

**Department of Biomedical Engineering**  
**Diagnosis and Innovative Medical Treatment**  
 Spring Semester

COURSE	HOURS	ECTS
<b>COURSE UNIT 1: MEDICAL APPLICATIONS</b>		
<a href="#">Clinical Translation</a>	10	1
<a href="#">Medical Imaging and Processing</a>	36	3
<b>COURSE UNIT 2: ELECTRONICS</b>		
<a href="#">Electronics and Embedded Systems</a>	50	5
<b>COURSE UNIT 3: IMAGE PROCESSING AND VISION</b>		
<a href="#">Intro. To Medical Image Processing</a>	12	1
<a href="#">Biology and Biological Imaging</a>	20	2
<a href="#">Machine Learning</a>	21	2
<a href="#">Computer Vision</a>	16	2
<b>COURSE UNIT 4: SYSTEM CONTROL AND ROBOTICS</b>		
Mechatronics and haptics	41	4
<a href="#">Optimization</a>	24	2
<b>COURSE UNIT 5: R&amp;D PROJECT</b>		
<a href="#">Research and Development Project</a>	50	5
<b>COURSE UNIT 6: FRENCH LANGUAGE AND INTERCULTURALITY</b>		
French Language	25	2
Interculturality	15	1
<b>TOTAL</b>	<b>320</b>	<b>30</b>