

Studies Plan

EL Micro- and Nanotechnologies for Integrated Systems 2023-24

Block 1

Courses			Master 1	Master 2	Master 3	Master 4	Exam Session	Exam	Credit
Language	Code	Section	Teacher	l e p	l e p	l e p	l e p		
E	Analog IC design (for MNIS)								
	EE-427	EL	Koukab			2h 1h		Win	Written 3
E	Design technologies for integrated systems								
	CS-472	IN	De Micheli			3h 2h		Win	During the semester 6
E	Digital systems design								
	EE-334	EL	Burg			2h 2h		Win	Written 4
E	Fundamentals of VLSI design								
	EE-429	EL	Burg			3h 1h		Win	Written 4

Block 2

Courses			Master 1	Master 2	Master 3	Master 4	Exam Session	Exam	Credit
Language	Code	Section	Teacher	l e p	l e p	l e p	l e p		
E	Nanoelectronics								
	EE-535	EL	Ionescu			2h		Win	Written 2
E	Physical models for micro and nanosystems								
	EE-536	EL	Kis			2h		Win	During the semester 2
E	Test of VLSI systems								
	EE-530	EL	Schmid			2h		Win	Written 2

Group 1

Courses			Master 1	Master 2	Master 3	Master 4	Exam Session	Exam	Credit
Language	Code	Section	Teacher	l e p	l e p	l e p	l e p		
E	EE-524	EL			1h 2h			Win	Written 3
E	Fundamentals of biosensors and electronic biochips								
	EE-515	EL			2h 1h			Win	Written 3
E	Lab in EDA based design								
	EE-490(b)	EL	Koukab Levisse		4h			Win	During the semester 4
E	Mathematics of data: from theory to computation								
	EE-556	EL	Cevher		3h 3h			Win	Written 6
E	Optical detectors								
	MICRO-523	MT	Besse		3h			Win	Oral 3
E	Radio frequency circuits design techniques								
	EE-426	EL	Ruffieux		2h 2h			Win	Written 4
E	Semiconductor devices I								
	EE-557	EL	Matioli		3h 1h			Win	During the semester 4
E	Seminar in physiology and instrumentation								
	MICRO-568	MT	Radenovic		2h			Win	Written 2
E	Wireless receivers: algorithms and architectures								
	EE-442	EL	Burg		2h 2h			Win	During the semester 4

Master cycle

Courses			Exam Session	Exam	Credit
Language	Code	Section	Teacher		
F	INPG courses				
		EL		Sum	Out of study plan 30
F	Politecnico di Torino courses				
		EL		Win	Out of study plan 30

Master project

Courses			Master 1	Master 2	Master 3	Master 4	MP Spring	Exam Session	Exam	C
Language	Code	Section	Teacher	I e p	I e p	I e p	I e p	I e p		
F	MNIS Master project for students from Grenoble									
	EE-599(b)	EL	Profs divers				420h			
	MNIS Master project for students from Torino									
	EE-599(c)	EL	Profs divers				420h			
F	Engineering internship credited with master project (master in Electrical and Electronical engineering)									
	EE-597(a)	EL	Profs divers	320h	320h			320h	Sum Win	Term paper 0
	Master project in Electrical and Electronic Engineering									
	EE-599(a)	EL	Profs divers					420h	Sum	Oral 3