

# University of Pretoria Yearbook 2024

## Design project 410 (MOX 410)

**Qualification** Undergraduate

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

**Module credits** 16.00

**NQF Level** 08

**Programmes** [BEng \(Mechanical Engineering\) 4-year programme](#)

[BEng \(Mechanical Engineering\) 5-year programme](#)

**Prerequisites** MOW 312 GS and MOW 323 GS, admission to relevant programme

**Contact time** 8 tutorials per week

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

**Department** Mechanical and Aeronautical Engineering

**Period of presentation** Semester 1

### Module content

Two exit-level Graduate Attributes (GAs) of ECSA are accessed and each must be passed in order to pass the module. GA3 Engineering Design & GA6 Professional & Technical Communication.

Engineering Design (GA3) is evaluated at the hand of (i) the definition and specification of the design problem, (ii) concept creation and concept selection, (iii) procedural & non-procedural calculations, analysis & optimisation, (iv) illustration and description of the complete design solution and (v) manufacturing & costing analysis and impacts & benefits of the design.

Professional and technical communication (GA6) is evaluated at the hand of (i) the written report, (ii) graphical communication (sketches, CAD images and detail & assembly drawings) for which there is a subminimum and (iii) oral communication.

### General Academic Regulations and Student Rules

The [General Academic Regulations \(G Regulations\)](#) and [General Student Rules](#) apply to all faculties and registered students of the University, as well as all prospective students who have accepted an offer of a place at the University of Pretoria. On registering for a programme, the student bears the responsibility of ensuring that they familiarise themselves with the General Academic Regulations applicable to their registration, as well as the relevant faculty-specific and programme-specific regulations and information as stipulated in the relevant yearbook. Ignorance concerning these regulations will not be accepted as an excuse for any transgression, or basis for an exception to any of the aforementioned regulations. The G Regulations are updated annually and may be amended after the publication of this information.



### **Regulations, degree requirements and information**

The faculty regulations, information on and requirements for the degrees published here are subject to change and may be amended after the publication of this information.

### **University of Pretoria Programme Qualification Mix (PQM) verification project**

The higher education sector has undergone an extensive alignment to the Higher Education Qualification Sub-Framework (HEQSF) across all institutions in South Africa. In order to comply with the HEQSF, all institutions are legally required to participate in a national initiative led by regulatory bodies such as the Department of Higher Education and Training (DHET), the Council on Higher Education (CHE), and the South African Qualifications Authority (SAQA). The University of Pretoria is presently engaged in an ongoing effort to align its qualifications and programmes with the HEQSF criteria. Current and prospective students should take note that changes to UP qualification and programme names, may occur as a result of the HEQSF initiative. Students are advised to contact their faculties if they have any questions.