

Human and Social Sciences

Engineering ethics

IDENTIFICATION

CODE : IF-3-S2-EC-RSI-HU
ECTS : 2.0

HOURS

Lectures : 13.5 h
Seminars : 6.0 h
Laboratory : 4.0 h
Project : 0.0 h
Teacher-student
contact : 23.5 h
Personal work : 10.0 h
Total : 33.5 h

ASSESSMENT METHOD

TD project to be realized by groups
of students
- individual part (40%)
- group part (60%)

TEACHING AIDS

- Course slideshow
- Case studies
- Articles
- MOOC

TEACHING LANGUAGE

French

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AIMS

*** Transversal skills ***

== B1 To know oneself to be able to manage oneself physically and mentally (level 1) ==

* Capacity :

To position oneself, to self-assess (level1)

== B2 To work, learn, evolve autonomously (level 2) ==

* Capacity :

To develop and apply a critical approach, to think for yourself (level 2)

== B5 Acting responsibly in a complex world (level 1.3) ==

* Capacities :

- Identify uncertainties and risks and act in order to reduce them (level 1)

- Include a responsible dimension (deontology, ethics) in your actions; identify, assess and anticipate the consequences of your actions and decisions at different scale levels (level 1)

- Understand the complex issues and challenges (in business and in society) faced by engineer: to understand the social, societal, political, economic, environmental, ethical and philosophical dimensions (level 2)

* Knowledge :

ethics

Socio-technical controversies

Responsibility

Postures to act

Risk

== B6 To position oneself, to work, to evolve in a company, a socio-productive organization (level 1.7) ==

* Capacities:

- To analyze the economic, industrial, strategic and human context of the organization for ensuring appropriate decision making (level 2)

- Prevent the individual and social risks specific to the professional environment (level 1)

- Identify and analyze the organizational principles of a business or other socio-productive organization and understand how it operates, particularly in the sectors of the digital economy (level 2)

* Knowledge :

Organization

Corporate social responsibility (CSR)

Work

Engineer

Psychosocial risks

By mobilizing the following skills

- B2 To work, learn, evolve autonomously

CONTENT

- 1) Introduction: engineering and responsibilities
- 2) Positioning of the engineer and ethical theories
- 3) Business in the economy
- 4) Corporate social responsibility
- 5) The engineer at work in business : labor and health
- 6) Risk society
- 7) Environnemental ethics
- 8) Engineers and politics : technical democracy

BIBLIOGRAPHY

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PRE-REQUISITE

None

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