University of Pretoria Yearbook 2017

Electronic defence - electronic support 781 (ELB 781)

Qualification	Postgraduate
Faculty	Faculty of Engineering, Built Environment and Information Technology
Module credits	32.00
Programmes	BEngHons Computer Engineering
	BEngHons Electronic Engineering
Contact time	32 contact hours per semester
Language of tuition	Module is presented in English
Academic organisation	Electrical, Electronic and Com
Period of presentation	Semester 1 or Semester 2

Module content

The role of electronic support (ES) receivers from tactical and strategic perspectives. ES system architectures including analogue and digital receivers. The following topics will be considered: signal detection, parameter estimation including direction finding (DF) angle of arrival (AoA) estimation and pulse repitition interval (PRI) tracking, emitter classification and low probability of detection (LPD) and low probability of intercept (LPI) techniques to counter ES receivers.