# University of Pretoria Yearbook 2018

# BScHons Applied Sciences Mechanics: Physical Asset Management (12243037)

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| **Minimum duration of study** | 1 year |
| **Total credits** | 128 |

## Programme information

This multidisciplinary programme exposes students to both the management as well as the technical aspects of Physical Asset Management from a theoretical perspective. Students will, however, have to choose whether they would prefer to conduct the research component of the programme in either the technical domain (register with the Department of Mechanical and Aeronautical Engineering) or in the management domain (register with the Graduate School of Technology Management).

## Other programme-specific information

The curriculum comprises four core modules, two elective modules and a compulsory research project.

Any specific module is offered on the condition that a minimum number of students are registered for the module, as determined by the head of department and the Dean.

## Examinations and pass requirements

Also consult the Faculty Rules in this regard.
All the examination admission requirements, applicable to the relevant module, must have been met.

## Pass with distinction

The degree is conferred with distinction if students obtain a weighted average of at least 75% in all the required modules for the programme. The degree is not awarded with distinction if any one module is failed (excluding modules which were discontinued timeously).

# Curriculum: Final year

**Minimum credits: 128**

## Core modules

Maintenance practice 780 (MIP 780) - Credits: 16.00
Reliability engineering 781 (MIR 781) - Credits: 16.00
Aerodynamics 780 (MLD 780) - Credits: 16.00
Flight mechanics 780 (MLV 780) - Credits: 16.00
Numerical thermoflow 780 (MSM 780) - Credits: 16.00
Fatigue 780 (MSV 780) - Credits: 16.00
Fluid mechanics 780 (MSX 780) - Credits: 16.00

## Elective modules

Aircraft propulsion 780 (MAY 780) - Credits: 16.00
Control Systems 780 (MBB 780) - Credits: 16.00
Non-destructive testing 780 (MCT 780) - Credits: 16.00
Advanced finite element methods 781 (MEE 781) - Credits: 16.00
Mechatronics 780 (MEG 780) - Credits: 16.00
Vibration-based condition monitoring 781 (MEV 781) - Credits: 16.00
Advanced heat and mass transfer 780 (MHM 780) - Credits: 16.00
Condition-based maintenance 780 (MIC 780) - Credits: 16.00
Maintenance logistics 782 (MIP 782) - Credits: 16.00
Missile aerodynamics and design 781 (MLD 781) - Credits: 16.00
Experimental methods 782 (MLD 782) - Credits: 16.00
Unmanned aircraft systems technology 783 (MLD 783) - Credits: 16.00
Avionics 784 (MLD 784) - Credits: 16.00
Air conditioning and refrigeration 780 (MLR 780) - Credits: 16.00
Optimum design 780 (MOO 780) - Credits: 16.00
Fracture mechanics 780 (MSF 780) - Credits: 16.00
Numerical thermoflow 781 (MSM 781) - Credits: 16.00
Research study 732 (MSS 732) - Credits: 32.00
Advanced fluid mechanics 781 (MSX 781) - Credits: 16.00
Experimental structural dynamics 783 (MSY 783) - Credits: 16.00
Advanced thermodynamics and energy systems 781 (MTX 781) - Credits: 16.00
Fossil fuel power stations 781 (MUU 781) - Credits: 16.00
Vehicle dynamics 780 (MVI 780) - Credits: 16.00
Numerical methods 780 (MWN 780) - Credits: 16.00