

## Studies Plan

### Génie nucléaire 2023-24

#### Group 1

Courses			Master 1	Master 2	Master 3	Exam Session	Exam	Credit
Language	Code	Section	Teacher	Specialization	o p	l e p	l e p	
E	ETH-530	PH_NE	Pouchon Spaetig Streit			2h 1h	Win	During the 4 semester
E	ETH-532	PH_NE	Manera Vacat			2h 1h	Win	During the 4 semester
E	ETH-533	PH_NE	Pautz			2h 1h	Win	During the 4 semester
F	PHYS-595	PH	Profs divers		8h	8h	Sum Win	During the 8 semester
E	ETH-401	PH_NE	Streit		2h 1h		Sum	Oral 4
E	ETH-531	PH_NE	Ferroukhi Freixa Terradas Pautz			1h 3h	Win	During the 4 semester
E	ETH-402	PH_NE	Pouchon Spaetig		3h		Sum	Oral 4
E	PHYS-443	PH	Hursin Pautz	4h 2h			Win	Oral 6
E	PHYS-451	PH	Hursin Lamirand Pakari	4h			Win	During the 6 semester
E	PHYS-450	PH	Damet Grilj Pakari	2h 1h			Win	Written 4
E		PH_NE	Profs divers		2h 1h		Sum	Written 4
E	ETH-590	PH_NE	Profs divers			8h	Win	During the 8 semester
E		PH_NE	Manera		4h 1h		Sum	Written 6

#### Group 2

Courses			Master 1	Master 2	Master 3	Exam Session	Exam	Credit
Language	Code	Section	Teacher	Specialization	o p	l e p	l e p	
E	ETH-441	PH_NE	Profs divers			2h 1h	Sum	Oral 4
E	ETH-427	PH_NE	Profs divers		5h		Sum	Written 6
E	ETH-433	PH_NE	Profs divers		2h 1h		Sum	Oral 4

E	<b>Computational Neuroimaging Clinic</b> ETH-444	PH_NE	Profs divers	2h			Sum	Oral	3
E	<b>Elective project nuclear engineering</b> PHYS-490	PH_NE	Profs divers	8h	8h	8h	Sum Win	During the semester	8
E	<b>Electrochemical Energy Conversion and Storage Technologies</b> ETH-454	PH_NE	Profs divers	3h			Sum	Written	4
E	<b>Energy conversion and renewable energy</b> ME-409	GM	Maréchal Nguyen	2h	1h	1h	Win	Written	4
E	<b>Experimental methods in physics</b> PHYS-405	PH	Cantoni Dwir	2h	1h		Win	Oral	3
E	<b>Hydraulic turbomachines</b> ME-453	GM	Vagnoni	3h	1h		Win	Written	4
E	<b>Image processing I</b> MICRO-511	MT	Unser Van De Ville	3h			Win	Written	3
E	<b>Introduction to medical radiation physics</b> PHYS-455	PH	Bochud	2h	1h		Win	Written	4
E	<b>Introduction to particle accelerators</b> PHYS-448	PH	Seidel	2h	2h		Win	Written	4
E	<b>Introduction to Quantum Mechanics for Engineers</b> ETH-445	PH_NE	Profs divers	2h	2h		Sum	Written	4
E	<b>Magnetic Resonance Imaging in Medicine</b> ETH-446	PH_NE	Profs divers	3h			Sum	Oral	4
E	<b>Materials Analysis by Nuclear Techniques</b> ETH-442	PH_NE	Profs divers	2h	1h		Sum	Oral	6
E	<b>Medical Physics II</b> ETH-452	PH_NE	Profs divers	2h	1h		Sum	Oral	6
E	<b>Micro and Nano-Tomography of Biological Tissues</b> ETH-453	PH_NE	Profs divers	3h			Sum	Oral	4
E	<b>Modelling and optimization of energy systems</b> ME-454	GM	Maréchal	2h	2h		Win	Oral	4
E	<b>Monte Carlo in Medical Physics</b> ETH-447	PH_NE	Profs divers	3h			Sum	Oral	4
E	<b>Multiphase Flow</b> ETH-434	PH_NE	Profs divers	3h			Sum	Oral	4
E	<b>Neutron and X-ray Scattering of Quantum Materials</b> PHYS-640	EDPY	Fogh Rønnow Schmitt	2h	2h		Win	Oral	4
E	<b>Nuclear fusion and plasma physics</b> PHYS-445	PH	Fasoli	2h	2h		Win	Oral	4
E	<b>Nuclear interaction : from reactors to stars</b> PHYS-461	PH	Rochman	2h	2h		Win	Written	4
E	<b>Numerics for fluids, structures &amp; electromagnetics</b> MATH-468	MA		2h	2h		Win	Oral	5
E	<b>Physics Against Cancer: The Physics of Imaging and Treating Cancer</b> ETH-443	PH_NE	Profs divers	2h	1h		Sum	Oral	6
E	<b>Physics of Nuclear Reactor II</b> ETH-404	PH_NE	Profs divers	3h			Sum	Oral	4
E	<b>Plasma I</b> PHYS-423	PH	Theiler	2h	3h		Win	Oral	6
E	<b>Radiation detection</b> PHYS-452	PH	Lamirand	2h	1h		Win	Oral	3

