

University of Pretoria Yearbook 2017

Automation 410 (EBT 410)

Qualification	Undergraduate
Faculty	Faculty of Engineering, Built Environment and Information Technology
Module credits	16.00
Programmes	BEng Electrical Engineering BEng Electrical Engineering ENGAGE BEng Electronic Engineering BEng Electronic Engineering ENGAGE
Prerequisites	EBB 320 GS
Contact time	1 tutorial per week, 1 practical per week, 3 lectures per week
Language of tuition	Separate classes for Afrikaans and English
Academic organisation	Electrical, Electronic and Com
Period of presentation	Semester 1

Module content

Plant automation issues. The steps taken to establish controllers for industrial processes. Static and dynamic properties of sensors and actuators. Obtaining models from process data. Plant automation platforms. Model-based PID and internal model control. Turning and troubleshoot control loops. Unconstrained single-input-single-output model predictive control. Economic evaluation of automation systems.

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