

Ethics and Engineering

1. **Course number and name:** 020ETHGS1 Ethics and Engineering
2. **Credits and contact hours:** 2 ECTS credits, 1x1.25 hours
3. **Name(s) of instructor(s) or course coordinator(s):** Nabil BEJJANI
4. **Instructional Materials:**
 - a. Basic reference: Samuel MERCIER, *L’Ethique dans les entreprises*, Ed. La découverte (2004).
 - b. Aggeri, F., Pezet, E., Abrassard, C. et Acquier, A., *Organiser le développement durable*, Paris, Vuibert, 2005.
 - c. Berle, A.A. and Means, G., *The Modern Corporation and the Private Property*, New York, Mc Millan, 1932.
 - d. Capron, M. et Quairel-Lanoizelée, F., *Mythes et réalités de l’entreprise responsable*, Paris, La Découverte, 2004.
 - e. Granovetter, M., *Le marché autrement*, Paris, Desclée de Brouwer, 2000
 - f. Jones, T.M., « Corporate Social Responsibility Revisited, Redefined », *California Management Review*, XXII (2), 1980.
 - g. Sainsaulieu, R. (ed.), *L’entreprise, une affaire de société*, Paris, Presses de la Fondation Nationale des Sciences Politiques, 1990.
5. **Specific course information**
 - a. **Catalog description:** The course is aimed at students destined to work in public or private companies and in all fields. The objective of the course is to create awareness for the need of ethics, which is becoming inescapable today, given current trends towards sustainable development, the dissemination of information to stakeholders and transparent competition. The course offers prospective engineers the opportunity to understand business issues from an analytical perspective and to distinguish themselves by their professionalism and informed attitude about ethics. Finally, students will be more alert to the entrepreneurial approaches and the ethical reflection that accompanies it.
 - b. **Prerequisites or co-requisites:** None
 - c. **Required:** Required for all Civil Engineering students.
6. **Educational objectives for the course**
 - a. **Specific outcomes of instruction:**
 - Acquire a general knowledge about the concepts of ethics, morality and deontology.
 - Acknowledge the importance of ethics in all business sectors.

- Identify the different vectors of ethics in business such as responsibility towards society, environment, employees, etc.
- Acknowledge the advantages of formalizing ethical processes within a company.
- Link ethics with national and organizational cultures.
- Interpret and contrast authentic documents such as code of conducts, mission and vision statements, etc.
- Engage in debates related to ethical dilemmas.
- Analyze codes of conduct and evaluate their relevance.
- Evaluate ethics in practice on a real business field.

b. PI addressed by the course:

PI	4.1	4.2
Covered	yes	yes
Assessed	yes	

7. Brief list of topics to be covered:

This course is interactive. It includes reading and analysis of basic texts, many debates, reflection on the state of the region (ethics acceptance in regional organizations), study of authentic organizational documents (global businesses), role-playing and projects aimed for pragmatic analysis. The final project consists of an entrepreneurial simulation and the drafting of its ethical code. The course also proposes a visit to companies (at least one) for a practical observation of the ethical actions implemented.

Detailed content:

Chapter	Details
Chapter 1: Ethics and advertising	Analysis and comparison between old and contemporary ads The new market values and principles
Chapter 2: Issues of ethical procedures within a company	<ul style="list-style-type: none"> ➤ Definition of the concept of business ethics ➤ Ethics acceptance in engineering. ➤ Environment and sustainability ➤ A business concept: stakeholders

<p>Chapter 3: Topics related to Ethics</p>	<p>Morals vs Ethics Deontology vs Ethics Utilitarianism Deontological Code for engineers and Architecture eng Fair trade Contemporary issues related to ethics Sweatshops Instrumentalisation Ethical dilemmas and solutions Moral development</p>
<p>Chapter 4: Formalization of ethics within the organization : implementing mechanisms for business ethics</p>	<p>Integration of ethical concerns within the company: committees, deontology, top management role, Seminars, audits, denunciation systems, status reports,</p>
<p>Chapter 5: Formalization of ethics within the organization : Business mission and vision</p>	<p>Definition of vision and mission statements Examples of big companies' statements Ways for communicating values</p>
<p>Chapter 6: Types of ethical responsibilities</p>	<p>Organization's responsibility towards employees (HR concerns) Organization's responsibility towards external partners Organization's responsibility towards environment. Organization's responsibility towards society</p>
<p>Chapter 7: Business Ethics documents</p>	<p>Different types of documents related to business ethics (form, content, length, advantages) Contemporary examples and case studies</p>