



University of Pretoria Yearbook 2020

Nuclear reactor materials 700 (NNR 700)

Qualification	Postgraduate
Faculty	Faculty of Engineering, Built Environment and Information Technology
Module credits	30.00
Prerequisites	No prerequisites.
Contact time	10 lectures per week
Language of tuition	Module is presented in English
Department	Materials Science and Metallurgical Engineering
Period of presentation	Semester 1 or Semester 2

Module content

In this module the mechanical behaviour of metals and alloys at room and high temperature is addressed but with special emphasis on nuclear materials used in commercial power reactors. In particular these materials' behaviour under deformation, creep, fracture, fatigue and also corrosion in irradiation conditions for in-core materials as well as their behaviour under the unique environmental conditions for out-of-core materials is covered.

The information published here is subject to change and may be amended after the publication of this information. The [General Regulations \(G Regulations\)](#) apply to all faculties of the University of Pretoria. It is expected of students to familiarise themselves well with these regulations as well as with the information contained in the [General Rules](#) section. Ignorance concerning these regulations and rules will not be accepted as an excuse for any transgression.