



Visiting Professor Program Academic Year 2024/2025

TEACHING COMMITMENT: 12 hours

COURSE TITLE

Design the Industry of the Future: Human Factors/Ergonomics, Psychological and Ethical Challenges

TEACHING PERIOD

1st term

SCIENTIFIC AREA

Human Factors and Ergonomics

LANGUAGE USED TO TEACH

English

COURSE SUMMARY

The module aims to provide a historical, theoretical and methodological overview of the industrial technological transformations, of the role of the human operators in these transformations, of the human factors/ergonomic, psychological and ethical challenges posed by these transformations. The module will also cover methodological approaches of human factors and ergonomics research, including practical aspects in several workplace contexts.

LEARNING OBJECTIVES

The module will cover the following topics:

- Designing interaction: Human-Machine Interaction in Industry 3.0, Human-Robot Interaction in Industry 4.0, Human-Robot Collaboration and Co-working in Industry 5.0;
- Ensuring safety, at product/system, interaction, environmental levels;

- Psychological issues affected by these transformations (e.g., acceptance, trust, etc.);
- Ethical issues and considerations (e.g. data monitoring, sharing and privacy, skilling/up-skilling/de-skilling, etc.).

OTHER ACTIVITIES BESIDES THE COURSE

It will be possible to organize seminars/lectures addressed to PhD students (DBIOS PhD school and others) and research fellows interested in workplace safety, prevention, hygiene and wellbeing.

VISITING PROFESSOR PROFILE

- Knowledge and consolidated experience in human factors and cognitive, organizational and physical ergonomics, both within academic research centres and in industry;
- Knowledge and experience in Safety (models and methods);
- Knowledge and consolidated experience in interaction design and evaluation: HCI, HMI, HRI;
- Consolidated experience in multi- and inter-disciplinary research activities.

CONTACT REFERENT

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