

Plan d'études

Mineur : Neuro-X 2023-24

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	Cours			Session Examen	Examen	Crédits
lang. ens.	Code	Sections	Enseignants			
E	Advanced computer graphics CS-440		IN	Jakob	Eté	Pendant le 6 semestre
E	Advanced methods for human neuromodulation NX-436		NX	Hummel	Hiv	Ecrit 4
E	Analog IC design EE-320		EL	Shoaran	Hiv	Ecrit 3
E	Applied biostatistics MATH-493		MA	Goldstein	Eté	Pendant le 5 semestre
E	Applied data analysis CS-401		SC	West	Hiv	Ecrit 8
E	Applied machine learning MICRO-455		MT	Billard	Hiv	Ecrit 4
E	Applied probability & stochastic processes MGT-484		MTE	Sutter	Hiv	Ecrit 4
E	Artificial neural networks/reinforcement learning CS-456		IN	Gerstner	Eté	Ecrit 6
E	Basics of robotics for manipulation MICRO-450		MT	Bouri	Hiv	Ecrit 3
E	Bioelectronics and biomedical microelectronics EE-519		EL	Schmid	Hiv	Ecrit 3
E	Biomedical optics BIOENG-445		SV	Wagnières	Hiv	Oral 3
E	Biomicroscopy I MICRO-561		SV	Altug	Hiv	Ecrit 3
E	Biomicroscopy II MICRO-562		SV	Altug Seitz	Eté	Pendant le 4 semestre
E	Bio-nano-chip design EE-517		EL	Carrara	Hiv	Ecrit 3
E	Brain-like computation and intelligence NX-414		NX	Mathis	Eté	Ecrit 4
E	Causal thinking MATH-352		MA	Stensrud	Hiv	Ecrit 5
E	Computational motor control CS-432		SV	Ijspeert	Eté	Pendant le 4 semestre
E	Computational neurosciences: biophysics NX-450		NX	Romani	Hiv	Ecrit 5
E	Computational neurosciences: neuronal dynamics NX-465		NX	Gerstner	Eté	Ecrit 5
E	Computer vision CS-442		IN	Fua	Eté	Ecrit 6
E	Controlling behavior in animals and robots BIOENG-456		SV	Ramdya	Eté	Pendant le 4 semestre
E	Deep learning EE-559		EL	Cavallaro	Eté	Pendant le 4 semestre
E	Deep learning in biomedicine CS-502		IN	Brbic	Hiv	Pendant le 6 semestre
E	Design technologies for integrated systems CS-472		IN	De Micheli	Hiv	Pendant le 6 semestre
E	Dynamical system theory for engineers COM-502		SC		Eté	Ecrit 6
E	Fundamentals of biomedical imaging PHYS-438		PH	Gruetter	Eté	Ecrit 4

E	Fundamentals of biophotonics BIO-443	SV	Radenovic	Eté	Pendant le 3 semestre	3
E	Fundamentals of biosensors and electronic biochips EE-515	EL		Hiv	Ecrit	3
E	Haptic human robot interfaces MICRO-553	MT	Bouri Shokur	Eté	Oral	3
E	Image analysis and pattern recognition EE-451	EL	Bozorgtabar Thiran	Eté	Pendant le 4 semestre	4
E	Image processing I MICRO-511	MT	Unser Van De Ville	Hiv	Ecrit	3
E	Image processing II MICRO-512	MT	Liebling Sage Unser Van De Ville	Eté	Ecrit	3
E	Introduction to natural language processing CS-431	IN	Bosselut Chappelier Rajman	Hiv	Ecrit	6
E	Machine learning CS-433	IN	Flammarion Jaggi	Hiv	Ecrit	8
E	Machine learning for behavioral data CS-421	IN		Eté	Ecrit	6
E	Mathematics of data: from theory to computation EE-556	EL	Cevher	Hiv	Ecrit	6
E	Nanotechnology MICRO-530	MT	Boero Brugger	Eté	Oral	3
E	Neural circuits of motivated behaviors BIO-499	SV	Kochubey Schneggenburger	Eté	Ecrit	4
E	Neural interfaces NX-422	NX	Lacour Shoaran	Hiv	Pendant le 6 semestre	6
E	Neural signals and signal processing NX-421	NX	Micera Van De Ville	Hiv	Ecrit	6
E	Neuroscience: behavior and cognition BIO-483	SV	Blanke Herzog Sandi Perez	Eté	Ecrit	5
E	Neuroscience: cellular and circuit mechanisms BIO-482	SV	Crochet Petersen	Hiv	Pendant le 5 semestre	5
E	Neuroscience: from molecular mechanisms to disease BIO-480	SV	Gräff Lashuel Schneider	Hiv	Ecrit	5
E	Optimization for machine learning CS-439	IN	Flammarion Jaggi	Eté	Ecrit	8
E	Organic and printed electronics MICRO-505	MT	Briand Subramanian	Eté	Oral	2
E	Project in minor Neuro-X NX-493	NX	Profs divers	Eté Hiv	Pendant le 7 semestre	7
E	Scientific literature analysis in neuroscience BIOENG-451	SV	La Manno	Hiv	Pendant le 4 semestre	4

	Scientific project design in integrative neurosciences					
<i>E</i>	<i>BIO-493</i>	<i>SV</i>	<i>Petersen</i>	<i>Hiv</i>	<i>Pendant le 4 semestre</i>	
	Sensors in medical instrumentation					
<i>E</i>	<i>EE-511</i>	<i>EL</i>	<i>Chételat Ionescu</i>	<i>Eté</i>	<i>Ecrit</i>	<i>3</i>
	Systems neuroscience					
<i>E</i>	<i>NX-435</i>	<i>NX</i>	<i>Mathis</i>	<i>Eté</i>	<i>Pendant le 4 semestre</i>	
	Translational neuroengineering					
<i>E</i>	<i>NX-423</i>	<i>NX</i>	<i>Blanke Courtine Hummel Micera</i>	<i>Eté</i>	<i>Ecrit</i>	<i>6</i>
	Understanding statistics and experimental design					
<i>E</i>	<i>BIO-449</i>	<i>SV</i>	<i>Herzog</i>	<i>Hiv</i>	<i>Ecrit</i>	<i>4</i>
	Virtual reality					
<i>E</i>	<i>CS-444</i>	<i>IN</i>	<i>Boulic</i>	<i>Eté</i>	<i>Pendant le 6 semestre</i>	
	Visual intelligence : machines and minds					
<i>E</i>	<i>CS-503</i>	<i>IN</i>	<i>Roshan Zamir</i>	<i>Eté</i>	<i>Pendant le 6 semestre</i>	