Themes ProjFE/UP-2425: L.EIC

Theme	Problem	Supervisor	Monitor	Class	Team	Room	Schedule (*)
Full Automation	What aspects are positive for ordinary citizens? What aspects are negative for ordinary citizens?	Magalhães Cruz	Wallen Ribeiro	1LEIC01	1 2 3 4	B 102	4ªf 14h-15h30
Data Theft from Institutions	How does this affect information privacy? How does this affect information secrecy?	Magalhães Cruz	Mariana Lobão	1LEIC02	1 2 3 4	B 102	4ªf 14h-15h30
What are Metaheuristics	The "Genetic Algorithm" technique The "Ant Colony" technique	Jorge Barbosa	Afonso Osório	1LEIC03	1 2 3 4	B 105	4ªf 14h-15h30
Processor Architecture	What are RISC processors? What are CISC processors?	Jorge Barbosa	José Henrique Pinheiro	1LEIC04	1 2 3 4	B 105	4ªf 14h-15h30
The Role of Domain-Specific Languages (DSL)	What is the impact of DSLs (e.g. (Verilog, VHDL) in hardware design? What is the impact of DSLs (e.g. (MATLAB, R) in computational mathematics?	Correia Lopes	Inês Oliveira	1LEIC07	1 2 3 4	B 103	4ªf 14h-15h30
Key Programming Paradigms	How do those paradigms impact software design? How do those paradigms impact engineering efficiency?	Correia Lopes	Miguel Garrido	1LEIC08	1 2 3 4	B 103	4ªf 14h-15h30
Programming languages performance and usability	What is the impact on ease of use and rapid development that performance-optimised languages (such as C++) have? What is the impact on performance that languages designed for ease of use and rapid development (such as Python) have?	Correia Lopes	Beatriz Almeida	1LEIC10	1 2 3 4	B 103	4ªf 15h30-17h
The Open Source Software Movement	How do open source language ecosystems (such as the extensive Python libraries) shape engineering solutions? How does the governance in open-source projects impact the long-term maintenance of software?	Correia Lopes	José Miguel Isidro	1LEIC11	1 2 3 4	B 103	4ªf 15h30-17h
Internet Control	How does such control appear to be being attempted by economic power (companies)? How does such control appear to be being attempted by political power (governments)?	Magalhães Cruz	Pedro Vieira	1LEIC12	1 2 3 4	B 109	4ªf 15h30-17h
Information Published on the Media	How can information be forged? How can the veracity of information be verified?	Magalhães Cruz	Miguel Lima	1LEIC13	1 2 3 4	B 102	4ªf 15h30-17h
Software Architecture	What are monolithic architectures? What are service-oriented architectures?	Jorge Barbosa	Rita Pereira	1LEIC15	1 2 3 4	B 105	4ªf 15h30-17h
Computer Architecture	What are GPUs? What are CPUs?	Jorge Barbosa	Vasco Oliveira	1LEIC16	1 2 3 4	B 105	4ªf 15h30-17h
Artificial Intelligence (AI)	Focus on its positive aspects. Focus on its negative aspects.	José Pereira	Filipe Cardoso	1LEIC18	1 2 3 4	B 304	4ªf 15h30-17h

* look up weeks in Calendar of Informatics

In general, students are expected to do:

- a factual evaluation of the situation relating to the topic
- a critical assessment
- improvement proposals