

## Plan d'études

### Minor : Photonics 2023-24

#### Mineur : Photonics

Cours		Session Examen	Examen	Crédits
lang. ens.	Code	Sections	Enseignants	
<b>Biomedical optics</b>				
E	BIOENG-445	SV	Wagnières	Hiv Oral 3
<b>Biomicroscopy I</b>				
E	MICRO-561	SV	Altug	Hiv Ecrit 3
<b>Biomicroscopy II</b>				
E	MICRO-562	SV	Altug Seitz	Eté Pendant le 4 semestre
<b>Classical and quantum photonic transducers</b>				
E	MICRO-410	MT	Benea-Chelms	Eté Oral 3
<b>Fundamentals &amp; processes for photovoltaic devices</b>				
E	MICRO-565	MT	Ballif	Eté Ecrit 3
<b>Fundamentals of biophotonics</b>				
E	BIO-443	SV	Radenovic	Eté Pendant le 3 semestre
<b>Fundamentals of integrated photonic components</b>				
E	MICRO-471	MT	Benea-Chelms	Hiv Oral 4
<b>Image processing I</b>				
E	MICRO-511	MT	Unser Van De Ville	Hiv Ecrit 3
<b>Image processing II</b>				
E	MICRO-512	MT	Sage Unser Van De Ville	Eté Ecrit 3
<b>Imaging optics</b>				
E	MICRO-421	MT	Psaltis	Eté Pendant le 3 semestre
<b>Ingénierie optique (pour MT)</b>				
F	MICRO-321(a)	MT	Achouri Martin Santschi	Hiv Ecrit 6
<b>Laser fundamentals and applications for engineers</b>				
E	MICRO-426	MT	Moser	Eté Oral 3
<b>Laser microprocessing</b>				
E	MICRO-520	MT	Hoffmann	Eté Oral 2
<b>Lasers: theory and modern applications</b>				
E	MICRO-422	MT	Kippenberg Moser	Hiv Ecrit 4
<b>Microfabrication technologies</b>				
E	MICRO-331	MT	Brugger Gijs Lacour	Hiv Oral 4
<b>Nanophotonics</b>				
E	MICRO-516	MT	Iadanza Moselund	Eté Oral 3
<b>Nonlinear optics</b>				
E	PHYS-501	MT	Roke	Hiv Ecrit 4
<b>Nonlinear optics for quantum technologies</b>				
E	PHYS-470	PH		Hiv Oral 4
<b>Optical design with ZEMAX</b>				
E	MICRO-517	MT	Pu	Hiv Pendant le 3 semestre
<b>Optical detectors</b>				
E	MICRO-523	MT	Besse	Hiv Oral 3
<b>Optics laboratories (autumn)</b>				
E	MICRO-424	MT	Pu	Hiv Pendant le 3 semestre

<i>E</i>	<b>Optics laboratories (spring)</b> MICRO-423	<i>MT</i>	<i>Pu</i>	<i>Eté</i>	<i>Pendant le 3 semestre</i>	
<i>E</i>	<b>Organic and printed electronics</b> MICRO-505	<i>MT</i>	<i>Briand Subramanian</i>	<i>Eté</i>	<i>Oral</i>	<i>2</i>
<i>E</i>	<b>Photomedicine</b> CH-448	<i>CGC</i>	<i>Wagnières</i>	<i>Eté</i>	<i>Oral</i>	<i>3</i>
<i>E</i>	<b>Photonic systems and technology</b> EE-440	<i>EL</i>	<i>Brès</i>	<i>Eté</i>	<i>Ecrit</i>	<i>4</i>
<i>E</i>	<b>Physics of photonic semiconductor devices</b> PHYS-434	<i>PH</i>	<i>Grandjean</i>	<i>Eté</i>	<i>Oral</i>	<i>4</i>
<i>E</i>	<b>Project in photonics</b> MICRO-488	<i>MT</i>	<i>Profs divers</i>	<i>Eté Hiv</i>	<i>Pendant le 10 semestre</i>	
<i>E</i>	<b>Quantum electrodynamics and quantum optics</b> PHYS-453	<i>PH</i>	<i>Kippenberg</i>	<i>Hiv</i>	<i>Ecrit</i>	<i>6</i>
<i>E</i>	<b>Quantum optics and quantum information</b> PHYS-454	<i>PH</i>	<i>Brantut</i>	<i>Eté</i>	<i>Ecrit</i>	<i>6</i>
<i>E</i>	<b>Quantum physics III</b> PHYS-425	<i>PH</i>	<i>Yazyev</i>	<i>Hiv</i>	<i>Oral</i>	<i>6</i>
<i>E</i>	<b>Selected topics in advanced optics</b> MICRO-420	<i>MT</i>	<i>Martin</i>	<i>Hiv</i>	<i>Oral</i>	<i>3</i>
<i>E</i>	<b>Semiconductor physics and light-matter interaction</b> PHYS-433	<i>PH</i>	<i>Butté</i>	<i>Hiv</i>	<i>Ecrit</i>	<i>4</i>