



University of Pretoria Yearbook 2020

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

Department Mechanical and Aeronautical Engineering

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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