

# University of Pretoria Yearbook 2016

## Optimum design 420 (MOO 420)

**Qualification** Undergraduate

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

**Module credits** 16.00

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

**Prerequisites** No prerequisites.

**Contact time** 1 practical per week, 3 lectures per week

**Language of tuition** English

**Academic organisation** Mechanical and Aeronautical En

**Period of presentation** Semester 2

### Module content

Introduction to elements of computer-aided design. Formulation of the optimum design problem. Concepts used in optimum design. Linear and integer programming methods. Numerical methods used for unconstrained and constrained optimum design. Model reduction techniques. Application to interactive and practical design optimisation.

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