Cognitive Ergonomics

Brief description of course content (according to the programme's verification report)

Human engineering. The control and supervision dynamic of human performance. Vigilance. Mental workload. Operator efficiency. Effects of stress, fatigue and circadian rhythms. Human processor models. Neuroergonomics. Human-machine interaction. Universal design.

Learning outcomes

- To understand the general contents of cognitive ergonomics (design, interaction, fatigue and mental load).
- To know how to apply cognitive ergonomics to the professional activity of cognitive ergonomists (e.g. automatic artifact design, universal design).
- To understand the problems associated with artefact design and automation.
- To know how ergonomics may be applied to one of the most important work areas for ergonomists nowadays: accident analysis and occupational risk prevention.

Planned learning activities
Theory Syllabus

Topic 1. Introduction to cognitive ergonomics

Topic 2. Design

Topic 3. Mental workload

Topic 4. Vigilance and mental fatigue

Topic 5. Human-machine interaction

Topic 6. Chronoergonomics

Practical Syllabus

1. Specialist readings.

2. Revision of the contents through practical activities.