

## **Department of Physics**

### **Photonics**

Fall Semester

COURSE	HOURS	ECTS
<b>COURSE UNIT 1: LASERS AND NON-LINEAR OPTICS</b>		
<a href="#"><u>Lasers and Femtosecond Techniques</u></a>	19	2
<a href="#"><u>Non-linear Optics</u></a>	20	2
<a href="#"><u>High-Power Lasers and Applications</u></a>	21	2
<b>COURSE UNIT 2: MICRO AND NANOPHOTONICS</b>		
<a href="#"><u>Metamaterials and Photonic Crystals</u></a>	16	2
<a href="#"><u>Micro- and Nano-manufacturing</u></a>	13	1
<a href="#"><u>Advances Microscopy</u></a>	13	1
<a href="#"><u>Plasmonic and Bio-applications</u></a>	16	2
<b>COURSE UNIT 3: METROLOGY</b>		
<a href="#"><u>Optical Metrology</u></a>	28	3
<a href="#"><u>Interferometric Systems and Imaging</u></a>	21	2
<a href="#"><u>Photonic Signal Processing</u></a>	13	1
<b>COURSE UNIT 4: DEVICES AND SYSTEMS</b>		
<a href="#"><u>Diffractive Optical Devices and CAD Tools</u></a>	24	2
<a href="#"><u>Biomedical Optics</u></a>	20	2
<b>COURSE UNIT 5: R&amp;D PROJECT</b>		
<a href="#"><u>Research and Development Project</u></a>	50	5
<b>COURSE UNIT 6: FRENCH LANGUAGE AND INTERCULTURALITY</b>		
French Language	25	2
Interculturality	15	1
<b>TOTAL</b>	<b>322</b>	<b>30</b>