Erasmus+ Programme – Strategic Partnership
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SafeEngine Module

Occupational Health and Safety
SYLLABUS

INSTRUCTORS:

Lucian Ionel Cioca, Professor
Mihaela Rotaru, Professor
Dorin Vlad, Professor
Faculty of Engineering, University "Lucian Blaga" of Sibiu, Romania

COURSE DESCRIPTION

The course is designed for Bachelor and master's degree students with a background in engineering.
The course provides information on the basic concepts of Occupational Health and Safety. Occupational safety and health (OSH) is generally defined as the science of anticipating, identifying, evaluating, and controlling hazards that may arise in or from the workplace and endanger workers' health and well-being, while also considering the potential impact on surrounding communities and the general environment.
The course includes information on the main legal requirements presenting the legal framework of health and Safety in EU, definition of hazard and risk, how to conduct a risk assessment by INCDPM method.

COURSE OBJECTIVE

By the end of this course, participants should be able to:

• Understand and apply the basic terminology of occupational health and safety in the workplace;
• Explain the difference between risk and hazard;
• Conduct a risk assessment using the INCDPM method.

COURSE ORGANIZATION

The course will be organized in at least 6 virtual lessons and one practical exercise with compulsory attendance. Students enrolled in this course can participate in the virtual lessons and the practical work. For exam dates, see the SafeEngine website (www.safeengine.eu). The training sessions will be held in two terms: 1st March 2022 - 31st May 2022 (first training session) and 1st November 2022 - 31st January 2023 (second training session).
The course is organized in the following chapters:

- Conceptual framework of occupational health and safety
- National and international legislative aspects on occupational health and safety;
- Conducting an occupational health and safety risk assessment;
- Documents used for prevention and protection activity.
- Case study at an ecological landfill, hydroelectrical power plant and automotive plant;
- Work accidents investigation technique.

PRE-REQUISITES

Basic knowledge in mechanical engineering and environmental engineering.

MATERIAL

Teaching materials are available on the Federica and EnvyJobs e-learning platform (e-courses, e-books, and video with practical works).

EVALUATION

Starting from May 16, 2022 those who have attended the course can take the exam.
Two training sessions are planned as following: March 1st, 2022 –May 15. 2022 (first training session) November 1st, 2022 – 31 January 2023 (second training session).
The exam aims at evaluating the student's learning progress (competency and achievement of desired learning objectives). Exams will be computer-based and will consist of a multiple-choice questionnaire which has to be successfully completed and the presentation of a risk assessment done at a local working place.
Students can sign up for exams only after successfully attending all web-lessons and web-practical works (compulsory attendance, verified through online check).
The students will be evaluated through the online examination system. The exam results will be based on the ratio of correct answers given to the total available questions number.
Exam results are reported as pass and score or fail. Exams are considered successful if the correct answers provided by the student are at least 50% of the total number.
Examination will be graded according to a scale ranging from 0 to 100, with 50 as a pass mark. The final grade of the SafeEngine module (3/4), based on the average of the single courses results, will be converted into the local grading scale of ULBS from 1 to 10.
To students failing the exams, a diagnostic report indicating subject areas of relative strength and weakness will be provided. The diagnostic report can assist them to study for a successful re-examination.
Student registration for participating in the exams will be done over the web platform.
Regular session of exams will be scheduled at the end of each teaching cycle.
The exam registration is done via the website www.safeengine.eu . For more information, please visit the SafeEngine web site.

RESOURCES

Resources available on the Federica / EnvYJobs platform.