

Studies Plan

EL Micro- and Nanotechnologies for Integrated Systems 2025-26

Block 1

Courses				Master 1					Master 2					Master 3					Master 4					Exam Session	Exam	Credit	
Lang.	Code	Sect.	Teacher	C	E	L	T	P	I	C	E	L	T	P	I	C	E	L	T	P	I	C	E	L	T	P	I
	Analog circuit design II (for MNIS)																								Win	Written	4
E	EE-435	EL	Koukab											2h 1h 1h													
	Design technologies for integrated systems																								Win	During the semester	6
E	CS-472	IN	De Micheli Mallasen Quintana Schiavone											3h 2h													
	Digital systems design																								Win	Written	4
E	EE-334	EL	Burg											2h 2h													
	Fundamentals of VLSI design																								Win	Written	6
E	EE-429	EL	Burg Levisse											3h 1h 2h													

Block 2

Courses				Master 1					Master 2					Master 3					Master 4					Exam Session	Exam	Credit				
Lang.	Code	Sect.	Teacher	C	E	L	T	P	I	C	E	L	T	P	I	C	E	L	T	P	I	C	E	L	T	P	I			
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

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Courses				Master 1					Master 2					Master 3					Master 4					Exam Session	Exam	Credit						
Lang.	Code	Sect.	Teacher	C	E	L	T	P	I	C	E	L	T	P	I	C	E	L	T	P	I	C	E	L	T	P	I					
E	Fundamentals of biosensors and electronic biochips														2h 1h										Win	Written	3					
E	EE-515	EL	Guiducci																													
E	Mathematics of data: from theory to computation														3h					3h										Win	Written	6
E	EE-556	EL	Cevher																													
E	Optical detectors														2h 1h															Win	Oral	3
E	MICRO-523	MT	Bruschini																													
E	Radio frequency circuits design techniques																													Win	Written	4
E	EE-426	EL	Ruffieux																													
E	Semiconductor devices I														3h 1h															Win	During the semester	4
E	EE-557	EL	Matioli																													
	Seminar in physiology and instrumentation																													Win	Written	2
	MICRO-568	MT	Radenovic											2h																		
E	Wireless receivers: algorithms and architectures																													Win	During the semester	4
E	EE-442	EL	Burg																2h 2h													

Master project

Courses				Master 1					Master 2					Master 3					Master 4					MP Spring					Exam Session	Exam
Lang.	Code	Sect.	Teacher	C	E	L	T	P	I	C	E	L	T	P	I	C	E	L	T	P	I	C	E	L	T	P	I			
	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			
	Engineering internship credited with master project (master in Electrical and Electronical engineering)																													
F	EE-597(a)	EL	Profs divers																			320h					Win	During the semester		
	Master project in Electrical and Electronic Engineering																													
	EE-599(a)	EL	Profs divers																								420h	Sum	Oral	