of hazard control strategies.

- 3.1 Critically assess the effectiveness of implemented hazard control measures in reducing workplace risk exposure and improving safety performance.
- 3.2 Analyse monitoring data, incident reports, and workplace observations to determine the ongoing performance of control strategies.
- 3.3 Evaluate the limitations and unintended consequences of hazard control measures within dynamic and complex operational environments.
- 3.4 Apply evidence-based reasoning to recommend enhancements to existing hazard control systems for improved safety outcomes.

4. Document hazards and implement corrective actions.

- 4.1 Prepare detailed and accurate documentation of identified workplace hazards in accordance with organisational procedures and regulatory requirements.
- 4.2 Critically evaluate the importance of hazard recording systems in supporting traceability, accountability, and risk management effectiveness.
- 4.3 Apply structured processes for implementing corrective actions based on hazard identification findings and risk assessment results.
- 4.4 Assess the effectiveness of corrective actions in eliminating or reducing workplace hazards and preventing recurrence.

5. Support continuous improvement in occupational safety practices.

- 5.1 Critically examine the role of continuous improvement methodologies in strengthening occupational health and safety performance.
- 5.2 Evaluate the contribution of hazard identification and control systems to organisational learning and proactive risk management.
- 5.3 Apply feedback, monitoring, and review mechanisms to identify opportunities for enhancing workplace safety practices.
- 5.4 Recommend systematic improvements to occupational safety procedures based on analysis of hazards, incidents, and operational

6. Contribute to safer workplace environments in line with OHS standards.

performance trends.

- 6.1 Critically assess the application of occupational health and safety standards in creating and maintaining safe workplace environments.
- 6.2 Analyse the relationship between hazard control practices, legal compliance, and organisational safety culture development.
- 6.3 Apply occupational health and safety principles to support the creation of structured, risk-controlled, and compliant workplace environments.
- 6.4 Evaluate the impact of proactive hazard management on worker wellbeing, operational efficiency, and organisational safety outcomes.

HS&E0008-11- Basics of Industrial Hygiene

Students are introduced to the anticipation, recognition, evaluation, and control of environmental stressors in the workplace. This unit covers exposure limits for noise, vibration, radiation, and hazardous chemicals. Learners will explore monitoring equipment and sampling strategies, gaining the technical knowledge necessary to protect employees from long-term occupational illnesses and maintain a healthy, compliant working environment.

Learning Outcome:

Assessment Criteria:

1. Understand principles of industrial hygiene and occupational exposure.

- 1.1 Critically examine the core principles of industrial hygiene and their application in controlling occupational exposure within diverse workplace environments.
- 1.2 Analyse the relationship between exposure pathways, dose-response concepts, and occupational health outcomes in industrial settings.
- 1.3 Evaluate the role of industrial hygiene in preventing occupational illness and supporting long-term workforce wellbeing and organisational performance.
- 1.4 Apply theoretical industrial hygiene principles to interpret workplace conditions involving potential exposure to harmful agents and operational risks.

2. Identify physical, chemical, and biological hazards in workplaces.

- 2.1 Critically analyse the characteristics and sources of physical, chemical, and biological hazards present across industrial and occupational environments.
- 2.2 Differentiate between various hazardous agents and their routes of exposure, including inhalation, ingestion, dermal contact, and injection.
- 2.3 Assess workplace processes, materials, and environmental conditions to systematically identify potential exposure risks.
- 2.4 Apply structured hazard identification techniques to evaluate the presence and impact of industrial hygiene-related workplace hazards.

3. Apply basic monitoring techniques to assess exposure levels.

- 3.1 Critically evaluate the purpose and limitations of industrial hygiene monitoring techniques used to assess occupational exposure levels.
- 3.2 Apply basic exposure monitoring methods, including sampling and observational techniques, in accordance with workplace procedures and safety standards.
- 3.3 Analyse monitoring data to determine the significance of exposure levels in relation to occupational exposure limits and regulatory benchmarks.
- 3.4 Interpret exposure assessment results to support informed decisions on risk control and workplace health protection measures.

4. Recommend preventive measures to reduce health risks.

- 4.1 Critically assess preventive strategies used in industrial hygiene to control or eliminate occupational exposure risks.
- 4.2 Develop practical recommendations based on hazard identification and exposure assessment findings to minimise health risks.
- 4.3 Evaluate the effectiveness and feasibility of engineering, administrative, and behavioural controls in reducing workplace exposure.
- 4.4 Apply the hierarchy of controls to prioritise preventive measures aligned with occupational health and safety requirements.

5. Promote learner awareness of hygiene and health standards.

- 5.1 Critically evaluate the importance of hygiene awareness in preventing occupational diseases and maintaining workplace health standards.
- 5.2 Design awareness initiatives that communicate key industrial hygiene principles and safe working practices to learners and employees.
- 5.3 Assess the effectiveness of training and communication strategies in improving understanding of occupational health risks and preventive behaviours.
- 5.4 Apply professional communication skills to encourage adherence to hygiene standards and promote proactive health protection practices.

6. Integrate industrial hygiene practices into 360 Credits Occupational Safety Diploma training.

- 6.1 Critically analyse the role of industrial hygiene within the broader framework of occupational health and safety engineering education.
- 6.2 Evaluate how industrial hygiene principles contribute to competency development within the 360 Credits Occupational Safety Diploma structure.
- 6.3 Apply industrial hygiene concepts to integrated occupational safety scenarios involving multiple hazards and exposure risks.
- 6.4 Recommend strategies for embedding industrial hygiene practices into professional training to enhance applied occupational safety competence.

HS&E0008-12- Introduction to Emergency Preparedness and Response

This unit prepares learners to manage unforeseen crises, from medical emergencies to industrial disasters. Students will study the development of Emergency Response Plans (ERPs), the coordination of first aid teams, and liaison with external emergency services. The curriculum emphasizes drill implementation, resource allocation, and the critical decision-making processes required to protect life and property during high-pressure incidents.

Learning Outcome:

Assessment Criteria:

1. Understand key elements of emergency planning.

- 1.1 Critically examine the fundamental components of emergency planning, including risk assessment, resource allocation, communication systems, and response coordination within occupational settings.
- 1.2 Analyse the relationship between emergency preparedness frameworks and organisational resilience in managing unforeseen incidents and critical events.
- 1.3 Evaluate the effectiveness of structured emergency planning in reducing response time, minimising harm, and ensuring operational continuity.
- 1.4 Apply emergency planning principles to interpret organisational requirements for preparedness across diverse industrial and corporate environments.

2. Identify potential emergency scenarios in industrial and corporate settings.

- 2.1 Critically analyse a range of potential emergency scenarios including fire, chemical spill, medical emergencies, structural failure, and security-related incidents in workplace environments.
- 2.2 Differentiate between internal and external emergency threats and assess their potential impact on personnel, assets, and organisational operations.
- 2.3 Assess workplace activities, processes, and environmental conditions to systematically identify plausible emergency situations.
- 2.4 Apply risk-based reasoning to prioritise emergency scenarios based on likelihood, severity, and organisational vulnerability.

3. Develop basic response and evacuation procedures.

- 3.1 Develop structured emergency response and evacuation procedures aligned with workplace hazards, occupancy levels, and operational requirements.
- 3.2 Critically evaluate the effectiveness of response procedures in ensuring rapid, safe, and coordinated evacuation during emergency situations.
- 3.3 Apply regulatory and organisational requirements to design clear roles, responsibilities, and communication protocols for emergency response.
- 3.4 Assess evacuation planning considerations such as exit routes, assembly points, accessibility, and contingency arrangements in complex workplace environments.

4. Participate in emergency drills and exercises effectively.

- 4.1 Critically evaluate the importance of emergency drills in testing preparedness, identifying weaknesses, and improving organisational response capability.
- 4.2 Demonstrate active participation in simulated emergency exercises in accordance with established procedures and safety requirements.
- 4.3 Assess the effectiveness of emergency drills through observation, feedback analysis, and performance evaluation of response actions.
- 4.4 Apply reflective practice to identify improvements in individual and organisational emergency response performance following drill activities.

5. Promote safety awareness and preparedness among learners.

- 5.1 Critically assess the role of communication and training in developing a proactive emergency preparedness culture within occupational environments.
- 5.2 Design and support awareness initiatives that enhance understanding of emergency risks, procedures, and individual responsibilities.
- 5.3 Evaluate the effectiveness of educational strategies in improving learner engagement and preparedness for emergency situations.

6. Apply emergency planning principles in occupational health and safety engineering.

5.4 Apply professional communication techniques to reinforce safety awareness and encourage consistent preparedness behaviours among learners and colleagues.

6.1 Critically analyse how emergency planning integrates within occupational health and safety engineering systems to manage complex risk environments.

6.2 Evaluate the application of engineering controls, organisational procedures, and risk management strategies in emergency preparedness frameworks.

6.3 Apply emergency planning principles to workplace scenarios involving multiple hazards, operational constraints, and regulatory compliance requirements.

6.4 Recommend improvements to emergency preparedness systems based on risk analysis, incident evaluation, and best practice in occupational safety engineering.

HS&E0008-13- Advanced Risk Assessment Techniques

This unit explores sophisticated methodologies for evaluating complex industrial hazards, moving beyond basic matrices to include Quantitative Risk Assessment (QRA) and Failure Mode and Effects Analysis (FMEA). Learners will master probabilistic modeling and data-driven decision-making to predict potential failures. The curriculum focuses on high-hazard environments where precision in estimating likelihood and severity is critical for maintaining operational integrity.

Learning Outcome:

Assessment Criteria:

1. Apply advanced risk assessment methodologies in occupational health and safety engineering.

- 1.1 Critically evaluate advanced risk assessment methodologies applicable to occupational health and safety engineering contexts.
- 1.2 Select and apply appropriate risk assessment models to address complex workplace safety challenges involving multiple interacting factors.
- 1.3 Analyse the effectiveness and limitations of different risk assessment approaches in relation to organisational and regulatory requirements.
- 1.4 Develop and justify evidence-based risk assessment solutions to support safe operational practices in diverse industrial environments.

2. Conduct quantitative and qualitative analyses of workplace hazards.

- 2.1 Conduct detailed quantitative analyses to measure the probability and severity of workplace hazards using appropriate analytical techniques.
- 2.2 Interpret qualitative hazard data to identify underlying causes, patterns, and operational risks within workplace environments.
- 2.3 Integrate quantitative and qualitative findings to produce comprehensive hazard evaluation reports for decision-making purposes.
- 2.4 Critically assess the reliability and validity of hazard analysis methods used in occupational health and safety engineering practice.

3. Evaluate complex hazards in industrial and high-risk environments.

- 3.1 Critically evaluate complex physical, chemical, biological, and operational hazards present in high-risk industrial environments.
- 3.2 Assess the interaction of multiple hazard factors and their potential impact on workers, equipment, and organisational operations.
- 3.3 Apply advanced investigative and analytical techniques to determine the root causes of

- 4. Develop comprehensive risk management strategies for workplace safety.**
 - 3.4 Recommend appropriate control measures and engineering solutions to minimise risks associated with high-risk activities and environments.
 - 4.1 Design comprehensive risk management strategies aligned with organisational objectives, legal frameworks, and industry standards.
 - 4.2 Develop integrated control measures to mitigate identified workplace hazards and support sustainable safety performance.
 - 4.3 Critically evaluate the effectiveness of existing risk management systems in controlling operational and occupational risks.
 - 4.4 Formulate strategic recommendations to improve workplace safety culture and long-term organisational resilience.

- 5. Monitor and review risk assessment outcomes to support continuous improvement.**
 - 5.1 Establish systematic procedures for monitoring and reviewing workplace risk assessment outcomes.
 - 5.2 Critically analyse risk assessment data to identify trends, recurring issues, and opportunities for continuous improvement.
 - 5.3 Evaluate the effectiveness of implemented control measures against organisational safety objectives and compliance requirements.
 - 5.4 Recommend evidence-based improvements to enhance the efficiency and sustainability of occupational health and safety practices.

- 6. Strengthen professional skills in 360 Credits Occupational Safety Diploma practices.**
 - 6.1 Demonstrate advanced professional competencies required for effective practice in occupational health and safety engineering.
 - 6.2 Apply critical decision-making, problem-solving, and communication skills in complex occupational safety scenarios.
 - 6.3 Evaluate personal and professional performance against industry expectations and continuing professional development requirements.
 - 6.4 Demonstrate ethical, responsible, and reflective



practice when managing occupational health and safety responsibilities in diverse workplace contexts.

HS&E0008-14- Fire Safety Systems and Evacuation Planning

Learners will examine the technical design and maintenance of active and passive fire protection systems, including suppression, detection, and smoke control. This unit emphasizes the development of robust emergency evacuation strategies based on human behavior and building geometry. Students will learn to conduct fire load calculations and ensure that life safety systems comply with rigorous international fire engineering standards.

