## **Course Syllabus**

- 1. Course number and name: 020GECNI1 The Electrical and Mechanical Engineering in the Service of the community
- 2. Credits and contact hours: 4 ECTS credits, 1x1:15 contact hours + mini project
- 3. Instructor's or course coordinator's name: Gabriel Deek
- 4. Text book: No text book
  - a. other supplemental materials:Professor Presentation and Course Material
- 5. Specific course information
  - a. catalog description:

This course introduce the engineering activities, their impact on society and engineers themselves and the major skills that engineers should master.

- b. prerequisites: None
- c. Required/Elective/Selected Elective: Required
- 6. Specific goals for the course
  - a. specific outcomes of instruction
    - Identify engineering activities.
    - Recognize their impact on communities and society at large
    - Identify soft skills that engineers should master in order to thrive in today's world
    - Understand the principles of modern entrepreneurship
  - b. KPIs addressed by the course.

KPI	f1	g1	i1	j1
Covered	X	X	X	X
Assessed	X	X		X
Give Feedback	X	X		

- 7. Topics and approximate lecture hours:
  - Course introduction, The various engineering activities (1 Lecture)
  - The various engineering activities (1 Lecture)
  - Competence versus Responsibility (1 Lecture)

- The Knowledge Economy: paradigm and social impact (1 Lecture)
- The pillars of Knowledge Economy (2 Lectures)
- The channels of Knowledge Economy and social impact (3 Lectures)
- The engineer personal skills (1 Lecture)
- The engineer general rules of behavior (2 Lectures)
- The Principles of modern entrepreneurship and business plan building (3 Lectures)
- Students presentations (3 Lectures)
- Mini project describing a community service in electrical and mechanical engineering for a contemporary issue (equivalent to 10 lectures hours)