

# University of Pretoria Yearbook 2022

## Radiation physics and instrumentation for nuclear medicine 700 (SFI 700)

<b>Qualification</b>	Postgraduate
<b>Faculty</b>	<a href="#">Faculty of Health Sciences</a>
<b>Module credits</b>	15.00
<b>NQF Level</b>	08
<b>Programmes</b>	<a href="#">BRadHons Nuclear Medicine</a>
<b>Prerequisites</b>	No prerequisites.
<b>Contact time</b>	2 lectures per week
<b>Language of tuition</b>	Module is presented in English
<b>Department</b>	Radiography
<b>Period of presentation</b>	Year

### Module content

Basic concepts of radiation physics, radioactive decay, radionuclide production, interaction with matter, radiation detectors and counting systems. Problems in radiation detection. The gamma camera: performance, image quality, quality control. Digital computers in nuclear medicine. SPECT principles, cameras, quality. PET principles, cameras, quality. Radiation dosimetry and biology. Radiation protection and safety.

The regulations and rules for the degrees published here are subject to change and may be amended after the publication of this information.

The [General Academic Regulations \(G Regulations\)](#) and [General Student Rules](#) apply to all faculties and registered students of the University, as well as all prospective students who have accepted an offer of a place at the University of Pretoria. On registering for a programme, the student bears the responsibility of ensuring that they familiarise themselves with the General Academic Regulations applicable to their registration, as well as the relevant faculty-specific and programme-specific regulations and information as stipulated in the relevant yearbook. Ignorance concerning these regulations will not be accepted as an excuse for any transgression, or basis for an exception to any of the aforementioned regulations.