

**SARDAR PATEL UNIVERSITY  
VALLABH VIDYANAGAR**



**SYLLABUS EFFECTIVE FROM: 2018-19  
M.Sc. INDUSTRIAL HYGIENE AND SAFETY  
SEMESTER-IV**

**PS04CIHS21 : OHSAS STANDARD AND ISO 14001:2015**

**1. OHSAS STANDARD**

Introduction – Development of OHSAS standard – Structure and features of OSHAS 18001 – Benefits of certification-certification procedure – OH & S management system element, specification and scope - correspondence between OHSAS 18001, ISO 14001:1996 and ISO 9001:1994 – Guidelines (18002:2000) for implementing OHSAS 18001.

**2. OHSAS 18001 POLICY & PLANNING**

2.1 Developing OH & S policy– Guidelines – Developments - procedure - Content of OH & S policy – General principle, strategy and planning, specific goals, compliance – methodology.

2.2 Planning – Guidelines, methodology steps developing action plan – Analysis and identify the priorities, objective & Targets, short term action plan, benefits and cost of each option, Development of action plan.

**3. IMPLEMENTATION AND OPERATION, CHECKING AND REVIEW**

Guidelines for structure and Responsibilities, Top Management, middle level management, co-ordinator and employees - Developing procedures, identifying training needs, providing training, documentation of training, Training methodology consultation and communications.

Checking & Review; performance measurement and monitoring, Proactive and Reactive monitoring, measurement techniques, inspections, measuring equipment - Accidents reports, Process & procedures, recording, investigation corrective action and follow up - records and records management. Handling documentation, information, records.

**4. ISO 14001:2015**

EMS, ISO 14001, specifications, objectives, Environmental Policy, Guidelines & Principles (ISO 14004), clauses 4.1 to 4.4. Documentation requirements, 3 levels of documentation for a ISO 14000 based EMS, steps in ISO 14001.

Implementation plan, Registration, Importance of ISO 14000 to the Management. Auditing ISO14000-General principles of Environmental Audit, Auditor, steps in audit, Audit plan.

**REFERENCE:**

1. ISO 9000 to OHSAS 18001, Dr. K.C. Arora, S.K. Kataria & Sons, Delhi.
2. ISO 14001 2015 version iso.org

### **PS04CIHS22: Project Work / Dissertation\***

\* Each student has to work in industry or complete the assigned project work on hygiene/safety or both in research institute/small scale industries/ institutions/MNCs / consultancies etc .Minimum duration of the Project Work/Dissertation work will be 12 weeks. Students will be guided by the faculties of the department and also by the concerned industry reporting personnel.

### **Suggested Books**

1. Fundamentals of Industrial Hygiene Safety and Health by Dr. K .U. Mistry 2012 Third Edition
2. Various Thesis work submitted by Students of previous years.
3. What Went Wrong; Catastrophy of Process Plant Disasters by Klez