

University of Pretoria Yearbook 2018

Advanced electronics 410 (ENE 410)

| | |
|-------------------------------|---|
| Qualification | Undergraduate |
| Faculty | Faculty of Engineering, Built Environment and Information Technology |
| Module credits | 16.00 |
| Programmes | BEng Electronic Engineering BEng Electronic Engineering ENGAGE |
| Prerequisites | ENE 310 GS |
| Contact time | 1 practical per week, 1 tutorial per week, 3 lectures per week |
| Language of tuition | Module is presented in English |
| Department | Electrical, Electronic and Computer Engineering |
| Period of presentation | Semester 1 |

Module content

Bipolar and Field Effect Transistor (FET) amplifier design: bias and frequency response of small signal loaded single stage, multistage, differential stage, and feedback amplifiers. Amplifier figure of merit parameters, including total harmonic distortion. Large signal power amplifiers. Communication electronics: RF component modelling, two-port models for RF networks, matching networks, small signal narrowband RF amplifiers, RF oscillators.

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.