

# University of Pretoria Yearbook 2023

## Diagnostic radiographic science 300 (RSC 300)

**Qualification** Undergraduate

**Faculty** [Faculty of Health Sciences](#)

**Module credits** 15.00

**NQF Level** 07

**Programmes** [Bachelor of Radiography in Diagnostics \[BRad in Diagnostics\]](#)

**Prerequisites** RSC 200, RPH 200, DIR 200, CDR 200

**Contact time** 1 discussion class per week, 2 lectures per week

**Language of tuition** Module is presented in English

**Department** Radiography

**Period of presentation** Year

### Module content

**Informatics:** Basic Computer Terminology, Integrating Healthcare Enterprise (IHE), PACS, Radiology Information System (RIS), Hospital Information System (HIS), Electronic Medical Record (EMR), Health Level 7 (HL7) Networks. Film digitisers.

**Storage:** Hardware, Storage Requirements, Disaster Recovery. DICOM: Modality Worklist, Image and Non-Image Objects, Components and Terminology, DICOM Conformance.

**Data Compression:** Clinical Impact, Lossy, Lossless, Image and Video Formats.

**Security and Privacy:** Encryption, Firewalls

Image quality optimisation in CT, Artefacts, factors affecting patient dose. Intervention Radiography (including digital subtraction angiography). Introduction to Quality assurance and quality control in CT, Intervention Radiography (including Digital subtraction angiography), Mammography, Bone densitometry and MRI. The preparation of patients for contrast media radiographic investigations, technical imaging procedures, and needle placements.

### Regulations and rules

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.

**University of Pretoria Programme Qualification Mix (PQM) verification project**

The higher education sector has undergone an extensive alignment to the Higher Education Qualification Sub-Framework (HEQF) across all institutions in South Africa. In order to comply with the HEQSF, all institutions are legally required to participate in a national initiative led by regulatory bodies such as the Department of Higher Education and Training (DHET), the Council on Higher Education (CHE), and the South African Qualifications Authority (SAQA). The University of Pretoria is presently engaged in an ongoing effort to align its qualifications and programmes with the HEQSF criteria. Current and prospective students should take note that changes to UP qualification and programme names, may occur as a result of the HEQSF initiative. Students are advised to contact their faculties if they have any questions.