University of Pretoria Yearbook 2020

Antenna theory 780 (EMA 780)

Qualification	Postgraduate
Faculty	Faculty of Engineering, Built Environment and Information Technology
Module credits	32.00
Programmes	BEngHons Electronic Engineering
Prerequisites	Microwaves and antennas EMZ 320 or equivalent
Contact time	32 contact hours per semester
Language of tuition	Module is presented in English
Department	Electrical, Electronic and Computer Engineering
Period of presentation	Semester 2

Module content

Types of antennas and radiation mechanisms, parameters of antennas, radiation integrals, near and far field radiation, duality theorem, wire antennas, antenna arrays, mutual coupling and mutual impedance, surface equivalence theorem, reaction theorem, moment methods in antenna analysis, travelling wave antennas, microstrip antennas, horn antennas, physical optics, reflector antennas, antenna synthesis.

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.