

## University of Pretoria Yearbook 2019

## Composite materials 780 (MCM 780)

**Qualification** Postgraduate

**Faculty** Faculty of Engineering, Built Environment and Information Technology

Module credits 16.00

**Prerequisites** No prerequisites.

**Contact time** 21 contact hours per semester

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

**Department** Mechanical and Aeronautical Engineering

Period of presentation Semester 1

## Module content

Fundamental concepts of composite materials; manufacturing methods; design criteria of laminated composite materials; determining mechanical properties of composite materials: anisotropic elasticity and laminate theory, beams and columns of composite materials, plates and panels, transverse shear deformation effects, twisting and stretching shear coupling, composite shells; hygrothermal effects; strength and failure theories.

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.