Learning Outcome:

1. Understand advanced fire detection systems and fire prevention technologies.

2. Develop detailed fire evacuation plans and emergency procedures.

Assessment Criteria:

- 1.1 Critically evaluate the operating principles, effectiveness, and limitations of advanced fire detection systems and fire prevention technologies used within complex workplace environments.
- 1.2 Analyse the relationship between fire detection technologies, building infrastructure, and occupational safety requirements to ensure effective fire prevention and emergency response.
- 1.3 Assess the suitability of different fire protection and suppression systems for diverse industrial, commercial, and high-risk operational settings.
- 1.4 Recommend evidence-based improvements to fire detection and prevention systems in accordance with current occupational health and safety legislation, regulatory frameworks, and industry standards.
- 2.1 Design comprehensive fire evacuation plans that address organisational risks, occupancy requirements, emergency communication systems, and safe evacuation procedures.
- 2.2 Develop structured emergency response procedures that account for vulnerable individuals, high-risk operations, and complex workplace layouts during fire-related incidents.
- 2.3 Critically analyse the effectiveness of evacuation routes, assembly points, and emergency coordination procedures in maintaining workplace safety during emergencies.
- 2.4 Justify the integration of emergency planning strategies with organisational business continuity objectives, legal obligations, and occupational health and safety management

3. Assess fire risk management strategies in complex workplaces.

- systems.
- 3.1 Critically assess fire risk management strategies used within complex and high-risk workplace environments to determine their effectiveness in preventing fire-related incidents.
 - 3.2 Analyse the interaction between workplace processes, hazardous materials, human behaviour, and environmental conditions when evaluating fire risks.
 - 3.3 Apply advanced fire risk assessment methodologies to identify deficiencies in existing fire safety controls and management systems.
 - 3.4 Develop strategic recommendations for improving fire risk management practices to enhance organisational resilience, regulatory compliance, and workplace safety performance.

4. Implement fire drills and preparedness programmes for learners and staff.

- 4.1 Develop and implement structured fire drill programmes that promote preparedness, coordinated response, and safe evacuation practices among learners and staff.
- 4.2 Evaluate the effectiveness of fire drill procedures through the analysis of participation, response times, communication systems, and emergency coordination activities.
- 4.3 Apply advanced communication and leadership techniques to ensure that emergency preparedness programmes support inclusive participation and organisational safety objectives.
- 4.4 Recommend improvements to fire preparedness training and emergency exercises based on post-drill evaluations, risk assessments, and identified operational weaknesses.

5. Evaluate fire safety compliance and recommend improvements.

- 5.1 Critically evaluate organisational fire safety arrangements against relevant occupational health and safety legislation, fire safety regulations, and recognised industry standards.
- 5.2 Conduct detailed reviews of fire safety documentation, inspection records, maintenance procedures, and emergency preparedness systems to determine compliance levels.
- 5.3 Analyse the implications of non-compliance and organisational deficiencies on workplace safety, operational continuity, and legal accountability.
- 5.4 Formulate evidence-based recommendations to improve fire safety compliance, strengthen governance arrangements, and support continuous organisational improvement.

6. Promote effective fire safety management in line with OHS standards.

- 6.1 Critically analyse the principles and practices of effective fire safety management within the context of occupational health and safety standards and organisational risk management systems.
- 6.2 Develop strategies to promote a proactive fire safety culture through leadership, employee engagement, communication, and continuous professional development initiatives.
- 6.3 Evaluate the effectiveness of organisational fire safety policies, responsibilities, and reporting structures in supporting compliance and operational safety objectives.
- 6.4 Recommend integrated fire safety management approaches that enhance workplace resilience, support regulatory compliance, and contribute to sustainable occupational health and safety performance.

HS&E0008-15- Safety Management Systems (ISO 45001)

This unit provides an in-depth analysis of the ISO 45001 framework, focusing on the Plan-Do-Check-Act (PDCA) cycle. Learners will study the integration of safety management into core business processes, emphasizing leadership commitment, worker participation, and continuous improvement. The goal is to equip students with the expertise to design, implement, and maintain a certified management system that reduces workplace risk.

Learning Outcome:

Assessment Criteria:

1. Understand the framework of ISO 45001 occupational health and safety management systems.

- 1.1 Critically evaluate the structure, principles, and operational requirements of ISO 45001 occupational health and safety management systems within diverse organisational contexts.
- 1.2 Analyse the relationship between ISO 45001 frameworks, organisational governance, risk management processes, and legal compliance obligations.
- 1.3 Assess the significance of leadership commitment, worker participation, and organisational context in the successful implementation of ISO 45001 standards.
- 1.4 Interpret the application of ISO 45001 requirements in supporting sustainable occupational health and safety performance and organisational resilience.

2. Implement and maintain safety management systems in workplaces.

- 2.1 Develop and implement occupational health and safety management systems that align with ISO 45001 requirements and organisational operational objectives.
- 2.2 Apply advanced planning, coordination, and resource management techniques to maintain effective workplace safety management systems.
- 2.3 Critically assess the effectiveness of organisational procedures, policies, and operational controls in supporting long-term system sustainability and compliance.
- 2.4 Recommend strategic improvements to safety management systems based on operational performance data, risk evaluations, and organisational requirements.

3. Monitor performance against ISO 45001 standards to ensure compliance.

- 3.1 Establish systematic performance monitoring processes to measure organisational compliance with ISO 45001 occupational health and safety standards.
- 3.2 Critically analyse workplace safety data, performance indicators, and incident trends to evaluate the effectiveness of safety management arrangements.
- 3.3 Assess the adequacy of corrective and preventive actions implemented to address identified non-conformities and operational risks.
- 3.4 Develop evidence-based recommendations to improve compliance performance, strengthen accountability, and support organisational safety objectives.

4. Conduct internal audits and evaluate safety system effectiveness.

- 4.1 Plan and conduct internal occupational health and safety audits in accordance with ISO 45001 auditing principles, organisational procedures, and regulatory expectations.
- 4.2 Critically evaluate audit findings to determine the effectiveness, reliability, and operational performance of workplace safety management systems.
- 4.3 Analyse the causes and implications of non-conformities, procedural deficiencies, and ineffective safety controls identified during audit activities.
- 4.4 Prepare comprehensive audit reports and recommend corrective actions to enhance organisational compliance, operational safety, and continuous improvement processes.

5. Foster continuous improvement and integrate a strong safety culture.

- 5.1 Critically analyse the factors that influence the development and sustainability of a positive organisational safety culture within occupational health and safety management systems.
- 5.2 Develop strategies to promote continuous improvement through worker engagement, leadership commitment, performance evaluation, and organisational learning.

- 5.3 Evaluate the effectiveness of communication, training, and behavioural safety initiatives in improving workplace safety awareness and compliance.
 - 5.4 Recommend integrated approaches for strengthening safety culture and embedding continuous improvement principles across organisational operations and management practices.
- 6. Apply strategic safety practices for industrial and occupational safety.**
- 6.1 Apply advanced strategic safety management practices to address complex occupational and industrial safety challenges across diverse workplace environments.
 - 6.2 Critically evaluate the effectiveness of organisational safety strategies in controlling operational risks, improving workforce wellbeing, and supporting legal compliance.
 - 6.3 Integrate risk management, incident prevention, and performance improvement methodologies into strategic occupational safety planning processes.
 - 6.4 Develop evidence-based recommendations for enhancing industrial safety performance through sustainable leadership, innovation, and proactive occupational health and safety management practices.

HS&E0008-16- Workplace Safety Auditing and Inspection

Students will develop the specialized skills required to conduct systematic examinations of health and safety performance. This unit covers the distinctions between routine inspections and formal audits, focusing on evidence gathering, interviewing techniques, and compliance verification. Learners will practice identifying systemic weaknesses and drafting professional audit reports that provide actionable recommendations for organizational improvement and risk mitigation.

Learning Outcome:

Assessment Criteria:

1. Conduct systematic workplace safety inspections and audits.

- 1.1 Plan and conduct systematic workplace safety inspections and audits using recognised occupational health and safety auditing methodologies and regulatory requirements.
- 1.2 Critically evaluate workplace environments, operational activities, and organisational procedures to identify hazards, unsafe practices, and areas of non-conformance.
- 1.3 Apply advanced inspection and auditing techniques to assess the effectiveness of workplace safety controls, risk management measures, and compliance systems.
- 1.4 Analyse audit and inspection findings to support evidence-based decision-making and the improvement of organisational safety performance.

2. Identify non-compliance and recommend corrective actions.

- 2.1 Critically analyse workplace practices, procedures, and operational systems to identify non-compliance with occupational health and safety legislation, standards, and organisational policies.
- 2.2 Assess the potential operational, legal, and safety implications of identified non-conformities within complex workplace environments.
- 2.3 Develop corrective and preventive action plans that address root causes, minimise recurring risks, and support sustainable compliance improvements.
- 2.4 Justify recommended corrective actions using audit evidence, risk assessment findings, and recognised occupational health and safety management principles.

3. Prepare professional audit reports with actionable outcomes.

- 3.1 Prepare comprehensive workplace safety audit reports that present accurate findings, evidence-based conclusions, and professionally structured recommendations.
- 3.2 Critically evaluate inspection and audit data to produce actionable outcomes that support organisational safety objectives and regulatory compliance.
- 3.3 Communicate complex audit findings effectively to relevant stakeholders using clear technical language, professional judgement, and appropriate reporting standards.
- 3.4 Recommend prioritised improvement strategies that support continuous improvement, operational efficiency, and enhanced occupational health and safety performance.

4. Use auditing techniques to evaluate safety management system effectiveness.

- 4.1 Apply advanced auditing techniques to evaluate the effectiveness, reliability, and operational performance of workplace safety management systems.
- 4.2 Critically assess the extent to which organisational safety management systems meet legal requirements, industry standards, and organisational objectives.
- 4.3 Analyse the effectiveness of internal controls, monitoring arrangements, and risk management procedures in maintaining workplace safety performance.
- 4.4 Develop evidence-based recommendations to improve safety management system efficiency, accountability, and long-term organisational resilience.

5. Encourage learner participation in inspection and audit processes.

- 5.1 Develop strategies to encourage active learner participation in workplace safety inspections, audits, and continuous improvement activities.
- 5.2 Critically evaluate the role of learner engagement in promoting safety awareness, accountability, and organisational compliance within occupational health and safety practices.
- 5.3 Apply effective communication, leadership, and collaborative approaches to support learner

6. Enhance organisational safety performance through structured evaluation.

involvement in identifying hazards and evaluating workplace risks.

5.4 Assess the impact of participatory inspection and audit practices on organisational learning, workforce competence, and overall safety culture development.

6.1 Critically evaluate organisational safety performance through the application of structured inspection, auditing, and performance measurement processes.

6.2 Analyse workplace safety trends, audit outcomes, and incident data to identify opportunities for operational and strategic improvement.

6.3 Develop integrated evaluation strategies that support continuous monitoring, regulatory compliance, and effective occupational health and safety governance.

6.4 Recommend evidence-based improvements to strengthen organisational safety performance, reduce workplace risks, and enhance sustainable health and safety practices.

HS&E0008-17- Electrical Safety in the Workplace

This unit covers the fundamental principles of electrical physics and the specific hazards associated with high and low-voltage systems. Learners will explore protective measures such as earthing, insulation, and circuit breakers, alongside safe working practices like Lockout-Tagout (LOTO). The curriculum emphasizes compliance with electrical codes to prevent shocks, burns, and arc flash incidents in industrial settings.

Learning Outcome:

- 1. Identify electrical hazards and assess associated risks.**

Assessment Criteria:

- 1.1** Critically evaluate a range of electrical hazards associated with workplace systems, equipment, and operational activities within industrial and commercial environments.
 - 1.2** Apply advanced risk assessment methodologies to identify, analyse, and prioritise electrical risks that may affect personnel, equipment, and organisational operations.
 - 1.3** Assess the interaction between human factors, environmental conditions, and electrical systems in contributing to workplace electrical incidents and failures.
 - 1.4** Develop evidence-based recommendations for controlling electrical hazards in accordance with occupational health and safety legislation, technical standards, and organisational procedures.
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- 2. Apply safe working practices for electrical systems and equipment.**
 - 2.1** Demonstrate the application of advanced safe working practices for the operation, maintenance, and inspection of electrical systems and equipment.
 - 2.2** Critically assess workplace procedures for isolation, lockout and tagout, permit-to-work systems, and emergency response relating to electrical safety activities.
 - 2.3** Evaluate the effectiveness of operational controls and safe systems of work in minimising electrical risks within complex workplace environments.
 - 2.4** Recommend improvements to workplace electrical safety procedures to support compliance, operational reliability, and workforce protection.

