

University of Pretoria Yearbook 2016

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 Both Afr and Eng

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.

The information published here is subject to change and may be amended after the publication of this information. The [General Regulations \(G Regulations\)](#) apply to all faculties of the University of Pretoria. It is expected of students to familiarise themselves well with these regulations as well as with the information contained in the [General Rules](#) section. Ignorance concerning these regulations and rules will not be accepted as an excuse for any transgression.