



---

# University of Pretoria Yearbook 2016

---

## Software engineering (II) 731 (COS 731)

**Qualification** Postgraduate

**Faculty** [Faculty of Engineering, Built Environment and Information Technology](#)

**Module content**

This module discusses software architecture, including the representation of designs, definitions, styles and patterns of architecture. Its themes include model-driven architecture, formal modelling and analysis, and architectural description languages. The module will show that the architecture of a software system is determined by the collection of significant design decisions made early on in the development of that system – decisions concerning the components comprising the system, repeating-patterns of system-wide aspects, and the platforms on which the system will be built. It will discuss how, once these decisions are made and subsequently followed, they end up profoundly affecting the development, deployment, use and ongoing enhancement of that system. The module assumes that the student is familiar with software development lifecycle concepts, and that she/he has been part of at least one significant software development effort. Those who have not completed COS730 will be provided additional background.

**Module credits** 15.00

**Programmes** [BIT Information Technology](#)

[BScHons Computer Science](#)

**Prerequisites** No prerequisites.

**Contact time** 2 lectures per week

**Language of tuition** English

**Academic organisation** Computer Science

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

---

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 each student to familiarise himself or herself 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.