3. Use protective equipment and controls to prevent electrical accidents.

- 3.1 Critically evaluate the suitability and effectiveness of personal protective equipment and engineering controls used to prevent electrical accidents and injuries.
- 3.2 Assess the limitations and operational requirements of protective devices, grounding systems, insulation methods, and circuit protection technologies in workplace environments.
- 3.3 Apply appropriate control measures and protective strategies to reduce the likelihood and severity of electrical incidents during workplace operations.
- 3.4 Develop recommendations for improving the selection, maintenance, and use of protective equipment and electrical control systems in line with recognised safety standards.

4. Recognise compliance standards for electrical safety.

- 4.1 Critically analyse occupational health and safety legislation, electrical safety regulations, and recognised industry standards applicable to workplace electrical operations.
- 4.2 Evaluate organisational compliance with electrical safety requirements through the review of procedures, operational controls, inspection records, and maintenance systems.
- 4.3 Assess the legal, operational, and safety implications of non-compliance with electrical safety standards within industrial and occupational settings.
- 4.4 Recommend strategic actions to strengthen organisational compliance, improve governance arrangements, and support effective electrical safety management practices.

5. Develop awareness of safe electrical handling among learners.

- 5.1 Develop structured awareness programmes to promote safe electrical handling practices among learners within workplace and training environments.
- 5.2 Critically evaluate the effectiveness of communication, instruction, and practical demonstrations in improving learner understanding of electrical hazards and safe behaviours.
- 5.3 Apply leadership and engagement strategies to encourage learner participation in electrical safety initiatives and hazard reporting processes.
- 5.4 Assess the contribution of electrical safety awareness programmes to improving organisational safety culture, learner competence, and risk reduction outcomes.

6. Integrate electrical safety measures into occupational health and safety practices.

- 6.1 Critically evaluate the integration of electrical safety measures within wider occupational health and safety management systems and operational practices.
- 6.2 Develop coordinated safety strategies that align electrical hazard control measures with organisational risk management and compliance objectives.
- 6.3 Analyse the effectiveness of integrated electrical safety procedures in supporting accident prevention, operational continuity, and workforce protection.
- 6.4 Recommend sustainable improvements for embedding electrical safety principles into organisational policies, training systems, and occupational health and safety frameworks.

HS&E0008-18- Mechanical and Machinery Safety

Focusing on the lifecycle of industrial equipment, this unit examines the mechanical hazards associated with moving parts and power tools. Learners will study various guarding techniques, safety interlocking systems, and the legal requirements for machinery CE marking or equivalent standards. The unit aims to ensure students can conduct machinery risk assessments and implement controls that protect operators without hindering productivity.

Learning Outcome:

Assessment Criteria:

1. Identify mechanical hazards and associated risks in industrial settings.

- 1.1 Critically evaluate mechanical hazards arising from industrial machinery, equipment, and operational processes within complex workplace environments.
- 1.2 Apply advanced risk assessment methodologies to identify, analyse, and prioritise mechanical risks associated with machinery operation, maintenance, and human interaction.
- 1.3 Assess the impact of mechanical failures, unsafe systems of work, and human factors on workplace safety, operational continuity, and organisational performance.
- 1.4 Develop evidence-based recommendations for controlling mechanical hazards in accordance with occupational health and safety legislation, engineering standards, and industry best practices.

2. Implement safety measures for machinery operation and maintenance.

- 2.1 Develop and implement comprehensive safety measures for the safe operation, maintenance, and inspection of industrial machinery and mechanical systems.
- 2.2 Critically assess the effectiveness of lockout and tagout procedures, permit-to-work systems, and maintenance controls in reducing machinery-related risks.
- 2.3 Apply safe systems of work and engineering control measures to minimise exposure to mechanical hazards during operational and maintenance activities.
- 2.4 Recommend improvements to machinery safety procedures and maintenance practices to support regulatory compliance, operational efficiency, and workforce protection.

3. Evaluate the effectiveness of guards, safety devices, and procedures.

- 3.1 Critically evaluate the suitability, reliability, and operational effectiveness of machinery guards, interlocking systems, emergency stop devices, and other safety controls.
- 3.2 Assess the contribution of engineering safeguards and operational procedures in preventing machinery-related injuries and equipment failures.
- 3.3 Analyse inspection, maintenance, and operational data to determine the performance and limitations of existing machinery safety arrangements.
- 3.4 Develop evidence-based recommendations to improve machinery guarding systems, safety devices, and operational procedures in line with recognised industry standards and occupational safety requirements.

4. Promote safe use of machinery among learners and colleagues.

- 4.1 Develop strategies to promote safe machinery operation practices among learners, employees, and workplace teams within industrial and training environments.
- 4.2 Critically evaluate the effectiveness of communication, supervision, and training initiatives in improving machinery safety awareness and behavioural compliance.
- 4.3 Apply leadership and collaborative approaches to encourage active participation in machinery safety programmes, hazard reporting, and safe working practices.
- 4.4 Assess the impact of machinery safety awareness initiatives on organisational safety culture, workforce competence, and incident prevention outcomes.

5. Ensure compliance with mechanical safety regulations.

- 5.1 Critically analyse mechanical safety legislation, regulatory requirements, and industry standards applicable to machinery operation and maintenance activities.
- 5.2 Evaluate organisational compliance arrangements through the review of machinery inspection records, maintenance systems, operational procedures, and safety documentation.
- 5.3 Assess the operational, legal, and financial implications of non-compliance with mechanical safety regulations in industrial workplace environments.
- 5.4 Recommend strategic improvements to strengthen mechanical safety governance, regulatory compliance, and organisational accountability.

6. Apply mechanical safety practices in 360 Credits Occupational Safety Diploma training.

- 6.1 Apply advanced mechanical safety practices and occupational health and safety principles within training and workplace-based learning environments.
- 6.2 Critically evaluate the effectiveness of practical training activities in developing learner competence in machinery safety, hazard control, and safe operational behaviour.
- 6.3 Integrate mechanical safety procedures, risk management strategies, and regulatory requirements into occupational safety training programmes and professional practice.
- 6.4 Develop evidence-based recommendations to enhance the quality, effectiveness, and sustainability of mechanical safety training within occupational health and safety education frameworks.

HS&E0008-19- Environmental Protection and Sustainability Practices

This unit explores the role of the safety professional in managing an organization's environmental footprint. Learners will study resource efficiency, carbon footprint reduction, and the management of industrial emissions. By integrating sustainability with safety, students learn to implement environmental management systems (ISO 14001) that promote ecological responsibility while ensuring long-term corporate viability and compliance with international climate goals.

Learning Outcome:

Assessment Criteria:

1. Understand environmental protection regulations and industry best practices.

- 1.1 Critically evaluate environmental protection legislation, regulatory frameworks, and recognised industry best practices relevant to occupational health and safety management.
- 1.2 Analyse the relationship between environmental compliance obligations, organisational sustainability objectives, and operational risk management practices.
- 1.3 Assess the effectiveness of environmental protection policies and procedures in controlling workplace environmental impacts and supporting sustainable operations.
- 1.4 Recommend evidence-based improvements to organisational environmental management practices in accordance with current legal requirements, international standards, and industry expectations.

2. Implement sustainable and eco-friendly initiatives in workplaces.

- 2.1 Develop and implement sustainable and environmentally responsible initiatives that support organisational operational efficiency and occupational health and safety objectives.
- 2.2 Critically assess the effectiveness of workplace sustainability programmes in reducing environmental impacts, resource consumption, and operational waste.
- 2.3 Apply advanced planning and management strategies to integrate eco-friendly technologies, processes, and practices within workplace operations.
- 2.4 Evaluate the long-term organisational, environmental, and economic benefits of sustainable workplace initiatives in promoting responsible business practices and regulatory

3. Identify environmental hazards affecting occupational health and safety.

compliance.

- 3.1 Critically evaluate environmental hazards arising from industrial activities, workplace operations, and organisational processes that may affect occupational health and safety performance.
- 3.2 Apply advanced risk assessment techniques to identify and analyse environmental factors contributing to worker exposure, environmental degradation, and operational risks.
- 3.3 Assess the interaction between environmental hazards, workplace conditions, and human health outcomes within complex occupational settings.
- 3.4 Develop evidence-based recommendations for controlling environmental hazards in line with occupational safety standards, environmental legislation, and sustainable risk management principles.

4. Develop strategies to reduce environmental risks in industrial operations.

- 4.1 Develop comprehensive environmental risk reduction strategies that address pollution control, waste management, resource conservation, and sustainable industrial operations.
- 4.2 Critically evaluate existing environmental control measures and operational practices to determine their effectiveness in reducing workplace environmental risks.
- 4.3 Apply integrated environmental management approaches to minimise the impact of industrial processes on workers, communities, and surrounding ecosystems.
- 4.4 Recommend strategic improvements to environmental risk management systems that support organisational sustainability, legal compliance, and continuous operational improvement.

5. Promote learner awareness of sustainability in safety practices.

- 5.1 Develop educational and awareness initiatives that promote sustainability principles within occupational health and safety practices among learners and workplace personnel.
- 5.2 Critically evaluate the effectiveness of communication, training, and engagement activities in improving learner understanding of environmental responsibility and sustainable safety behaviours.
- 5.3 Apply leadership and collaborative approaches to encourage learner participation in sustainability programmes, environmental reporting, and responsible workplace practices.
- 5.4 Assess the contribution of sustainability awareness initiatives to organisational culture, environmental performance, and long-term occupational safety objectives.

6. Integrate environmental health considerations into occupational safety management systems.

- 6.1 Critically evaluate the integration of environmental health considerations within occupational health and safety management systems and organisational risk management frameworks.
- 6.2 Develop coordinated management strategies that align environmental protection objectives with workplace health, safety, and operational performance requirements.
- 6.3 Analyse the effectiveness of integrated environmental and occupational safety systems in preventing incidents, reducing organisational risks, and supporting regulatory compliance.
- 6.4 Recommend evidence-based improvements to strengthen the integration of environmental health principles into occupational safety policies, procedures, and continuous improvement processes.

HS&E0008-20- Occupational Health Monitoring and Surveillance

Learners will investigate the systematic methods used to track health trends and detect early signs of work-related illness. This unit covers biological monitoring, health checks for high-risk roles, and the management of medical records. The curriculum emphasizes the importance of data confidentiality and the professional collaboration between safety engineers and medical practitioners to ensure a healthy, resilient workforce.

Learning Outcome:

1. Conduct occupational health monitoring and surveillance programmes.

Assessment Criteria:

- 1.1 Design and implement occupational health monitoring and surveillance programmes that address workplace hazards, exposure risks, and organisational health and safety objectives.
- 1.2 Critically evaluate the effectiveness of occupational health surveillance methods in identifying trends, patterns, and emerging workplace health concerns within industrial environments.
- 1.3 Apply advanced monitoring techniques and data collection processes to assess worker exposure to physical, chemical, biological, and ergonomic hazards.
- 1.4 Develop evidence-based recommendations to improve occupational health monitoring systems in accordance with legal requirements, professional standards, and organisational risk management strategies.

2. Identify early signs of occupational illness and exposure risks.

- 2.1 Critically evaluate the indicators, symptoms, and contributing factors associated with occupational illnesses and workplace exposure risks across diverse industrial settings.
- 2.2 Apply systematic assessment techniques to identify early warning signs of work-related health conditions and hazardous exposure scenarios.
- 2.3 Assess the relationship between workplace processes, environmental conditions, and worker health outcomes in the development of occupational illnesses.
- 2.4 Recommend preventive interventions and control measures to minimise exposure risks and support early detection of occupational health issues.

3. Apply surveillance techniques for workplace hazards and environmental factors.

- 3.1 Apply advanced occupational health surveillance techniques to monitor workplace hazards, environmental conditions, and employee health performance.
- 3.2 Critically assess the suitability and reliability of surveillance methodologies used for evaluating exposure to hazardous substances, noise, vibration, temperature, and airborne contaminants.
- 3.3 Analyse occupational health and environmental data to identify areas of concern, emerging risks, and opportunities for workplace health improvement.
- 3.4 Develop integrated surveillance strategies that support proactive hazard control, regulatory compliance, and sustainable occupational health management practices.

4. Maintain health records and reporting systems accurately.

- 4.1 Develop and maintain accurate occupational health records and reporting systems in accordance with legal, ethical, and organisational requirements.
- 4.2 Critically evaluate the effectiveness of workplace health information management systems in supporting confidentiality, data accuracy, and informed decision-making.
- 4.3 Apply professional reporting practices to document occupational illnesses, exposure incidents, surveillance outcomes, and health monitoring activities.
- 4.4 Recommend improvements to health record management and reporting procedures to enhance organisational accountability, compliance, and occupational health performance.

