

Studies Plan

EDMI - Microsystems and Microelectronics 2023-24

Core courses

Courses	Language Code	Section	Teacher	Exam	Credit
Additive Manufacturing of Metals and Alloys					
E	MSE-666	EDMX	Leinenbach Logé	Oral presentation	2
Advanced III-Nitride Semiconductor Devices (Students are required to have taken semiconductor classes (EE-557, PHYS-433 or an equivalent) / Next time: Spring 2025)					
E	EE-627	EDEE	Grandjean Matioli	Oral presentation	3
Advanced micro-/nano- manufacturing (June 19-23, 2023)					
E	MICRO-632	EDAM	Various lecturers	Written	2
Advanced topics in micro- and nanomanufacturing: top-down meets bottom-up (Next time in Spring 2025)					
E	MICRO-724	EDMI	Brugger Böhringer Mastrangeli Perez-Murano	Multiple	2
Design and Optimization of Internet-of-Things Systems (Next time: Fall 2024)					
E	EE-733	EDEE	Aminian Atienza Alonso Burg	Oral presentation	4
Electrochemical nano-bio-sensing and bio/CMOS interfaces (June 10-14, 2024)					
E	MICRO-614	EDMI	Carrara	Project report	1
Energy Autonomous Wireless Smart Systems (Next time in Spring 2024)					
E	MICRO-617	EDMI	Burg Dehollain Maloberti Skrivervik	Multiple	3
Laser Materials Processing					
E	MSE-662	EDMX	Hoffmann Leinenbach Wasmer	Oral	2
Machine Learning for Engineers (Next time: Fall 2023)					
E	EE-613	EDEE	Calinon Canévet Odobez Villamizar	Multiple	4
Microfluidics for lab-on-a-chip (Next time in Spring 2024)					
E	MICRO-706	EDMI	Le Gac de Malsche	Term paper	1
Micro-magnetic field sensors and actuators (Next time in Spring 2024)					
E	MICRO-602	EDMI	Boero	Oral	1
Modelling micro-/nano- field effect electron devices (Next time in Spring 2024)					
E	MICRO-623	EDMI	Sallese	Written	1
MOOC: Micro and Nanofabrication (MEMS) (September 18 to November 19, 2023 - Online course (self-paced))					
E	MICRO-621	EDMI	Brugger Gijs	Oral	1

Nanoscale MOSFETs and beyond CMOS devices*(Next time in Autumn 2024)*

E	MICRO-611	EDMI	Ionescu Zota	Oral	1
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Optical MEMS and micro-optics*(November 14th to 17th, 2023 (Microcity, Neuchatel))*

E	MICRO-605	EDMI	Ataman	Written	1
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Research seminars in Electrical Engineering - FALL*(Next time: Fall 2023)*

E	EE-625(a)	EDEE	Choo Fleury Matioli	Oral presentation	1
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Research seminars in Electrical Engineering - SPRING*(Next time: Spring 2024)*

E	EE-625(b)	EDEE	Choo Fleury Matioli	Oral presentation	1
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Scaling in MEMS*(4-day course - from August 28 to August 31, 2023. Room Microcity MC B1 273)*

E	MICRO-606	EDMI	Shea	Oral presentation	1
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Soft Microsystems Processing and Devices*(February 5th, 7th, 9th, 12th, 14th and 16th, 2024)*

E	MICRO-618	EDMI	Briand Brugger Lacour Leterrier Shea Subramanian	Multiple	2
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Thin film and small scale mechanics*(Next time: November 7-10, 2023)*

E	MSE-669	EDMX	Michler Schwiedrzik	Written	2
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Wearables and implantables for personalized and preventive healthcare*(February 5-9, 2024)*

E	MICRO-624	EDMI	Ionescu Locca Teveaarai Stahel	Written	2
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