

University of Pretoria Yearbook 2022

BRadHons *Diagnostics* (10247015)

Department Radiography

Minimum duration of study 1 year

Total credits 120

NQF level 08

Admission requirements

1. BRad (or equivalent) degree with a weighted average of at least 60% in the final year **or** Bachelor in Technology: Radiography with a weighted average of at least 60% in the final year **or** National Diploma in Radiography and BRadHons bridging programme with a weighted average of at least 60%. Maximum of two attempts for the bridging examination
2. Applicants with BRad (or equivalent) or Bachelor in Technology: Radiography with a weighted average of less than 60% in the final year, must do the bridging programme and pass with a weighted average of at least 60%. A maximum of two attempts will be permitted in order to pass the bridging examination with the required weighted average of 60% and thereby gain admission to the relevant plan.
3. Research methodology passed at bachelor's level
4. Registration as a radiographer or a postgraduate student with the Health Professions Council of South Africa (HPCSA)
5. Access to accredited, suitable training facilities

Additional requirements

All students must register for NVB 700 Research principles.

Also consult the General Academic Regulations G16-G29.

Examinations and pass requirements

- i. In accordance with the stipulations of the General Academic Regulations a year mark of at least 40% is required for admission to the standard examination in all postgraduate modules in the University where year marks apply.
- ii. Each paper written for the standard examination must be passed individually with 50%.
- iii. There is one examination period for the standard examination in October/ November and the supplementary examination in November/December of the same year.
- iv. If a student fails the supplementary examination, the module must be repeated.
- v. A supplementary examination in a module is granted to a student, if a student obtains a final mark of between 40%-49% in any module at the examination.

- vi. Students intending to sit for the supplementary examination due to the reasons mentioned above, must register for the supplementary examination opportunity 24 hours after the results have been made public.
- vii. If a student fails a module in the standard examination, the examination mark obtained in the relevant module at the supplementary examination will be calculated as the final mark. The marks obtained with continuous evaluation during the quarter/semester/year will not be taken into calculation. If the student passes the module in the supplementary examination, a maximum of 50% is awarded as a pass mark to the module in question.
- viii. A student who is prevented from writing the standard examination due to illness or other qualifying circumstances, may be granted permission by the dean to write a special examination in the particular module(s).
- ix. If a student is granted permission by the dean to write a special examination, the continuous evaluation mark, together with the examination mark obtained in the module in question at the special examination, will be calculated as the final mark obtained in the module.
- x. In instances where students are unable to write the examination and supplementary examination as a consequence of a serious medical condition or an accident, such a student must apply for a special dispensation, with the support of the dean, to the Registrar, who will make a final decision.
- xi. A student who has failed one module but who has passed all other modules, may be admitted to a Chancellor's examination in the module in question at the end of the first semester of the subsequent year, after obtaining a subminimum of 40% in the first semester.
- xii. A final year student who has failed more than one module, must register for the whole year to complete the modules in question.

Pass with distinction

The degree is conferred with distinction on a student who has obtained an average of at least 75% (not rounded) in all the modules for the degree.

Curriculum: Final year

Minimum credits: 120

Fundamental modules

Anatomical pathology 703 (ANP 703)

Module credits	5.00
NQF Level	08
Prerequisites	No prerequisites.
Contact time	1 discussion class per week
Language of tuition	Module is presented in English
Department	Anatomical Pathology
Period of presentation	Semester 1

Module content

Basic knowledge of General Pathology. Pathology and pathogenesis of some of the more common disease in several of the organ systems and integration of clinical features with the pathological aspect of a disease.

Research principles 700 (NVB 700)

Module credits	5.00
NQF Level	08
Prerequisites	No prerequisites.
Contact time	1 discussion class per week
Language of tuition	Module is presented in English
Department	Radiography
Period of presentation	Semester 1

Module content

Development and submission of a research protocol.

Radiographic anatomy 700 (RAN 700)

Module credits	20.00
NQF Level	08
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Anatomy
Period of presentation	Semester 1

Module content

Integration of anatomical concepts related to the general as well specialised imaging procedures specific to radiographic technique and image interpretation regarding the thorax, abdomen, pelvis, head and neck, vertebral column, the nervous system: brain and upper and lower limbs.

Core modules

Research report: Radiography 700 (RSK 700)

Module credits	30.00
NQF Level	08
Prerequisites	No prerequisites.
Contact time	as scheduled with study leader
Language of tuition	Module is presented in English
Department	Radiography
Period of presentation	Year

Module content

Continuation of the research process which includes the implementation of the approved research protocol and writing up a research essay of the completed research project.

Elective modules

Quality assurance 780 (RAW 780)

Module credits	20.00
NQF Level	08
Prerequisites	No prerequisites.
Contact time	1 discussion class per week
Language of tuition	Module is presented in English
Department	Radiography
Period of presentation	Semester 2

Module content

Integration of administrative and management principles. Legal and ethical requirements in management of a radiography department. Drafting a quality assurance programme and manual for a radiography department. Management of reject image analysis compilation of a programme and implantation thereof. Compiling radiation safety protection protocols. Conducting and management of quality control tests on all types of radiation emitting equipment and accessories. Staff evaluations and quality of service programmes.

Image interpretation 781 (RAW 781)

Module credits	20.00
NQF Level	08

Prerequisites	No prerequisites.
Contact time	1 discussion class per week
Language of tuition	Module is presented in English
Department	Radiography
Period of presentation	Semester 2

Module content

Advance application of image interpretation principles in image evaluation of the head and neck, chest and abdomen, axial and appendicular skeleton in biplane, three dimensional and cross sectional images.

Radiographic report writing skills.

Computer tomography 782 (RAW 782)

Module credits	20.00
NQF Level	08
Prerequisites	No prerequisites.
Contact time	1 discussion class per week
Language of tuition	Module is presented in English
Department	Radiography
Period of presentation	Semester 2

Module content

Introduction to principles of CT scan. Image acquisition, processing and image evaluation and interpretation normal as well pathological images of head, neck, thorax, abdomen and musculo-skeletal system. Application of Quality assurance including quality control and radiation safety principles for all investigations and procedures. Knowledge on Contrast media administration for all the different types of procedures and investigations. Patient care. Medico-legal aspects. Clinical application and evaluation by means of case studies.

Magnetic resonance imaging 783 (RAW 783)

Module credits	20.00
NQF Level	08
Prerequisites	No prerequisites.
Contact time	1 discussion class per week
Language of tuition	Module is presented in English
Department	Radiography
Period of presentation	Semester 2

Module content

Review of basic MRI principles, image weighting and contrast, spatial encoding, k-space, image formation, instrumentation, MRI safety, trade-offs between parameters, pulse sequences, flow phenomena and basic principles of MRA. Artifacts in MRI/ Contrast agents. Functional imaging techniques and applications for various types of investigations.

Intervention 784 (RAW 784)

Module credits	20.00
NQF Level	08
Prerequisites	No prerequisites.
Contact time	1 discussion class per week
Language of tuition	Module is presented in English
Department	Radiography
Period of presentation	Semester 2

Module content

Interventional procedures for both adult and paediatric which includes all specialised radiographic modalities such as CT, MRI and Ultrasound.. Imaging principles and post processing. Intervention equipment considerations for all imaging modalities and accessory equipment for different procedures, investigations and interventions. Contrast media application and drug administration for all the different types of procedures and investigations. Patient care. Medico-legal aspects. Radiation protection. Quality assurance including quality control. Clinical application and evaluation by means of case studies.

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.