5. Recommend preventive measures to protect worker health.

- 5.1 Critically evaluate workplace control measures and occupational health interventions designed to protect workers from occupational illnesses and hazardous exposures.
- 5.2 Develop comprehensive preventive strategies that integrate engineering controls, administrative measures, health promotion initiatives, and personal protective equipment.
- 5.3 Assess the effectiveness of organisational health protection programmes in reducing occupational health risks and supporting workforce wellbeing.
- 5.4 Recommend evidence-based improvements to occupational health prevention practices in alignment with regulatory standards, organisational objectives, and industry best practices.

6. Enhance professional capability in industrial health and safety engineering.

- 6.1 Demonstrate advanced professional competence in occupational health and safety engineering through the application of technical knowledge, analytical skills, and ethical practice.
- 6.2 Critically evaluate personal and organisational performance in managing occupational health risks within complex industrial environments.
- 6.3 Apply strategic problem-solving, communication, and decision-making skills to address occupational health and safety challenges involving multiple interacting factors.
- 6.4 Develop continuous professional development strategies to strengthen expertise, leadership capability, and professional effectiveness in industrial health and safety engineering practices.

HS&E0008-21- Safety Leadership and Team Management

Moving beyond technical skills, this unit focuses on the behavioral aspects of safety management. Learners will study leadership styles, motivational theories, and strategies for fostering a positive safety culture. The course develops the interpersonal skills necessary to lead technical teams, manage change, and influence stakeholders at all levels, ensuring safety becomes a core organizational value.

Learning Outcome:

Assessment Criteria:

1. Develop leadership skills for occupational health and safety initiatives.

- 1.1 Critically evaluate leadership theories, management approaches, and decision-making models applicable to occupational health and safety initiatives within complex workplace environments.
- 1.2 Apply advanced leadership strategies to influence organisational safety performance, workforce engagement, and the effective implementation of health and safety programmes.
- 1.3 Assess the impact of leadership behaviours, ethical practice, and organisational governance on the achievement of occupational health and safety objectives.
- 1.4 Develop evidence-based leadership approaches that support proactive risk management, regulatory compliance, and sustainable workplace safety improvement.

2. Promote a positive safety culture among teams and learners.

- 2.1 Critically analyse the factors that influence the development and maintenance of a positive organisational safety culture within industrial and educational environments.
- 2.2 Develop strategies to encourage safe behaviours, workforce participation, and shared responsibility for occupational health and safety among teams and learners.
- 2.3 Evaluate the effectiveness of organisational communication, supervision, and behavioural safety initiatives in promoting safety awareness and compliance.
- 2.4 Recommend integrated approaches for strengthening safety culture through leadership commitment, employee engagement, and continuous organisational learning.

3. Apply strategies for effective safety communication and engagement.

- 3.1 Apply advanced communication and engagement strategies to promote occupational health and safety awareness across diverse workplace and training environments.
- 3.2 Critically evaluate the effectiveness of formal and informal communication methods in supporting hazard reporting, workforce consultation, and safety participation.
- 3.3 Assess the role of active engagement, collaboration, and feedback mechanisms in improving organisational safety performance and employee accountability.
- 3.4 Develop evidence-based communication plans that support effective dissemination of safety information, emergency procedures, and organisational safety objectives.

4. Manage safety projects and team responsibilities efficiently.

- 4.1 Plan and manage occupational health and safety projects using effective resource allocation, scheduling, monitoring, and risk management techniques.
- 4.2 Critically evaluate team performance, operational priorities, and project outcomes to ensure the successful achievement of organisational safety objectives.
- 4.3 Apply leadership and management principles to coordinate team responsibilities, resolve operational challenges, and maintain workplace safety standards.
- 4.4 Develop strategic recommendations to improve project efficiency, team accountability, and the sustainable delivery of occupational health and safety initiatives.

5. Foster collaboration, accountability, and professional development.

- 5.1 Critically evaluate the importance of collaboration, accountability, and continuous professional development in maintaining effective occupational health and safety performance.
- 5.2 Develop strategies to encourage teamwork, professional responsibility, and shared commitment to workplace safety objectives among employees and learners.

6. Strengthen leadership expertise in Occupational Health and Safety Engineering Diploma contexts.

- 5.3 Assess the effectiveness of mentoring, training, and performance management practices in supporting professional growth and organisational capability development.
- 5.4 Recommend evidence-based initiatives to strengthen collaborative working relationships, ethical practice, and long-term professional competence within occupational health and safety environments.
- 6.1 Demonstrate advanced leadership expertise through the application of occupational health and safety engineering principles within professional and academic contexts.
- 6.2 Critically analyse complex occupational safety challenges and apply strategic leadership approaches to support effective problem-solving and organisational improvement.
- 6.3 Integrate advanced managerial, technical, and communication competencies to lead occupational health and safety activities across diverse operational environments.
- 6.4 Develop reflective and evidence-based leadership practices that support continuous improvement, professional effectiveness, and sustainable occupational health and safety performance.

HS&E0008-22- Hazardous Materials and Chemical Safety

This unit provides a comprehensive overview of the classification, labeling, and handling of toxic substances. Learners will study the Global Harmonized System (GHS), Safety Data Sheets (SDS), and the principles of chemical containment and ventilation. The objective is to ensure that hazardous materials are stored, transported, and used in a manner that prevents acute and chronic health effects.

Learning Outcome:

- 1. Identify hazardous substances and evaluate associated workplace risks.**

Assessment Criteria:

- 1.1** Critically evaluate the properties, classifications, and occupational risks associated with hazardous substances used or generated within workplace environments.
 - 1.2** Apply advanced risk assessment methodologies to identify, analyse, and prioritise chemical hazards affecting workers, equipment, and organisational operations.
 - 1.3** Assess the interaction between hazardous substances, workplace processes, and environmental conditions in contributing to occupational health and safety risks.
 - 1.4** Develop evidence-based recommendations for controlling hazardous substance exposure in accordance with occupational health and safety legislation, chemical safety standards, and industry best practices.
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- 2. Apply safe handling, storage, and disposal procedures for chemicals.**
 - 2.1** Develop and implement safe handling, storage, transportation, and disposal procedures for hazardous chemicals within industrial and occupational settings.
 - 2.2** Critically evaluate the effectiveness of workplace chemical management systems in preventing contamination, exposure incidents, and environmental harm.
 - 2.3** Apply appropriate engineering controls, administrative procedures, and personal protective measures to minimise risks associated with hazardous chemical operations.
 - 2.4** Recommend strategic improvements to chemical handling and waste management practices to support legal compliance, operational safety, and environmental sustainability.

3. Understand chemical safety legislation and compliance requirements.

- 3.1 Critically analyse chemical safety legislation, regulatory frameworks, and recognised industry standards applicable to hazardous materials management.
- 3.2 Evaluate organisational compliance arrangements through the review of safety data sheets, labelling systems, storage controls, and chemical risk management procedures.
- 3.3 Assess the operational, legal, and financial implications of non-compliance with chemical safety regulations within workplace environments.
- 3.4 Develop evidence-based recommendations to strengthen chemical safety governance, regulatory compliance, and organisational accountability.

4. Implement emergency response measures for chemical incidents.

- 4.1 Develop and implement emergency response procedures for chemical spills, leaks, exposures, fires, and other hazardous material incidents within workplace environments.
- 4.2 Critically evaluate the effectiveness of emergency preparedness systems, communication procedures, and incident response coordination during chemical emergencies.
- 4.3 Apply advanced incident management techniques to minimise risks to personnel, property, and the environment during hazardous chemical events.
- 4.4 Recommend improvements to emergency response planning, training, and resource allocation based on incident evaluations and organisational risk assessments.

5. Promote learner awareness of hazardous materials risks.

- 5.1 Develop educational and awareness initiatives to promote understanding of hazardous materials risks and safe chemical practices among learners and workplace personnel.
- 5.2 Critically evaluate the effectiveness of communication, instruction, and practical training activities in improving awareness of chemical hazards and safe behaviours.
- 5.3 Apply leadership and engagement strategies to encourage active participation in hazardous materials safety programmes and workplace reporting processes.
- 5.4 Assess the contribution of hazardous materials awareness initiatives to organisational safety culture, workforce competence, and the prevention of chemical-related incidents.

6. Integrate chemical safety practices into 360 Credits Occupational Safety Diploma training.

- 6.1 Apply advanced chemical safety principles and hazardous materials management practices within occupational health and safety training and professional contexts.
- 6.2 Critically evaluate the effectiveness of practical and theoretical training activities in developing learner competence in chemical safety, hazard control, and regulatory compliance.
- 6.3 Integrate chemical risk management strategies, emergency response procedures, and environmental protection measures into occupational safety training programmes.
- 6.4 Develop evidence-based recommendations to improve the quality, effectiveness, and sustainability of chemical safety education within occupational health and safety engineering frameworks.

HS&E0008-23- Noise, Vibration, and Occupational Stress Management

Students will analyze the physical and psychological stressors that impact long-term worker health. This unit covers the measurement and control of noise and hand-arm vibration, alongside the identification of psychosocial hazards. Learners will develop holistic mitigation strategies that include engineering controls for physical stressors and organizational interventions to manage workplace stress and promote mental well-being.

Learning Outcome:

Assessment Criteria:

1. Understand occupational exposure to noise, vibration, and stress.

- 1.1 Critically evaluate the sources, characteristics, and occupational impacts of noise, vibration, and work-related stress within industrial and organisational environments.
- 1.2 Analyse the short-term and long-term physical, psychological, and operational consequences associated with exposure to excessive noise, vibration, and workplace stressors.
- 1.3 Assess the interaction between workplace conditions, organisational practices, and human factors in contributing to occupational exposure risks and employee wellbeing concerns.
- 1.4 Develop evidence-based recommendations for controlling occupational exposure to physical and psychological hazards in accordance with occupational health and safety legislation and recognised industry standards.

2. Conduct assessments and monitor workplace conditions effectively.

- 2.1 Apply advanced assessment and monitoring techniques to evaluate workplace exposure to noise, vibration, ergonomic risks, and occupational stress factors.
- 2.2 Critically evaluate the reliability, accuracy, and suitability of monitoring equipment, data collection methods, and assessment procedures used within occupational health and safety practice.
- 2.3 Analyse workplace monitoring data to identify hazardous trends, non-compliance issues, and areas requiring corrective intervention or operational improvement.
- 2.4 Develop comprehensive monitoring strategies that support proactive risk management, regulatory compliance, and sustainable workplace health and safety performance.

3. Develop strategies to reduce harmful exposure to physical and psychological hazards.

- 3.1 Develop integrated risk reduction strategies to minimise employee exposure to harmful physical and psychological workplace hazards.
- 3.2 Critically evaluate the effectiveness of engineering controls, administrative measures, behavioural interventions, and organisational support systems in reducing occupational health risks.
- 3.3 Apply occupational health and safety management principles to address complex workplace conditions involving interacting physical, environmental, and psychosocial factors.
- 3.4 Recommend evidence-based improvements to organisational hazard control strategies that support workforce wellbeing, operational efficiency, and long-term occupational health protection.

4. Promote learner awareness of stress management and well-being.

- 4.1 Develop educational and awareness initiatives that promote stress management, mental wellbeing, and healthy workplace practices among learners and employees.
- 4.2 Critically evaluate the effectiveness of communication, training, and engagement strategies in improving awareness of occupational stress risks and wellbeing management techniques.
- 4.3 Apply leadership and interpersonal communication skills to encourage active participation in workplace wellbeing initiatives and supportive organisational practices.
- 4.4 Assess the contribution of stress management awareness programmes to organisational culture, workforce resilience, and the prevention of work-related psychological health issues.

5. Implement ergonomic and organisational measures for health and safety.

- 5.1 Critically evaluate ergonomic principles and organisational control measures designed to improve workplace health, safety, and employee performance.
- 5.2 Develop and implement ergonomic interventions that address manual handling risks, repetitive strain hazards, workplace design issues, and human performance limitations.
- 5.3 Assess the effectiveness of organisational policies, workload management practices, and workplace support systems in reducing occupational stress and physical strain.
- 5.4 Recommend strategic improvements to ergonomic and organisational safety measures that enhance workforce wellbeing, operational productivity, and regulatory compliance.

6. Strengthen professional skills in occupational health and safety engineering practices.

- 6.1 Demonstrate advanced professional competence through the application of occupational health and safety engineering principles to workplace health risk management practices.
- 6.2 Critically evaluate personal and organisational approaches to managing occupational exposure risks involving physical, ergonomic, and psychological hazards.
- 6.3 Apply strategic problem-solving, analytical, and communication skills to address complex occupational health and safety challenges within diverse workplace environments.
- 6.4 Develop continuous professional development strategies to enhance leadership capability, technical expertise, and professional effectiveness in occupational health and safety engineering practice.

HS&E0008-24- Construction and Industrial Safety Practices

Focused on the high-risk nature of the construction and manufacturing sectors, this unit covers site-specific hazards such as working at heights, excavations, and heavy lifting operations. Learners will explore the coordination of multiple contractors, site logistics, and the implementation of robust safety plans. The curriculum emphasizes the practical application of safety standards in dynamic, fast-paced industrial environments.

