UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Industrial Management and Certification

2324-3-E2702Q104

Aims

Dealing with the main certified management systems in the areas of quality, occupational safety, environment, social responsibility and food safety, The course aims to provide the basic knowledge enriched by practical exercises drawn from the operational context of chemical companies at national and international level.

Upon passing the exam, students will be able to understand the practical application of management systems treated in a given company. They can therefore propose themselves as Quality Assurance, Environmental Assurance, Auditor and other roles actively involved in the implementation, modification, and verification of certified management systems.

Contents

Management systems, definitions and application, national and international standards. Management systems for quality (UNI EN ISO 9001), quality control and statistical tools. Envinronmental management systems (UNI EN ISO 14001). Occupational Safety (UNI EN ISO 45001). Root cause analysis for claims and incidents. Food safety management systems (ISO 22000). Audit of management systems.

Detailed program

Introduction to management systems and certification, national and international standards, ISO900x series. Adoption of a certified management systems; the role of Accredia and of the national certification bodies. Integrated management systems. The concept of quality and its evolution over time. Management systems for quality (ISO 9001), quality control and statistical tools. Envinronmental management systems (ISO 14001); *Responsible Care programme* for chemical companies. **Occupational Safety (ISO 45001)**. **Food safety**

management systems (ISO 22000), HACCP method, control critical points. Elements of industrial risk management. **Gender equality certification**. **Audit**.

Prerequisites

--

Teaching form

Classroom at Ed U-1/4

Textbook and teaching resource

Professor's slides.

ISO standards (www.uni.it ; www.iso.org)

Accredia guidelines (www.accredia.it)

Responsible Care guidelines

L. Pavletic, Le nuove norme sui sistemi di gesgione per la qualità (UNI EN ISO 9001:2015) e Gestione Ambientale (UNI EN ISO 14001:2015); Franco Angeli

M. Sartor, Qualità – La gestione, gli strumenti, i metodi e le migliori esperienze; Gruppo 24Ore

D.C. Montgomery, Controllo statistico della qualità; McGraw-Hill

A. Chiarini, La conduzione degli audit; Franco Angeli

Linee guida per l'integrazione dei sistemi di gestione dell'ambiente e della sicurezza e salute sul lavoro nelle piccole e medie imprese; ISPESL

Semester

First semester

Assessment method

Oral examination performed by questions on the topics of the course in reference to the teacher's slides and to the

applicative cases discussed during classrooms.

Office hours

Everyday, upon reservation by e-mail

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION | GENDER EQUALITY | LIFE ON LAND