University of Pretoria Yearbook 2016

Information systems 780 (BIS 780)

Qualification	Postgraduate
Faculty	Faculty of Engineering, Built Environment and Information Technology
Module credits	16.00
Prerequisites	No prerequisites.
Contact time	24 contact hours
Language of tuition	English
Academic organisation	Industrial and Systems Eng
Period of presentation	Semester 1 or Semester 2

Module content

To introduce the student with a background in transactional application software development to a variety of aspects in the wider field of information technology. Emphasis is on the functional design of Business Intelligence systems from an Industrial Engineering perspective. The aim is to enable the student to appreciate the scope of management challenges in the integrated environment of business processes, transactional application software, data, IT infrastructure and telecommunications, data warehousing, and the necessary management information needed at various levels in an organisation.
It covers:
• Technology trends
• Context diagram of application software portfolio
• Review of typical transactional information systems
• Role of Business Intelligence and data warehousing
• Business dimensional lifecycle
• Business requirement definition
• Basic elements of the data warehouse
• Extraction, Transformation and Loading processes
• Dimensional modelling (star schema)
• Metadata
• Information delivery