University of Pretoria Yearbook 2016

Non-destructive testing 780 (MCT 780)

Qualification	Postgraduate
Faculty	Faculty of Engineering, Built Environment and Information Technology
Module credits	16.00
Programmes	BEngHons Mechanical Engineering
	BScHons Applied Science Applied Science: Mechanics
Contact time	21 contact hours per semester
Language of tuition	English
Academic organisation	Mechanical and Aeronautical En
Period of presentation	Semester 1 or Semester 2

Module content

Probabilty, design and management in non-destructive testing (NDT). Fundamental theory of commonly used NDT methods: Ultrasonic testing, Electromagnetic testing (MT and ACFM). Radiographic testing, Penetrant testing, Eddy current testing. Other NDT technologies, including phased array UT, time-of flight diffraction. Digital (RT and Acoustic emission. Monitoring.