

# University of Pretoria Yearbook 2022

## Mathematical morphology 820 (WTW 820)

<b>Qualification</b>	Postgraduate
<b>Faculty</b>	<a href="#">Faculty of Natural and Agricultural Sciences</a>
<b>Module credits</b>	1.00
<b>NQF Level</b>	09
<b>Prerequisites</b>	Measure Theory and Functional Analysis on honours level
<b>Contact time</b>	1 lecture per week
<b>Language of tuition</b>	Module is presented in English
<b>Department</b>	Mathematics and Applied Mathematics
<b>Period of presentation</b>	Semester 1

### Module content

Mathematical morphology – a theory for the analysis of special structures and a powerful methodology for the extraction of useful information from images. Morphological operators and their properties: erosion, dilation, opening, closing, granulometries. Applications to noise removal, filtering, extraction of features, edge detection, etc. LULU operators - properties and applications. Partial differential equations for morphological operators.

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