

# University of Pretoria Yearbook 2016

## Metals processing 411 (NPW 411)

**Qualification** Undergraduate

**Faculty** [Faculty of Engineering, Built Environment and Information Technology](#)

**Module credits** 16.00

**Programmes** [BEng Metallurgical Engineering](#)  
[BEng Metallurgical Engineering Engage](#)

**Prerequisites** (NMC 313), (NMM 320)

**Contact time** 2 practicals per week, 3 lectures per week

**Language of tuition** English

**Academic organisation** Materials Science and Metallur

**Period of presentation** Semester 1

### Module content

Introduction to welding and joining processes. Welding of carbon steels, stainless steels, aluminium and aluminium alloys. Development and qualification of welding procedure specifications. Liquid metal processing (casting processes, solidification of castings and mould design). Deformation processing (forging, extrusion and rolling), sheet metal processing and surface processing. The identification and prevention of defects.

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.