

## University of Pretoria Yearbook 2021

## Generic programming 782 (COS 782)

Postgraduate

Faculty Faculty of Engineering, Built Environment and Information Technology

Module credits 15.00

NQF Level 08

**Programmes** BScHons Computer Science

**Prerequisites** No prerequisites.

**Contact time** 2 lectures per week

**Language of tuition** Module is presented in English

**Department** Computer Science

**Period of presentation** Semester 1 or Semester 2

## **Module content**

Qualification

This module introduces the concepts of generic programming in order to generate code at compile-time. Of particular interest is the automatic generation of design pattern implementations at compile-time for use at runtime. To this end, design patterns and compile-time programming techniques such as: basic compile-time programming constructs, object allocation, generalised functors, smart pointer and multi-methods are discussed in detail and applied to design patterns.

The information published here is subject to change and may be amended after the publication of this information. The **General Regulations** (**G Regulations**) apply to all faculties of the University of Pretoria. It is expected of students to familiarise themselves well with these regulations as well as with the information contained in the **General Rules** section. Ignorance concerning these regulations and rules will not be accepted as an excuse for any transgression.