Learning Outcome:

Assessment Criteria:

1. Apply safety principles in construction and industrial environments.

- 1.1 Critically evaluate occupational health and safety principles applicable to construction sites, industrial operations, and high-risk working environments.
- 1.2 Apply advanced safety management techniques to address operational hazards, workforce protection requirements, and regulatory obligations within construction and industrial settings.
- 1.3 Assess the effectiveness of workplace safety systems, operational controls, and engineering measures in reducing risks associated with construction and industrial activities.
- 1.4 Develop evidence-based recommendations for improving safety performance, operational efficiency, and compliance within construction and industrial environments.

2. Identify hazards specific to construction sites and industrial operations.

- 2.1 Critically analyse hazards associated with construction activities, industrial processes, heavy machinery, confined spaces, work at height, and hazardous materials operations.
- 2.2 Apply advanced hazard identification and risk assessment methodologies to evaluate site-specific and operational risks within complex workplace environments.
- 2.3 Assess the interaction between environmental conditions, workforce behaviour, equipment operation, and organisational practices in contributing to workplace incidents.
- 2.4 Develop comprehensive hazard control recommendations that support accident prevention, workforce protection, and sustainable operational safety performance.

3. Implement risk controls and safety procedures effectively.

- 3.1 Develop and implement risk control measures and safe working procedures for construction and industrial operations in accordance with occupational health and safety standards.
- 3.2 Critically evaluate the effectiveness of engineering controls, administrative procedures, permit-to-work systems, and personal protective measures in reducing workplace risks.
- 3.3 Apply advanced operational planning and supervision techniques to ensure the consistent implementation of safety procedures across diverse workplace activities.
- 3.4 Recommend strategic improvements to workplace risk control systems and operational safety procedures based on inspection findings, incident data, and organisational requirements.

4. Conduct inspections and audits for regulatory compliance.

- 4.1 Plan and conduct workplace safety inspections and audits to evaluate compliance with occupational health and safety legislation, construction regulations, and industry standards.
- 4.2 Critically assess operational activities, safety documentation, and workplace conditions to identify non-conformities, hazards, and procedural deficiencies.
- 4.3 Analyse inspection and audit findings to determine the effectiveness of organisational safety management systems and compliance arrangements.
- 4.4 Prepare professional audit and inspection reports that provide evidence-based recommendations for corrective actions, continuous improvement, and regulatory compliance.

5. Promote a proactive safety culture among learners and teams.

- 5.1 Critically evaluate the organisational and behavioural factors that influence the development of a proactive safety culture within construction and industrial environments.
- 5.2 Develop strategies to encourage workforce participation, learner engagement, and shared responsibility for occupational health and safety performance.
- 5.3 Apply effective communication, leadership, and behavioural management approaches to improve safety awareness, compliance, and hazard reporting practices.
- 5.4 Assess the impact of proactive safety culture initiatives on workforce competence, organisational accountability, and the prevention of workplace incidents.

6. Integrate construction and industrial safety practices into OHS engineering programmes.

- 6.1 Integrate advanced construction and industrial safety practices into occupational health and safety engineering education, training, and professional development programmes.
- 6.2 Critically evaluate the effectiveness of practical and theoretical training activities in developing learner competence in construction and industrial safety management.
- 6.3 Apply occupational health and safety engineering principles to support the delivery of industry-relevant safety training within complex operational contexts.
- 6.4 Develop evidence-based recommendations to enhance the quality, relevance, and sustainability of construction and industrial safety education within occupational health and safety engineering frameworks.

HS&E0008-25- Strategic Health and Safety Management

This unit focuses on aligning health and safety objectives with long-term corporate goals. Learners will explore the integration of safety into high-level organizational governance, financial planning, and risk management strategies. The curriculum emphasizes the development of proactive safety policies that drive business resilience, ensuring that safety is not just a compliance requirement but a core driver of sustainable competitive advantage.

Learning Outcome:

Assessment Criteria:

1. Develop strategic plans for occupational health and safety engineering within organisations.

- 1.1 Develop critically informed strategic occupational health and safety engineering plans that integrate legal, operational, financial and organisational requirements within complex working environments.
- 1.2 Evaluate organisational structures, governance systems and corporate objectives to determine how occupational health and safety strategies can support long-term organisational performance and sustainability.
- 1.3 Design and justify advanced strategic health and safety initiatives using evidence-based approaches, sector standards and risk intelligence to address emerging and unpredictable workplace challenges.
- 1.4 Critically review the effectiveness of strategic health and safety management arrangements through the application of performance analysis, stakeholder feedback and continuous improvement methodologies.

2. Align health and safety objectives with overall organisational goals.

- 2.1 Critically analyse organisational aims, operational priorities and regulatory obligations to establish alignment between occupational health and safety objectives and broader business strategies.
- 2.2 Develop integrated health and safety objectives that support organisational resilience, workforce wellbeing, operational efficiency and compliance with national and international standards.
- 2.3 Assess the influence of organisational culture, leadership approaches and stakeholder expectations on the successful integration of health and safety objectives across departments

- and operational functions.
- 2.4 Recommend strategic interventions that enhance organisational commitment to occupational health and safety while maintaining productivity, ethical responsibility and sustainable business performance.
- 3. Implement advanced risk management frameworks at a strategic level.**
- 3.1 Evaluate advanced risk management frameworks and models to determine their suitability for managing complex occupational health and safety risks within diverse organisational contexts.
- 3.2 Design strategic risk management processes that identify, assess and control interconnected hazards using quantitative, qualitative and predictive risk assessment methodologies.
- 3.3 Apply advanced theoretical and practical risk management principles to prioritise organisational resources and support informed strategic decision-making in high-risk environments.
- 3.4 Critically assess the effectiveness of implemented risk management frameworks by analysing incident trends, organisational performance data and compliance outcomes.
- 4. Evaluate safety performance metrics and recommend improvements.**
- 4.1 Critically evaluate the reliability and validity of occupational health and safety performance metrics used to measure organisational effectiveness and regulatory compliance.
- 4.2 Interpret complex safety performance data, audit findings and statistical indicators to identify patterns, operational weaknesses and opportunities for improvement.
- 4.3 Develop evidence-based recommendations for improving occupational health and safety performance through strategic monitoring, benchmarking and continuous improvement systems.
- 4.4 Assess the impact of corrective and preventive actions on organisational health and safety outcomes using measurable performance indicators and evaluation techniques.

5. Engage learners and teams in strategic safety decision-making.

- 5.1 Critically evaluate leadership and communication approaches that influence participation, collaboration and accountability in strategic occupational health and safety decision-making processes.
- 5.2 Facilitate inclusive engagement strategies that enable learners, teams and stakeholders to contribute effectively to organisational safety planning and problem-solving activities.
- 5.3 Apply advanced interpersonal, negotiation and consultation skills to manage conflicting priorities and support informed decision-making in complex occupational health and safety contexts.
- 5.4 Assess the effectiveness of team engagement and participative decision-making practices in improving organisational safety culture, operational performance and workforce commitment.

6. Strengthen leadership skills for effective management in 360 Credits Occupational Safety Diploma contexts.

- 6.1 Critically analyse leadership theories, management principles and professional responsibilities relevant to occupational health and safety engineering practice within complex organisational environments.
- 6.2 Demonstrate advanced leadership capabilities in managing occupational health and safety systems, organisational change and strategic operational priorities within unpredictable contexts.
- 6.3 Evaluate personal and organisational leadership practices to identify opportunities for professional development, improved governance and enhanced safety performance.
- 6.4 Develop and implement leadership strategies that promote ethical practice, accountability, continuous improvement and sustainable occupational health and safety management within 360 Credits Occupational Safety Diploma contexts.

HS&E0008-26- Advanced Fire Risk Management and Prevention

Students will delve into sophisticated fire modeling and the application of engineering solutions to complex fire hazards. This unit covers the integration of advanced suppression technologies, structural integrity assessments, and high-level fire safety audits. The focus is on mastering fire prevention in high-risk environments, such as chemical plants and high-rise structures, through rigorous application of international fire engineering standards.

Learning Outcome:

1. Conduct detailed fire risk assessments in complex industrial and corporate workplaces.

2. Develop and implement advanced fire prevention and mitigation strategies.

Assessment Criteria:

- 1.1 Critically evaluate workplace environments, operational activities and organisational processes to identify complex fire hazards, ignition sources and vulnerable risk areas within industrial and corporate settings.
 - 1.2 Apply advanced fire risk assessment methodologies and legislative frameworks to determine the likelihood and potential consequences of fire incidents across diverse occupational environments.
 - 1.3 Analyse structural layouts, fire protection systems, human behaviour factors and emergency arrangements to produce comprehensive and evidence-based fire risk assessment findings.
 - 1.4 Develop detailed recommendations for controlling and reducing fire risks through the implementation of proportionate preventive, protective and monitoring measures aligned with organisational and regulatory requirements.
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- 2.1 Design advanced fire prevention and mitigation strategies that address operational hazards, organisational risks and sector-specific fire safety challenges within complex workplaces.
 - 2.2 Evaluate the suitability and effectiveness of fire control technologies, suppression systems and emergency response procedures in reducing the impact of potential fire incidents.
 - 2.3 Implement integrated fire prevention measures that support business continuity, workforce safety and compliance with occupational health and safety engineering standards.
 - 2.4 Critically assess the effectiveness of implemented fire prevention strategies through

performance reviews, incident analysis and continuous improvement processes.

3. Analyse fire incident trends and recommend improvements.

- 3.1 Critically analyse fire incident reports, statistical data and organisational records to identify recurring hazards, behavioural patterns and operational weaknesses contributing to fire-related events.
- 3.2 Interpret qualitative and quantitative fire safety data to evaluate the effectiveness of existing prevention, response and recovery arrangements within occupational environments.
- 3.3 Develop evidence-based recommendations for improving fire safety management systems, emergency preparedness and organisational learning from fire incidents.
- 3.4 Assess the potential organisational, legal and operational implications of fire incident trends in order to support strategic decision-making and risk reduction initiatives.

4. Lead fire safety training and awareness initiatives for learners and staff.

- 4.1 Design and deliver advanced fire safety training programmes that address organisational risks, legal responsibilities and emergency response requirements for learners and workplace personnel.
- 4.2 Apply effective leadership, communication and facilitation techniques to promote engagement, accountability and safe fire safety practices among diverse groups of participants.
- 4.3 Evaluate the effectiveness of fire safety awareness initiatives through learner feedback, competency assessments and behavioural performance indicators.
- 4.4 Develop inclusive fire safety communication strategies that support continuous learning, organisational preparedness and a positive workplace safety culture.

5. Ensure robust compliance with occupational health and safety engineering standards.

- 5.1 Critically evaluate organisational fire safety arrangements against relevant occupational health and safety engineering legislation, regulatory requirements and recognised professional standards.
- 5.2 Develop and implement compliance monitoring systems that ensure fire safety procedures, documentation and operational controls remain effective and legally compliant.
- 5.3 Assess the implications of non-compliance, regulatory breaches and organisational failures on workplace safety, legal accountability and operational continuity.
- 5.4 Recommend corrective and preventive actions that strengthen organisational compliance, governance practices and continuous improvement in fire risk management systems.

6. Integrate fire risk management strategies into comprehensive workplace safety plans.

- 6.1 Develop integrated workplace safety plans that incorporate fire risk management principles alongside broader occupational health and safety objectives and operational requirements.
- 6.2 Critically analyse the interrelationship between fire risks, emergency planning, environmental hazards and organisational safety management systems within complex workplaces.
- 6.3 Coordinate fire risk management measures with wider organisational safety strategies to support operational resilience, workforce protection and effective emergency response capability.
- 6.4 Evaluate the effectiveness of integrated workplace safety plans through audits, performance monitoring and stakeholder feedback to ensure continuous improvement and organisational readiness.

HS&E0008-27- Safety Culture Development and Behavioural Safety

This unit examines the psychological factors influencing workplace safety and the methodologies required to foster a positive safety culture. Learners will study behavioral observation techniques, feedback loops, and leadership influence on employee choices. By understanding the root of human behavior, students will develop strategies to shift organizational mindsets from reactive compliance to an interdependent, proactive safety commitment across all levels.

Learning Outcome:

1. Understand the role of safety culture in accident prevention and organisational performance.

2. Implement behavioural safety programmes to influence learner and employee conduct.

Assessment Criteria:

- 1.1 Critically analyse the relationship between organisational safety culture, human behaviour and accident prevention within complex occupational and industrial environments.
- 1.2 Evaluate the influence of leadership practices, communication systems and workforce engagement on the development and maintenance of a positive safety culture.
- 1.3 Assess the impact of organisational values, attitudes and behavioural norms on operational performance, workforce wellbeing and regulatory compliance.
- 1.4 Critically review theoretical models and contemporary approaches to safety culture in order to determine their effectiveness in improving organisational resilience and reducing workplace incidents.
- 2.1 Design and implement behavioural safety programmes that address organisational risks, workforce behaviour and operational safety requirements within diverse workplace settings.
- 2.2 Apply advanced communication, coaching and motivational techniques to influence safe behaviour and encourage accountability among learners and employees.
- 2.3 Evaluate behavioural observation methods, reporting systems and intervention strategies to improve compliance with occupational health and safety procedures.
- 2.4 Assess the effectiveness of behavioural safety initiatives through performance monitoring, incident reduction analysis and workforce feedback mechanisms.

