

# University of Pretoria Yearbook 2021

## Corrosion 410 (NKR 410)

<b>Qualification</b>	Undergraduate
<b>Faculty</b>	<a href="#">Faculty of Engineering, Built Environment and Information Technology</a>
<b>Module credits</b>	16.00
<b>NQF Level</b>	08
<b>Prerequisites</b>	No prerequisites.
<b>Contact time</b>	3 lectures per week, 3 practicals per week
<b>Language of tuition</b>	Module is presented in English
<b>Department</b>	Materials Science and Metallurgical Engineering
<b>Period of presentation</b>	Semester 1

### Module content

Thermodynamics and kinetics of electrochemical processes relevant to corrosion. Application of electrochemical techniques in corrosion. Theory and practice of corrosion phenomena such as uniform and localised forms of corrosion including crevice and pit corrosion, dealloying, sensitisation and environmentally assisted cracking. Mitigation of corrosion through materials selection, modification of the environment, and by the application of cathodic and anodic protection, and protective coatings.

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