

University of Pretoria Yearbook 2022

Design of welded structures 701 (NWP 701)

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| Qualification | Postgraduate |
| Faculty | Faculty of Engineering, Built Environment and Information Technology |
| Module credits | 30.00 |
| NQF Level | 08 |
| Programmes | BEngHons Metallurgical Engineering BEngHons Metallurgical Engineering - Welding Engineering BScHons (Applied Science) Metallurgy BScHons (Applied Science) Metallurgy - Welding Technology |
| Prerequisites | No prerequisites. |
| Contact time | 48 contact hours per semester |
| Language of tuition | Module is presented in English |
| Department | Materials Science and Metallurgical Engineering |
| Period of presentation | Semester 1 or Semester 2 |

Module content

This module examines welded joint design, the basics of weld design and the role of fracture mechanics in joint design. The behaviour of welded structures under different types of loading are considered, with special focus on the design of welded structures with predominantly static loading and the design of dynamically loaded welded structures. The design of welded pressure equipment, aluminium alloy structures and reinforcing-steel welded joints is considered.

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