

ENGINEERING FOR SAFETY OF CRITICAL INDUSTRIAL AND CIVIL

(Lecce - Università degli Studi)

Teaching SAFETY ENGINEERING

GenCod A007226

Owner professor Giovanni ELMO

Teaching in italian SAFETY ENGINEERING

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SSD code ING-IND/17

Reference course ENGINEERING FOR SAFETY OF CRITICAL INDUSTRIAL AND

Course type Laurea Magistrale

Credits 9.0

Teaching hours Front activity hours: 81.0

For enrolled in 2024/2025

Taught in 2024/2025

Course year 1

Language ENGLISH

Curriculum INDUSTRIAL ENGINEERING SYSTEMS

Location Lecce

Semester Second Semester

Exam type Oral

Assessment Final grade

Course timetable

<https://easyroom.unisalento.it/Orario>

BRIEF COURSE DESCRIPTION

The course provides the tools and methodologies to acquire the basic skills of a safety engineer who must be able to carry out risk assessment in civil infrastructures and industrial plants

REQUIREMENTS

No prerequisites required

COURSE AIMS

Provide the student with the knowledge to be able to:

- know and apply the engineering principles for risk assessment by referring to mandatory legislation.
- know the prevention and protection measures relating to the most well-known specific risks and with particular reference to fire risk assessment
- understand the technical-organizational problems and methodologies for the design and management of systems at risk of major accidents

TEACHING METHODOLOGY

Lectures, exercises and seminars

ASSESSMENT TYPE

The exam consists of an in-depth study of a topic of the program

FULL SYLLABUS

- Introduction to safety engineering: concepts, objectives, methods and fundamental legislation.
- Risk assessment methodologies and techniques. Introduction to the assessment of specific risks: chemical risk, physical risk, mechanical risk.
- Fire risk assessment: materials, technologies, ATEX environments, procedures according to the new Fire Prevention Code.
- The legislation for the design and management of systems at risk of major accidents (Direttive Seveso).
- Notes on Risk management systems ISO 31000 and HSE management systems ISO 45001 and OHSAS 18001

REFERENCE TEXT BOOKS

Slides provided by the teacher