3. Assess and measure safety culture effectiveness using metrics and surveys.

- 3.1 Critically evaluate qualitative and quantitative methods used to measure organisational safety culture, behavioural performance and workforce perceptions.
- 3.2 Design and apply safety culture surveys, performance indicators and assessment tools to collect reliable and valid organisational safety data.
- 3.3 Interpret survey findings, behavioural trends and performance metrics to identify organisational strengths, weaknesses and opportunities for improvement.
- 3.4 Develop evidence-based recommendations to enhance safety culture effectiveness through targeted interventions, stakeholder engagement and continuous monitoring processes.

4. Promote continuous improvement in organisational safety culture.

- 4.1 Develop continuous improvement strategies that strengthen organisational safety culture through effective planning, monitoring and performance evaluation processes.
- 4.2 Critically assess existing organisational practices, incident trends and behavioural outcomes to identify areas requiring cultural and operational improvement.
- 4.3 Implement corrective and preventive actions that support sustainable improvements in workforce engagement, safety performance and organisational accountability.
- 4.4 Evaluate the effectiveness of continuous improvement initiatives by analysing organisational performance data, stakeholder feedback and compliance outcomes.

5. Encourage proactive safety behaviour across teams and departments.

- 5.1 Apply leadership and interpersonal strategies to encourage proactive safety participation, collaboration and shared responsibility among teams and departments.
- 5.2 Develop initiatives that empower employees and learners to identify hazards, report unsafe conditions and contribute to workplace safety improvements.
- 5.3 Assess the influence of communication systems,

6. Embed safety culture principles into industrial and occupational safety engineering practices.

organisational support and behavioural reinforcement on the promotion of proactive safety practices.

5.4 Critically evaluate the effectiveness of proactive safety behaviour initiatives in improving operational performance, reducing incidents and strengthening organisational safety culture.

6.1 Integrate safety culture principles into occupational safety engineering systems, operational procedures and organisational risk management practices.

6.2 Critically evaluate engineering controls, workplace processes and organisational policies to ensure alignment with positive safety culture objectives and professional standards.

6.3 Develop and implement safety-focused operational strategies that promote ethical practice, workforce wellbeing and sustainable organisational performance.

6.4 Assess the effectiveness of embedded safety culture principles through audits, behavioural analysis and continuous improvement measures within industrial and occupational safety engineering contexts.

HS&E0008-28- Advanced Accident Investigation and Root Cause Analysis

Going beyond basic reporting, this unit utilizes complex forensic methodologies like TapRoot and AcciMap to dissect multifaceted industrial incidents. Learners will master evidence preservation, advanced interviewing, and the identification of systemic latent failures. The objective is to move past human error to uncover deep-seated organizational flaws, providing comprehensive corrective actions that fundamentally prevent the recurrence of high-consequence events.

Learning Outcome:

- 1. Apply advanced investigative techniques to determine root causes of incidents.**

- 2. Prepare detailed accident reports with actionable recommendations.**

Assessment Criteria:

- 1.1 Critically evaluate advanced accident investigation methodologies and analytical models to determine their suitability for identifying root causes within complex occupational environments.
 - 1.2 Apply systematic investigative techniques, evidence collection processes and causal analysis tools to examine incidents involving multiple interacting operational, environmental and human factors.
 - 1.3 Analyse physical evidence, witness statements, organisational records and technical data to establish accurate conclusions regarding immediate, underlying and root causes of workplace incidents.
 - 1.4 Develop justified findings and corrective recommendations based on critical interpretation of investigation outcomes, legal requirements and organisational safety objectives.
- 2.1 Produce comprehensive accident investigation reports that present factual findings, technical analysis and evidence-based conclusions in a clear and professionally structured format.
 - 2.2 Critically evaluate incident information, organisational records and investigation evidence to develop accurate and legally compliant documentation of workplace accidents.
 - 2.3 Formulate practical and actionable recommendations that address identified failures, organisational weaknesses and operational risks to support continuous safety improvement.

3. Analyse complex incidents in industrial and corporate environments.

2.4 Assess the effectiveness of accident reporting processes in supporting regulatory compliance, organisational accountability and informed decision-making within occupational health and safety engineering contexts.

3.1 Critically analyse complex workplace incidents involving technical systems, operational processes and human behaviour within industrial and corporate environments.

3.2 Evaluate the interaction of organisational, environmental and engineering factors contributing to incident occurrence and the escalation of workplace hazards.

3.3 Apply advanced analytical techniques to interpret incident trends, operational failures and risk factors across diverse occupational settings.

3.4 Develop strategic recommendations for improving organisational controls, emergency response systems and operational practices based on the outcomes of incident analysis.

4. Recommend preventive strategies to avoid recurrence of accidents.

4.1 Develop preventive strategies that address root causes, operational deficiencies and behavioural risks identified through accident investigation processes.

4.2 Critically evaluate the effectiveness of existing control measures, organisational procedures and safety systems in preventing workplace accidents and incidents.

4.3 Recommend integrated corrective and preventive actions that support risk reduction, regulatory compliance and long-term organisational safety performance.

4.4 Assess the potential impact of proposed prevention strategies on workforce safety, operational continuity and organisational resilience within complex working environments.

5. Facilitate organisational learning from incident investigations.

- 5.1 Develop processes for communicating investigation findings and lessons learned to relevant stakeholders in order to strengthen organisational awareness and safety performance.
- 5.2 Apply leadership and facilitation skills to encourage workforce participation, reflective practice and collaborative learning following workplace incidents.
- 5.3 Critically evaluate organisational learning mechanisms, knowledge-sharing systems and feedback processes used to improve occupational health and safety practices.
- 5.4 Assess the effectiveness of organisational learning initiatives in reducing repeat incidents, improving safety culture and supporting continuous improvement objectives.

6. Strengthen professional expertise in occupational health and safety engineering practices.

- 6.1 Critically evaluate contemporary developments, professional standards and emerging practices within occupational health and safety engineering.
- 6.2 Demonstrate advanced professional competence in applying investigative, analytical and problem-solving skills to complex occupational health and safety challenges.
- 6.3 Assess personal and organisational performance in relation to ethical responsibilities, professional accountability and continuous professional development requirements.
- 6.4 Develop strategies for enhancing professional expertise, leadership capability and technical knowledge to support effective occupational health and safety engineering practice across diverse workplace contexts.

HS&E0008-29- Ergonomic Risk Management in Industrial Settings

This unit focuses on the technical design of work systems to optimize human well-being and system performance. Learners will conduct advanced ergonomic assessments using tools like RULA and REBA, focusing on automation, repetitive tasks, and tool design. The curriculum emphasizes reducing physical strain and cognitive load, ensuring that industrial processes are engineered to fit the human operator's physical and mental capabilities.

Learning Outcome:

Assessment Criteria:

1. Conduct advanced ergonomic assessments in diverse workplaces.

- 1.1 Critically evaluate workplace activities, environmental conditions and operational systems to identify ergonomic hazards and human factor risks within diverse occupational settings.
- 1.2 Apply advanced ergonomic assessment methodologies, measurement techniques and analytical tools to examine physical, cognitive and organisational risk factors affecting workforce performance and wellbeing.
- 1.3 Analyse workstations, manual handling activities, equipment design and task demands to determine the causes and consequences of musculoskeletal and ergonomic-related risks.
- 1.4 Develop evidence-based ergonomic assessment findings and recommendations that support regulatory compliance, operational efficiency and sustainable workplace safety improvements.

2. Design solutions to mitigate musculoskeletal and human factor risks.

- 2.1 Design ergonomic interventions and workplace modifications that minimise musculoskeletal disorders, reduce human error and improve overall occupational performance.
- 2.2 Critically evaluate engineering controls, workstation layouts and operational processes to determine appropriate solutions for complex ergonomic challenges.
- 2.3 Apply human factor principles and ergonomic design standards to enhance employee comfort, safety, accessibility and operational effectiveness within industrial environments.
- 2.4 Assess the effectiveness of implemented ergonomic solutions through performance monitoring, workforce feedback and risk reduction outcomes.

3. Evaluate the impact of ergonomics on productivity and workplace safety.

- 3.1 Critically analyse the relationship between ergonomic practices, workforce productivity and occupational health and safety performance within organisational contexts.
- 3.2 Evaluate the impact of ergonomic risks on employee wellbeing, operational efficiency, absenteeism and workplace incident rates using qualitative and quantitative data.
- 3.3 Interpret organisational performance indicators, ergonomic assessment findings and operational outcomes to identify opportunities for continuous improvement.
- 3.4 Develop evidence-based recommendations that enhance workplace productivity and safety through the effective integration of ergonomic principles and risk management strategies.

4. Develop and deliver ergonomic training programmes for learners and teams.

- 4.1 Design comprehensive ergonomic training programmes that address workplace hazards, safe working practices and human factor awareness for learners and organisational teams.
- 4.2 Apply advanced communication, instructional and facilitation techniques to deliver effective ergonomic education within diverse occupational environments.
- 4.3 Evaluate the effectiveness of ergonomic training initiatives through competency assessments, behavioural observations and participant feedback mechanisms.
- 4.4 Develop inclusive learning resources and awareness strategies that support continuous improvement in ergonomic knowledge, safe behaviour and workplace practices.

5. Promote proactive ergonomic practices across organisations.

- 5.1 Develop organisational initiatives that encourage proactive identification, reporting and management of ergonomic risks across teams and departments.
- 5.2 Critically evaluate the influence of organisational culture, leadership commitment and employee participation on the successful implementation of ergonomic practices.
- 5.3 Apply collaborative and consultative approaches

to promote workforce engagement, accountability and continuous improvement in ergonomic risk management.

5.4 Assess the effectiveness of proactive ergonomic programmes in improving employee wellbeing, reducing workplace injuries and supporting organisational performance objectives.

6. Integrate ergonomic risk management into OHS engineering strategies.

6.1 Integrate ergonomic risk management principles into occupational health and safety engineering systems, policies and operational planning processes.

6.2 Critically analyse the interaction between ergonomic hazards, engineering controls and organisational safety management strategies within complex workplace environments.

6.3 Develop comprehensive occupational health and safety engineering strategies that incorporate ergonomic considerations to improve workforce safety, operational resilience and compliance standards.

6.4 Evaluate the effectiveness of integrated ergonomic risk management approaches through audits, performance reviews and continuous improvement measures within occupational health and safety engineering practice.

HS&E0008-30- Emergency Planning and Crisis Management

Learners will develop the skills to lead organizations through large-scale emergencies and reputation-threatening crises. This unit covers the creation of business continuity plans, multi-agency coordination, and strategic communication during disasters. Students will participate in simulation exercises to master high-pressure decision-making, resource mobilization, and the recovery strategies necessary to stabilize operations and protect stakeholders following significant industrial disruptions.

Learning Outcome:

- 1. Develop comprehensive emergency and crisis management plans for workplaces.**

- 2. Implement response strategies for industrial, environmental, and corporate crises.**

Assessment Criteria:

- 1.1 Critically evaluate organisational risks, operational vulnerabilities and regulatory requirements to develop comprehensive emergency and crisis management plans for diverse workplace environments.
 - 1.2 Design integrated emergency management frameworks that address industrial accidents, environmental incidents, security threats and business continuity challenges within complex organisational contexts.
 - 1.3 Apply advanced planning methodologies and risk assessment techniques to establish effective emergency procedures, communication systems and resource allocation strategies.
 - 1.4 Assess the effectiveness of emergency and crisis management plans through scenario analysis, stakeholder consultation and continuous review processes to ensure organisational preparedness and resilience.
- 2.1 Develop and implement strategic response procedures for managing industrial, environmental and corporate crises in accordance with occupational health and safety engineering standards and organisational objectives.
 - 2.2 Critically evaluate emergency response systems, incident command structures and operational coordination mechanisms to support effective crisis management activities.
 - 2.3 Apply advanced decision-making, communication and problem-solving skills to manage complex emergency situations involving multiple stakeholders and unpredictable operational conditions.

3. Coordinate emergency drills and training exercises effectively.

2.4 Assess the effectiveness of implemented response strategies by analysing incident outcomes, operational performance and organisational recovery processes.

3.1 Design and coordinate emergency drills and simulated crisis exercises that reflect realistic workplace risks, operational hazards and emergency response requirements.

