

# University of Pretoria Yearbook 2017

## Control Systems 780 (MBB 780)

**Qualification** Postgraduate

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

**Module credits** 16.00

**Programmes** [BEngHons Mechanical Engineering](#)  
[BScHons Applied Science Mechanics](#)

**Prerequisites** Working knowledge of MATLAB/OCTAVE

**Contact time** 21 contact hours per semester

**Language of tuition** Module is presented in English

**Academic organisation** Mechanical and Aeronautical En

**Period of presentation** Semester 1

### Module content

Introduction to state space methods, full state feedback design, disturbances and tracking systems, linear observers, compensator design by the separation principle, linear quadratic optimum control, Kalman filter, linear quadratic Gaussian compensator.

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