

5.0 credits

30.0 h + 60.0 h

Teacher(s) :	Scalliet Pierre ; Vynckier Stefaan (coordinator) ; Grégoire Vincent ;
Language :	Français
Place of the course	Bruxelles Woluwe
Main themes :	<p>A. Production of radiotherapy beams :</p> <ul style="list-style-type: none"> <li>- Cobalt-60,</li> <li>- linear accelerators,</li> <li>- neutron beams, proton beams, heavy ion beams.</li> </ul> <p>B. Definition of dosimetry quantities for radiotherapy:</p> <ul style="list-style-type: none"> <li>- PDD, RTM, RTA, OAR, isodoses, BSF, PSF.</li> </ul> <p>C. Quality assurance in radiotherapy :</p> <ul style="list-style-type: none"> <li>- definition and importance</li> <li>- recommendations</li> <li>- quality control in radiotherapy</li> <li>- quality control of CT scanners</li> <li>- quality control of linear accelerators</li> <li>- quality control of treatment planning systems</li> <li>- in-vivo dosimetry</li> </ul> <p>D. Calculation methods for external beam therapy</p> <ul style="list-style-type: none"> <li>- matrix system in TPS</li> <li>- separation of scatter and primary beam</li> <li>- pencil beam methods</li> <li>- Monte Carlo calculations</li> </ul> <p>E. Dosimetry for Brachy therapy</p>
Aims :	<i>The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".</i>
Cycle and year of study :	<a href="#">&gt; Master [120] in Physics</a> <a href="#">&gt; Master [120] in Biomedical Engineering</a> <a href="#">&gt; Advanced Master in Radiotherapy-Oncology</a> <a href="#">&gt; Certificat universitaire en physique d'hôpital</a>
Faculty or entity in charge:	MED