3.2 Apply leadership, communication and organisational skills to manage the participation of learners, employees and stakeholders during emergency preparedness activities.

3.3 Evaluate the effectiveness of emergency drills and training exercises through performance monitoring, participant feedback and post-exercise analysis.

3.4 Develop recommendations for improving emergency preparedness, response coordination and organisational resilience based on the outcomes of training and simulation activities.

4. Evaluate response effectiveness and recommend improvements.

4.1 Critically analyse emergency response performance using incident reports, operational data and stakeholder feedback to identify strengths, weaknesses and areas requiring improvement.

4.2 Apply qualitative and quantitative evaluation techniques to assess the effectiveness of emergency procedures, crisis communication systems and organisational recovery measures.

4.3 Develop evidence-based recommendations for enhancing emergency response capability, operational coordination and risk management effectiveness within workplace environments.

4.4 Assess the organisational implications of identified deficiencies and propose corrective actions that support continuous improvement and regulatory compliance.

5. Promote learner and organisational readiness for emergencies.

- 5.1 Develop initiatives that strengthen learner and organisational awareness, preparedness and resilience in relation to workplace emergencies and crisis situations.
- 5.2 Apply advanced communication and engagement strategies to encourage proactive participation in emergency planning, training and preparedness activities.
- 5.3 Critically evaluate the role of organisational culture, leadership commitment and workforce competence in supporting effective emergency readiness and response capability.
- 5.4 Assess the effectiveness of preparedness initiatives in improving workforce confidence, emergency awareness and organisational capacity to manage crisis situations.

6. Embed crisis management principles into occupational health and safety engineering programmes.

- 6.1 Integrate crisis management principles into occupational health and safety engineering policies, operational systems and organisational risk management strategies.
- 6.2 Critically evaluate the relationship between crisis management, business continuity and occupational health and safety engineering practices within complex organisational environments.
- 6.3 Develop occupational health and safety engineering programmes that incorporate emergency preparedness, crisis response and recovery planning in alignment with professional standards and regulatory frameworks.
- 6.4 Assess the effectiveness of integrated crisis management approaches through audits, performance reviews and continuous improvement processes to support organisational resilience and sustainable safety performance.

HS&E0008-31- Safety Performance Metrics and KPI Analysis

This unit teaches learners how to measure what matters by developing both leading and lagging indicators. Students will explore data visualization, trend analysis, and the use of safety dashboards to inform management decisions. By mastering statistical analysis and Key Performance Indicators (KPIs), learners can quantify the effectiveness of safety programs and demonstrate the tangible return on investment of safety initiatives.

Learning Outcome:

Assessment Criteria:

1. Identify key performance indicators (KPIs) for occupational health and safety.

- 1.1 Critically evaluate the purpose and relevance of occupational health and safety key performance indicators in measuring organisational performance, compliance and operational effectiveness.
- 1.2 Identify and justify appropriate leading and lagging indicators that support the monitoring of workplace safety performance across diverse organisational and industrial contexts.
- 1.3 Analyse organisational objectives, operational risks and regulatory requirements to develop measurable and evidence-based safety performance indicators.
- 1.4 Assess the suitability, reliability and limitations of selected KPIs in supporting informed decision-making, continuous improvement and organisational accountability.

2. Collect, analyse, and interpret safety performance data for informed decision-making.

- 2.1 Apply advanced data collection methods and analytical techniques to gather accurate and reliable occupational health and safety performance information from multiple organisational sources.
- 2.2 Critically analyse qualitative and quantitative safety data to identify trends, recurring hazards and operational weaknesses affecting workplace safety performance.
- 2.3 Interpret statistical findings, audit results and incident records to support evidence-based decision-making and strategic safety management processes.
- 2.4 Evaluate the accuracy, validity and ethical management of organisational safety data in accordance with professional standards, confidentiality requirements and regulatory

obligations.

3. Evaluate the effectiveness of safety initiatives using data-driven metrics.

3.1 Critically evaluate the effectiveness of occupational health and safety initiatives through the application of performance metrics, benchmarking processes and outcome analysis techniques.

3.2 Assess the impact of implemented safety programmes on incident reduction, workforce behaviour, operational efficiency and regulatory compliance using evidence-based approaches.

3.3 Apply advanced analytical methods to compare organisational performance against established objectives, industry standards and continuous improvement targets.

3.4 Develop justified recommendations for enhancing safety initiatives based on the interpretation of performance data, stakeholder feedback and organisational priorities.

4. Prepare reports to guide strategic safety planning and organisational improvement.

4.1 Produce comprehensive occupational health and safety performance reports that communicate complex data, analytical findings and strategic recommendations in a clear and professional format.

4.2 Critically evaluate organisational performance information to develop reports that support strategic planning, risk management and informed decision-making processes.

4.3 Present evidence-based recommendations that address operational deficiencies, compliance concerns and opportunities for organisational improvement within workplace safety systems.

4.4 Assess the effectiveness of reporting practices in supporting stakeholder engagement, organisational accountability and continuous

improvement objectives.

5. Support continuous improvement in safety performance and compliance.

- 5.1 Develop continuous improvement strategies that strengthen occupational health and safety performance, regulatory compliance and organisational resilience within complex workplace environments.
- 5.2 Critically assess organisational monitoring systems, audit findings and performance trends to identify opportunities for operational and procedural enhancement.
- 5.3 Implement corrective and preventive actions informed by safety performance data, risk assessments and organisational objectives to improve workplace safety outcomes.
- 5.4 Evaluate the effectiveness of continuous improvement measures through performance reviews, compliance assessments and stakeholder feedback processes.

6. Integrate KPI analysis into 360 Credits Occupational Safety Diploma professional practice.

- 6.1 Integrate occupational health and safety performance metrics and KPI analysis into professional practice to support evidence-based management and strategic organisational decision-making.
- 6.2 Critically evaluate the role of KPI analysis in enhancing professional accountability, operational efficiency and sustainable safety management within occupational health and safety engineering contexts.
- 6.3 Apply advanced analytical, technological and problem-solving skills to interpret performance data and support professional practice across diverse and unpredictable workplace environments.
- 6.4 Assess the contribution of KPI-driven decision-making processes to continuous professional



development, organisational improvement and effective occupational health and safety engineering practice within 360 Credits Occupational Safety Diploma contexts.

HS&E0008-32- Legal Compliance and Occupational Safety Standards

Students will undertake a deep dive into the evolution of international safety law and the complexities of multi-jurisdictional compliance. This unit analyzes case law, statutory duties, and the interplay between local regulations and global standards. Learners will develop the expertise to navigate legal challenges, manage liability, and ensure that organizational practices consistently exceed the requirements of regulatory bodies and inspectors.

Learning Outcome:

1. Interpret international occupational health and safety regulations and standards.

2. Apply legal and compliance frameworks to workplace operations.

Assessment Criteria:

1.1 Critically analyse international occupational health and safety legislation, regulatory frameworks and professional standards relevant to diverse industrial and organisational environments.

1.2 Interpret the legal principles, statutory duties and compliance requirements that govern occupational health and safety engineering practices across national and international contexts.

1.3 Evaluate the application of recognised occupational health and safety standards in supporting organisational governance, workforce protection and operational risk management.

1.4 Assess the implications of regulatory changes, non-compliance and emerging international standards on organisational performance, legal accountability and professional practice.

2.1 Apply occupational health and safety legal frameworks, policies and compliance procedures to operational activities within complex workplace environments.

2.2 Critically evaluate workplace systems, processes and operational controls to ensure alignment with relevant legal obligations and recognised professional standards.

2.3 Develop and implement compliance strategies that support effective risk management, organisational accountability and sustainable workplace safety practices.

2.4 Assess the effectiveness of legal compliance measures in reducing organisational liability, improving workforce protection and maintaining operational continuity.

3. Evaluate organisational practices for regulatory adherence.

- 3.1 Critically evaluate organisational policies, procedures and operational practices to determine their effectiveness in meeting occupational health and safety regulatory requirements.
- 3.2 Apply audit methodologies, inspection techniques and performance monitoring systems to assess compliance with legal and professional standards.
- 3.3 Analyse organisational performance data, incident records and compliance reports to identify areas of non-conformity, operational weakness and regulatory risk.
- 3.4 Develop evidence-based recommendations for improving organisational compliance arrangements, governance systems and occupational health and safety performance.

4. Maintain compliance documentation and reporting systems.

- 4.1 Develop and maintain occupational health and safety documentation systems that ensure accurate recording, monitoring and reporting of compliance activities.
- 4.2 Critically evaluate the effectiveness of organisational reporting procedures, document control systems and record management practices in supporting legal accountability and operational transparency.
- 4.3 Apply regulatory requirements and professional standards to the preparation and management of compliance reports, audit records and safety documentation.
- 4.4 Assess the role of effective documentation systems in supporting informed decision-making, continuous improvement and organisational compliance assurance.

5. Promote awareness of legal responsibilities among learners and teams.

- 5.1 Develop initiatives that promote understanding of occupational health and safety legal responsibilities, ethical obligations and compliance expectations among learners and workplace teams.
- 5.2 Apply advanced communication, leadership and training strategies to support workforce engagement and compliance awareness within diverse organisational contexts.
- 5.3 Critically evaluate the effectiveness of awareness programmes, instructional methods and communication systems in improving legal compliance behaviour and organisational accountability.
- 5.4 Assess the impact of increased legal awareness on workplace safety culture, operational performance and adherence to occupational health and safety standards.

6. Embed regulatory compliance into occupational health and safety engineering initiatives.

- 6.1 Integrate occupational health and safety regulatory requirements into engineering initiatives, operational planning and organisational risk management strategies.
- 6.2 Critically evaluate the relationship between regulatory compliance, engineering controls and sustainable occupational health and safety performance within complex workplace environments.
- 6.3 Develop occupational health and safety engineering initiatives that incorporate legal standards, compliance monitoring systems and continuous improvement processes.
- 6.4 Assess the effectiveness of integrated compliance strategies in supporting organisational resilience, professional accountability and effective occupational health and safety engineering practice.

HS&E0008-33- Environmental Health and Safety Policy Development

This unit focuses on the creation of high-level EHS policies that integrate environmental stewardship with worker protection. Learners will study policy-writing techniques, stakeholder engagement, and the alignment of organizational values with global sustainability frameworks. The objective is to produce comprehensive documents that provide clear direction, establish accountability, and reflect a commitment to ethical operations and environmental conservation.

Learning Outcome:

Assessment Criteria:

1. Develop comprehensive environmental and safety policies for organisations.

- 1.1 Critically evaluate organisational operations, environmental impacts and occupational hazards to develop comprehensive environmental health and safety policies suitable for complex industrial and corporate environments.
- 1.2 Design structured policy frameworks that address risk management, environmental protection, occupational health and safety obligations and organisational sustainability objectives.
- 1.3 Apply advanced analytical and strategic thinking to ensure that policy development reflects operational realities, stakeholder needs and long-term organisational risk profiles.
- 1.4 Justify policy provisions using evidence-based practice, incident data, regulatory requirements and recognised occupational health and safety engineering principles.

2. Align policies with legal, regulatory, and international best practice standards.

- 2.1 Critically analyse national and international environmental, health and safety legislation, directives and standards to ensure organisational policy alignment with legal obligations.
- 2.2 Evaluate the relevance and applicability of global best practice frameworks in shaping organisational environmental health and safety governance systems.
- 2.3 Integrate regulatory requirements and professional standards into policy structures to ensure compliance, accountability and operational consistency across workplace functions.
- 2.4 Assess the implications of non-compliance with

- legal and international standards on organisational performance, reputation and operational continuity.
- 3. Communicate safety policies effectively to learners and stakeholders.**
- 3.1 Develop clear and structured communication strategies to ensure environmental health and safety policies are effectively understood by learners, employees and organisational stakeholders.
 - 3.2 Apply advanced communication and engagement techniques to translate complex policy requirements into accessible operational guidance for diverse audiences.
 - 3.3 Critically evaluate the effectiveness of communication channels, dissemination methods and engagement strategies in promoting policy awareness and compliance.
 - 3.4 Assess stakeholder understanding and behavioural response to safety policies using feedback mechanisms, training evaluations and organisational performance indicators.
- 4. Implement monitoring and review mechanisms to evaluate policy effectiveness.**
- 4.1 Design and implement systematic monitoring and evaluation frameworks to assess the effectiveness of environmental health and safety policies within organisational contexts.
 - 4.2 Critically analyse performance data, audit findings and compliance reports to evaluate policy implementation outcomes and identify areas for improvement.
 - 4.3 Apply continuous improvement methodologies to ensure policies remain relevant, effective and responsive to changing operational and regulatory conditions.
 - 4.4 Assess the reliability and validity of monitoring systems in supporting evidence-based policy review and organisational decision-making.

