

## University of Pretoria Yearbook 2022

## Generic programming 782 (COS 782)

**Qualification** 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**

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.

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