



University of Pretoria Yearbook 2017

Program design: Introduction 110 (COS 110)

Qualification	Undergraduate
Faculty	Faculty of Engineering, Built Environment and Information Technology
Module credits	16.00
Programmes	BCom Statistics BEng Computer Engineering BEng Computer Engineering ENGAGE BIS Multimedia BIT Information Technology BSc Computer Science BSc Information and Knowledge Systems BSc Extended programme - Mathematical Sciences BSc Mathematical Statistics
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Economic and Management Sciences Faculty of Natural and Agricultural Sciences
Prerequisites	COS 132 , COS 151 and Maths level 5
Contact time	1 tutorial per week, 1 practical per week, 3 lectures per week
Language of tuition	Separate classes for Afrikaans and English
Academic organisation	Computer Science
Period of presentation	Semester 2

Module content

The focus is on object-oriented (OO) programming. Concepts including inheritance and multiple inheritance, polymorphism, operator overloading, memory management (static and dynamic binding), interfaces, encapsulation, reuse, etc. will be covered in the module. The module teaches sound program design with the emphasis on modular code, leading to well structured, robust and documented programs. A modern OO programming language is used as the vehicle to develop these skills. The module will introduce the student to basic data structures, lists, stacks and queues.

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