



# University of Pretoria Yearbook 2016

## Program design: Introduction 110 (COS 110)

<b>Qualification</b>	Undergraduate
<b>Faculty</b>	Faculty of Engineering, Built Environment and Information Technology
<b>Module credits</b>	16.00
<b>Programmes</b>	BCom Statistics BEng Computer Engineering BEng Computer Engineering Engage BIS Multimedia BIT Information Technology BSc Information Technology Information and Knowledge Systems BSc(Computer Science) Computer Science BSc Extended programme - Mathematical Sciences BSc Mathematical Statistics BSc Physics
<b>Service modules</b>	Faculty of Engineering, Built Environment and Information Technology Faculty of Economic and Management Sciences
<b>Prerequisites</b>	COS 153 or COS 131 or COS 132 and Maths level 5 or WTW 133
<b>Contact time</b>	1 tutorial per week, 1 practical per week, 3 lectures per week
<b>Language of tuition</b>	Both Afr and Eng
<b>Academic organisation</b>	Computer Science
<b>Period of presentation</b>	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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