





Rules of the course

- No way one course provides you with all the information <u>you need</u> for becoming a successful engineer.
- Classes are oriented towards providing the scope of the topic.
- Course will be run under the understanding that you will look for added information along the topics
 - Books (some in elearning)
 - Material on Internet
 - Discussions with experienced professionals.

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Classes

- Classes will comprise
 - Expositions
 - Invited presentations
 - Practical examples
 - Discussions on the practical works
 - > Times for the classes may change
 - Warnings on e-learning
 - > Friday should always be used for EVERYONE.
 - > Thursday Schedule will be not always used.

When used, the Schedule may be continuous between the two classes, for students to present their materials

"Discussion of results" is also a class with teaching material6

Evaluation criteria Five different evaluations moments: Online test to be performed during classes: 25% Individual practical work 1 Group practical works 2 Group practical work 3 Group practical work 4

| Work | # | Deadline | Time | Early ideas on evaluation |
|------|-------|------------|-------------|---------------------------------------|
| 1 | (1) | 28th Feb | 14 (7) days | Report (individual)+sample discussion |
| 2 | (2) | 27th March | 28 days | Report |
| 3 | (3) | 8th May | 40 days | Presentation + Handouts |
| 4 | (4-6) | 20th May | 21 days | Precentation + Penort |

: 10%

: 20%

: 25%

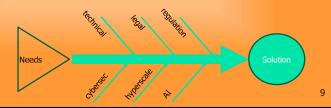
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Organization

- All information to be displyed in elearning
 - Announcements
 - Classes handoout
 - Practical works
 - Evaluation and grades
- Summaries in paco.



- The purpose of this discipline is to provide a general overview about the profession of an informatics engineeer and his relation with society.
- Overall perspective of different professional aspects of being an engineer in Informatics.
 - Students should be able to deal with the following aspects:
 - Possible social impacts of the use of informatic products and services.
 - Possible attitudes towards the challenges of the profession and its personal implications.



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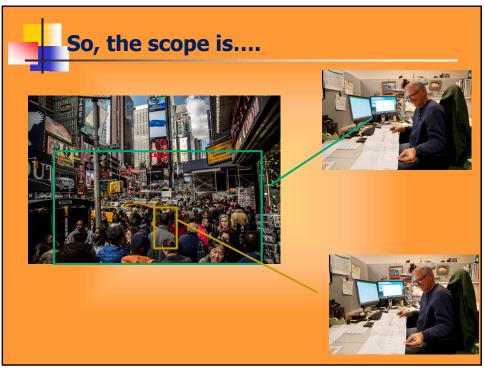
- Social:
 - adjective: social
 - 1. relating to society or its organization.
- Society:
 - noun: society
 - 1. the aggregate of people living together in a more or less ordered community

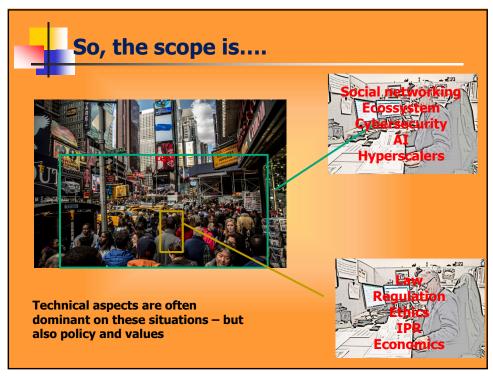


- Professional:
 - adjective: professional
 - 1. relating to or belonging to a profession.
 - 2. engaged in a specified activity as one's main paid occupation rather than as a pastime
- Informatics Engineering:
 - South Europe: engineering discipline most commonly known in English as Computer Science & Engineering.
 - 1. Both computer science (CS) and computer engineering (CE) are tech-intensive fields oriented around computer and information systems

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- Chat Generative Pre-trained Transformer
 - Chatbot, based on previous GPT-3 models
 - Started Nov 2022
 - Class of AI algorithm
 - Uses supervised + reinforcement learning
 - Human effort in pre-training
 - Used MS Azure for model development
 - RL ongoing based on users.
 - Qualities?
 - Limitations?

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Qualities? Problems/limitations?

(built in class 2025 with students)

Qualities

- Rapid access to information
- free
- Easy to use
- Useful for simple code generation
- Good for code correction
- Good for project starts
- Good understanding of user inputs
- Understanding of images

Problems/limitations

- "lies a lot"
- Resource waste: bad to environment
- Spends too much energy
- Creates dependency
- Lack of originality/creativity
- Does not respect autorship rights
- Limited by the existing information

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Qualities? Problems/limitations?

(OLD: built in class 2024 with students)

Good

- Personalized responses
- Practical and Fast
- Free Tier
- Learning tool
- Image generator
- Supporting diferent programming languages
- Surrogate partner/ company/therapeut

- Hallucinations
- Copyright material (in training)
- Cannot run locally
- Near-misses"
- Free tier is outdated
- "Heavy regulated" (?)
- Hard to train (impossible locally)
- Danger to some professions
- Implicit bias (... as the Internet)

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Bad

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Assigment 1 - Part 1 - individual

Should students be allowed to use chatGPT in this course (APSEI)?

- If yes, should students be expected to use chatGPT?
- If yes, should students be incentivized to use chatGPT in which way?
- If no, why not?
- And can/should *professors* follow the same rules as the students? That is: use ChatGPT to classify and grade the students work?

NOTES:

- The important aspect is the application to APSEI. "Generic answers" are not welcomed.
- There is another question in this assignment. The second part will be presented next week in the practical class.
- Typical size expected: 4-8 A4 pages (total for both answers)
- DEADLINE for both parts: 28th February

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