

ProjFE/UP-2324 Themes: L.EIC

Theme	Problem	Supervisor	Monitor	Team Class	Living room	Note.	
Applications of Number Theory	How is it used in cryptographic algorithms?	Jorge Barbosa	Melissa Silva	1LEIC01	1 two	B 101	6th f 2pm-3:30pm (*)
	How is it used in Optimization algorithms?						
"Orders" in Logic	What is first order logic?	Jorge Barbosa	Ana Matilde Bar	1LEIC02	1 two	B 101	6th f 2pm-3:30pm (*)
	What is Higher Order Logic?						
Graphs in Real Applications	How are they used on Social Networks?	Magalhães Cruz	Carlos Gomes	1LEIC03	1 two	B 308	4th f 11am-12:30pm (*)
	How are they used in Computer Networks?						
Discrete Mathematics	What are they in it " <i>big problems</i> "?	Magalhães Cruz	Mariana Lobão	1LEIC04	1 two	B 308	4th f 11am-12:30pm (*)
	How does it compare to Mathematics? <i>to be continued</i> ?						
History of Computing	Who was Alan Turing?	Correia Lopes	Diogo Babo	1LEIC05	1 two	B 109	4th f 9:30am-11am (*)
	Who was Donald Knuth?						
Modern Programming Languages (I)	What is the Go language?	Correia Lopes	Fernando Rego	1LEIC06	1 two	B 109	4th f 9:30am-11am (*)
	What is Kotlin language?						
Modern Programming Languages (II)	What is the R language?	Magalhães Cruz	Matthew Silva	1LEIC08	1 two	B 303	6th f 2pm-3:30pm (*)
	What is the Ruby language?						
"Automatic" programming	How is it achieved using special languages?	Magalhães Cruz	André Lima	1LEIC10	1 two	B 303	6th f 2pm-3:30pm (*)
	How is it achieved using <i>Chat Generative Pre-trained Transformer</i> or similar?						
Logic Circuits	What are electronic logic circuits?	Correia Lopes	Mariana Lobão	1LEIC11	1 two	B 109	4th f 11am-12:30pm (*)
	What are quantum logic circuits?						
Open "low-level" computing systems	What is the RISC-V "architecture"?	Correia Lopes	Carlos Gomes	1LEIC12	1 two	B 109	4th f 11am-12:30pm (*)
	What is the Arduino "architecture"?						
"Assembly" language	What is it and how important is it?	Jorge Barbosa	Fernando Rego	1LEIC13	1 two	B 308	4th f 9:30am-11am (*)
	How do you write programs with it?						
Unconventional computing	What is Molecular Computing?	Jorge Barbosa	Pedro Machado	1LEIC15	1 two	B 308	4th f 9:30am-11am (*)
	What is Optical Computing?						

* see weeks in [IT Calendar](#)

In general, students are expected to:

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