5. Promote sustainable and safe workplace practices.

- 5.1 Develop initiatives that promote environmental sustainability and occupational health and safety integration within organisational operational practices.
- 5.2 Critically evaluate the relationship between sustainability objectives, workplace safety performance and environmental impact reduction strategies.
- 5.3 Encourage adoption of proactive safety behaviours and environmentally responsible practices across teams and organisational departments.
- 5.4 Assess the effectiveness of sustainability and safety promotion initiatives in improving organisational culture, operational efficiency and environmental performance outcomes.

6. Integrate environmental and health safety policies into industrial safety engineering programmes.

- 6.1 Integrate environmental health and safety policy requirements into industrial safety engineering systems, operational processes and risk management frameworks.
- 6.2 Critically evaluate the interaction between engineering controls, environmental considerations and occupational safety policies in complex industrial environments.
- 6.3 Develop safety engineering programmes that embed policy compliance, sustainability principles and risk mitigation strategies into operational design and implementation.
- 6.4 Assess the effectiveness of integrated policy-driven engineering approaches in enhancing organisational resilience, compliance performance and sustainable occupational health and safety outcomes.

HS&E0008-34- Health and Safety Project Planning and Implementation

Learners will apply project management methodologies to the rollout of safety initiatives, such as new equipment installations or management system upgrades. This unit covers scoping, budgeting, timeline management, and stakeholder communication. Students will learn to overcome resistance to change and utilize project management software to ensure safety projects are delivered on time, within budget, and achieve their intended safety outcomes.

Learning Outcome:

- 1. Plan, implement, and manage occupational health and safety projects.**

- 2. Apply project management techniques to ensure successful safety initiative outcomes.**

Assessment Criteria:

- 1.1 Critically evaluate organisational needs, risk profiles and operational constraints to develop structured occupational health and safety project plans that address complex workplace challenges.
- 1.2 Design and implement project frameworks that integrate scope definition, resource planning, risk control measures and regulatory compliance requirements within occupational health and safety contexts.
- 1.3 Apply advanced planning methodologies to coordinate project activities, timelines and stakeholder responsibilities in dynamic and multi-factorial operational environments.
- 1.4 Assess project outcomes against defined safety objectives, legal requirements and organisational expectations to ensure effective delivery and continuous improvement.
- 2.1 Critically analyse project management methodologies and tools to determine their suitability for occupational health and safety initiative delivery in complex environments.
- 2.2 Apply structured project management techniques including scheduling, budgeting, risk management and quality control to ensure effective implementation of safety initiatives.
- 2.3 Evaluate project progress using performance indicators, milestone tracking and resource utilisation analysis to ensure alignment with planned objectives.
- 2.4 Assess the effectiveness of project management practices in achieving occupational health and safety improvements, compliance outcomes and organisational efficiency.

3. Monitor project performance and evaluate risks and resource requirements.

- 3.1 Develop and implement systematic monitoring processes to evaluate project performance, resource allocation and risk exposure throughout occupational health and safety project lifecycles.
- 3.2 Critically evaluate project risks using qualitative and quantitative assessment methods to identify potential impacts on safety outcomes, timelines and organisational resources.
- 3.3 Analyse performance data, operational constraints and stakeholder inputs to ensure effective resource optimisation and risk mitigation strategies.
- 3.4 Assess the effectiveness of monitoring systems in supporting timely decision-making, corrective actions and successful project delivery.

4. Foster team engagement and collaboration throughout project implementation.

- 4.1 Apply advanced leadership, communication and coordination skills to promote effective teamwork and collaboration in occupational health and safety project environments.
- 4.2 Critically evaluate team dynamics, stakeholder roles and organisational culture to enhance participation and shared responsibility during project execution.
- 4.3 Develop strategies that encourage engagement, accountability and conflict resolution among multidisciplinary teams involved in safety projects.
- 4.4 Assess the impact of team collaboration on project performance, safety outcomes and organisational efficiency within occupational health and safety initiatives.

5. Ensure alignment of safety projects with organisational objectives.

- 5.1 Critically analyse organisational goals, strategic priorities and operational requirements to ensure occupational health and safety projects support overall business objectives.
- 5.2 Develop project alignment strategies that integrate safety performance, regulatory compliance and organisational efficiency within project planning and execution.
- 5.3 Evaluate the consistency between project outcomes and organisational expectations using

6. Strengthen professional skills in 360 Credits Occupational Safety Diploma project management.

performance indicators and strategic assessment tools.

5.4 Assess the contribution of aligned safety projects to organisational resilience, productivity improvement and long-term sustainability.

6.1 Critically evaluate personal project management competencies in relation to occupational health and safety engineering standards and professional development requirements.

6.2 Apply advanced cognitive, analytical and practical skills to manage complex safety projects across diverse and unpredictable workplace contexts.

6.3 Develop strategies for continuous professional improvement in planning, leadership, risk management and decision-making within occupational safety project environments.

6.4 Assess the effectiveness of professional practice in delivering successful occupational health and safety projects in alignment with 360 Credits Occupational Safety Diploma standards and industry expectations.

HS&E0008-35- Leadership in Occupational Safety Engineering

This unit explores the unique challenges of leading technical safety teams in high-stakes environments. Learners will study emotional intelligence, ethical leadership, and conflict resolution within an engineering context. The focus is on developing the "soft skills" necessary to influence executive boards, mentor junior engineers, and champion safety as a non-negotiable value, ensuring technical expertise is matched by effective leadership.

Learning Outcome:

Assessment Criteria:

1. Develop advanced leadership skills for health and safety roles.

- 1.1 Critically evaluate leadership theories and models to develop advanced leadership capabilities relevant to occupational health and safety engineering roles in complex organisational environments.
- 1.2 Analyse the influence of leadership behaviour, decision-making styles and professional ethics on workforce safety performance and organisational outcomes.
- 1.3 Apply strategic leadership approaches to manage health and safety priorities, resource allocation and operational challenges within dynamic and high-risk contexts.
- 1.4 Assess personal leadership effectiveness through reflective practice, stakeholder feedback and performance outcomes in occupational health and safety settings.

2. Guide teams in implementing effective safety strategies and initiatives.

- 2.1 Critically evaluate team structures, roles and competencies to ensure effective coordination in the implementation of occupational health and safety strategies and initiatives.
- 2.2 Apply leadership and communication techniques to direct multidisciplinary teams in executing safety procedures, risk control measures and compliance activities.
- 2.3 Monitor and evaluate team performance to ensure alignment with safety objectives, organisational standards and regulatory requirements.
- 2.4 Assess the effectiveness of leadership interventions in improving team engagement, operational efficiency and occupational health and safety outcomes.

3. Promote a proactive, accountable, and positive safety culture.

- 3.1 Critically analyse organisational culture and behavioural factors that influence accountability, proactive safety behaviour and workforce engagement in occupational health and safety practices.
- 3.2 Develop and implement leadership strategies that encourage responsibility, reporting of hazards and continuous improvement in safety performance.
- 3.3 Evaluate the impact of leadership actions on shaping positive safety attitudes, ethical conduct and compliance with organisational safety expectations.
- 3.4 Assess the effectiveness of cultural improvement initiatives in reducing incidents, strengthening engagement and enhancing organisational safety performance.

4. Apply decision-making frameworks in complex occupational safety situations.

- 4.1 Critically evaluate decision-making models and frameworks to determine their effectiveness in managing complex occupational health and safety scenarios involving multiple risk factors.
- 4.2 Apply structured analytical and problem-solving techniques to assess hazards, prioritise risks and determine appropriate control measures in dynamic environments.
- 4.3 Justify decisions using evidence-based information, regulatory requirements and organisational safety objectives in high-pressure situations.
- 4.4 Assess the outcomes of safety-related decisions in terms of effectiveness, compliance, operational impact and risk reduction.

5. Mentor learners and colleagues in professional development and safety practices.

- 5.1 Develop structured mentoring approaches to support the professional growth, competence development and safety awareness of learners and colleagues in occupational health and safety contexts.
- 5.2 Apply coaching, feedback and reflective practice techniques to enhance understanding of safety systems, procedures and engineering principles.
- 5.3 Critically evaluate the effectiveness of mentoring relationships in improving individual

6. Enhance leadership competencies within occupational health and safety engineering.

performance, confidence and adherence to safety standards.

5.4 Assess the contribution of mentoring activities to workforce capability development, organisational learning and continuous improvement in safety practices.

6.1 Critically evaluate personal and organisational leadership competencies in relation to occupational health and safety engineering standards and professional expectations.

6.2 Develop strategies for continuous improvement in leadership, communication, risk management and strategic decision-making within safety-critical environments.

6.3 Apply advanced leadership skills to manage complex safety systems, organisational change and multidisciplinary occupational health and safety challenges.

6.4 Assess the impact of enhanced leadership competencies on organisational performance, safety culture development and sustainable occupational health and safety outcomes.

HS&E0008-36- Capstone Project in Occupational Health and Safety Engineering

The Capstone Project is the culmination of the diploma, requiring learners to conduct independent, high-level research or solve a real-world industrial safety problem. Students will apply the full spectrum of their technical and managerial knowledge to a specific project, demonstrating their ability to analyze data, propose engineering solutions, and present professional findings that contribute to the field of safety engineering.

Learning Outcome:

- 1. Conduct a comprehensive research or practical project in occupational health and safety engineering.**

- 2. Integrate knowledge and skills gained throughout the diploma programme.**

Assessment Criteria:

- 1.1 Critically evaluate a complex occupational health and safety engineering problem and define a clear research or practical project scope that addresses real-world industrial or corporate challenges.
- 1.2 Design and apply appropriate research methodologies or practical investigation techniques to collect, analyse and interpret relevant occupational health and safety data within defined parameters.
- 1.3 Demonstrate systematic application of advanced theoretical, technical and professional knowledge to investigate multifactorial safety issues in diverse workplace environments.
- 1.4 Justify methodological choices and project design decisions in relation to reliability, validity, ethical considerations and alignment with occupational health and safety engineering standards.
- 2.1 Critically synthesise knowledge, theories and practical competencies acquired across all units of the diploma to address complex occupational health and safety engineering challenges.
- 2.2 Apply integrated problem-solving approaches that combine risk management, legal compliance, safety culture, ergonomics and emergency planning principles within a unified project framework.
- 2.3 Evaluate the interrelationship between different occupational health and safety domains and their combined impact on workplace safety performance and organisational effectiveness.
- 2.4 Demonstrate the ability to transfer and adapt advanced knowledge and skills to unpredictable and multifactorial workplace scenarios within a

3. Analyse real-world occupational health and safety challenges and develop practical solutions.

capstone project context.

- 3.1 Critically analyse real-world occupational health and safety issues using evidence-based data, incident reports and organisational performance information.
- 3.2 Evaluate root causes, contributing factors and systemic weaknesses within occupational environments to identify priority areas for intervention and improvement.
- 3.3 Develop practical, feasible and evidence-based solutions that address identified hazards while considering operational constraints, regulatory requirements and organisational objectives.
- 3.4 Assess the potential effectiveness, risks and implementation challenges of proposed solutions in improving workplace safety outcomes and compliance performance.

4. Implement safety improvement strategies in industrial or corporate settings.

- 4.1 Design and implement occupational health and safety improvement strategies that address identified risks, operational deficiencies and compliance gaps within workplace settings.
- 4.2 Apply project planning, risk control and change management techniques to ensure effective execution of safety interventions in industrial or corporate environments.
- 4.3 Monitor implementation processes and evaluate real-time outcomes to ensure alignment with project objectives, regulatory standards and organisational expectations.
- 4.4 Assess the impact of implemented safety improvement strategies on incident reduction, workforce behaviour, operational efficiency and overall safety performance.

5. Present findings professionally, demonstrating analytical and leadership competencies.

- 5.1 Critically evaluate and synthesise project findings into a structured professional presentation that clearly communicates complex occupational health and safety information.
- 5.2 Apply advanced analytical, communication and reporting skills to present evidence-based conclusions, recommendations and project outcomes to diverse stakeholders.

6. Showcase mastery of ICTQual AB Diploma in Occupational Health and Safety Engineering outcomes.

- 5.3 Demonstrate leadership competencies through effective articulation of decision-making processes, problem-solving approaches and strategic safety insights.
- 5.4 Assess the effectiveness of professional presentation in influencing stakeholder understanding, organisational decision-making and occupational health and safety improvements.
- 6.1 Critically integrate and demonstrate comprehensive understanding of all programme learning outcomes within a single cohesive occupational health and safety engineering project.
- 6.2 Apply advanced cognitive, technical and professional competencies to address complex, unpredictable and multifactorial occupational safety challenges effectively.
- 6.3 Evaluate personal and professional development achieved throughout the diploma programme in relation to industry standards and occupational health and safety engineering practice.
- 6.4 Demonstrate mastery of occupational health and safety engineering principles by producing a capstone output that reflects analytical depth, practical competence and strategic leadership capability.

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