

Faculty of Applied Sciences



FSA2630

Technologie de la sécurité et de l'hygiène du travail

[15h] 2 credits

This course is not taught in 2006-2007

This course is taught in the 2nd semester

Language: French

Level: Second cycle

Aims

- To familiarize the future engineers with the organizational, human and technical factors of safety and occupational hygiene.
- To provide the basic knowledge needed for the recognition of the risks of accidents and disease, their evaluation and their control.
- To make them in general aware of the consequences on the human level and the health in particular of the technological choices and techniques which they will contribute to bring into their future companies.

Main themes

- Introduction to the operation of safety and hygiene into the companies
- Introduction to the analysis of the industrial accidents
- General methodology of recognition - evaluation and hazard control
- Application of this methodology in some fields:
 - chemical risk: toxicology, evaluation of environment, industrial ventilation
 - acoustical risk: noise control
 - thermal risk: comfort and thermal stress
 - musculoskeletal disorders and back problems
 - not-ionizing radiations.

Content and teaching methods

1. Introduction

Organization of hygiene and safety, prevention advisers, legal bodies, place of the hierarchy.

Distribution of the roles and the responsibilities.

Belgian and European regulations.

2. Global management of the risks

Management of the risks

economic and social indicators

industrial accidents

Strategy for risk prevention

3. Risks related to the physical and chemical environment

Basic physical concepts.

Effects on health.

Methods of screening of the risks.

Evaluation of the exposure: methodology, equipment.

Quantification of the risks.

Methodology of reduction of the risks.

Management practices in the company with specific role of the hierarchy.