

University of Pretoria Yearbook 2018

MSc Engineering Management (Coursework) (12251077)

Minimum duration of study 2 years

Total credits 180

Programme information

- Unless the Dean, on recommendation of the relevant head of department, decides otherwise, the master's degree is conferred on the basis of examinations of coursework and a mini-dissertation (including an examination on the mini-dissertation).
- A minimum of 180 credits is required to obtain the MSc degree. A mini-dissertation (60 credits) and coursework (120 credits) is included in the programme.
- Recognition is not granted for credits acquired during studying for the BEngHons or the BScHons.
- The curriculum is determined in consultation with the relevant head of department. Any specific module is offered on condition that a minimum number of students are registered for the module, as determined by the head of department and the Dean. Students must consult the relevant head of department in order to compile a meaningful programme, as well as for information on the syllabi of the modules. The various departmental postgraduate brochures should also be consulted.

Admission requirements

The admission requirement for the MSc is a MSC (Hon) or equivalent qualification. A selection procedure takes place prior to admission to the Masters degree. Restrictions may be placed on the number of students admitted. Postgraduate selection takes place as stipulated in the respective departmental rules. ([click here](#))

Examinations and pass requirements

The stipulations of the relevant Faculty regulations are applicable.

Guidelines for the preparation and examination of mini-dissertations are available from the department.

- i. The examination in each module for which a student is registered, takes place during the normal examination period after the conclusion of lectures (i.e. October/November or May/June).
- ii. A student registered for the masters degree must complete his or her studies within three years provided that the Dean, on recommendation of the relevant head of department, may approve a stipulated limited extension of this period.
- iii. A student must obtain at least 50% in an examination for each module where no semester or year mark is required. A module may only be repeated once.
- iv. In modules where semester or year marks are awarded, a minimum examination mark of 40% and a final mark of 50% is required.

- v. No supplementary or special examinations are granted at postgraduate level.

Research information

A student must by means of a mini-dissertation prove that he or she is capable of planning, instituting and executing a scientific investigation. As part of the examination a student must submit an article and present at the final year symposium. The article should be based on the research that the student has conducted for the dissertation and be approved by the supervisor. Conferment of the degree may be made subject to compliance with the stipulations of this regulation.

Pass with distinction

A student who completes the master's degree on grounds of coursework and a mini-dissertation, passes with distinction if a weighted average mark of at least 75% is obtained in the first 180 credits obtained for the degree provided that 60 of these credits are allocated to the mini-dissertation. However, the degree is not awarded with distinction should a student fail any of these modules (excluding modules which have been timeously discontinued). The degree is also not awarded with distinction if a student obtains less than 70% for the mini-dissertation.

Curriculum: Year 1

Core modules

Maintenance management 801 (IIB 801)

Module credits	10.00
Prerequisites	No prerequisites.
Contact time	20 contact hours per semester
Language of tuition	Module is presented in English
Department	Engineering and Technology Management
Period of presentation	Semester 1 or Semester 2

Literature study 801 (ILS 801)

Module credits	10.00
Prerequisites	No prerequisites.
Contact time	20 contact hours per semester
Language of tuition	Module is presented in English
Department	Engineering and Technology Management
Period of presentation	Semester 2

Module content

The overall objective of this module is to provide students with sufficient knowledge and skills to undertake a detailed and comprehensive literature review. This module is an integral part of the research component and will be aligned with the research proposal of the student. The major part of the module consists of individual self-study done by the student outside the classroom in his/her own time, complemented by student-centred and co-operative learning/teaching methods during lectures. The self-study includes prescribed reading and individual assignments.

Research methodology 800 (INI 800)

Module credits	10.00
Prerequisites	No prerequisites.
Contact time	20 contact hours per semester
Language of tuition	Module is presented in English
Department	Engineering and Technology Management
Period of presentation	Semester 1 or Semester 2

Module content

The overall objective of this module is to provide students with sufficient knowledge and skills to undertake independent research for a masters' dissertation. The major part of the course consists of individual self-study done by the student outside the classroom in his/her own time, complemented by student-centred and co-operative learning/teaching methods during lectures. The self-study includes prescribed reading, individual assignments and preparation for the examination. The lecturer will act as a guide to the students to acquire the necessary knowledge and skills through self-study and practical exercises, in addition to formal lectures.

Project management 803 (IPK 803)

Module credits	10.00
Prerequisites	No prerequisites.
Contact time	20 contact hours per semester
Language of tuition	Module is presented in English
Department	Engineering and Technology Management
Period of presentation	Semester 2

Production and operations management 801 (IPP 801)

Module credits	10.00
Prerequisites	No prerequisites.
Contact time	20 contact hours per semester
Language of tuition	Module is presented in English
Department	Engineering and Technology Management
Period of presentation	Semester 1

Systems engineering and management 801 (ISE 801)

Module credits	10.00
Prerequisites	No prerequisites.
Contact time	20 contact hours per semester
Language of tuition	Module is presented in English
Department	Engineering and Technology Management
Period of presentation	Semester 1

Technology management 801 (ITB 801)

Module credits	10.00
Prerequisites	No prerequisites.
Contact time	20 contact hours per semester
Language of tuition	Module is presented in English



Department	Engineering and Technology Management
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Period of presentation	Semester 1
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People management 883 (PEM 883)

Module credits	10.00
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Service modules	Faculty of Engineering, Built Environment and Information Technology
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Prerequisites	No prerequisites.
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Contact time	16 lectures per week, 2 web-based periods per week, 3 discussion classes per week
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Language of tuition	Module is presented in English
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Department	Human Resource Management
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Period of presentation	Semester 2
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Curriculum: Final year

Core modules

Financial management 830 (FBS 830)

Module credits	10.00
Service modules	Faculty of Engineering, Built Environment and Information Technology
Prerequisites	No prerequisites.
Contact time	1 lecture per week
Language of tuition	Module is presented in English
Department	Financial Management
Period of presentation	Semester 2

Mini-dissertation 898 (ISC 898)

Module credits	60.00
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Engineering and Technology Management
Period of presentation	Year

Module content

The research component is the capstone of the MTM programme. It comprises an independent research study into an area of engineering, project or technology management, applying the principles learned during the programme. Although not a full master's dissertation, it is essential to produce something original and useful, both to an academic field in the respective programmes and to the public/private sector that searches for solutions. Although this is a dissertation of limited breadth and scope, it nonetheless has to comply with the requirements of scientific research.

Strategic management 801 (ISM 801)

Module credits	10.00
Prerequisites	No prerequisites.
Contact time	20 contact hours per semester
Language of tuition	Module is presented in English
Department	Engineering and Technology Management
Period of presentation	Semester 2

Elective modules

Engineering asset management 801 (IAM 801)



Module credits	10.00
Prerequisites	No prerequisites.
Contact time	20 contact hours per semester
Language of tuition	Module is presented in English
Department	Engineering and Technology Management
Period of presentation	Semester 1

Marketing management 801 (IIM 801)

Module credits	10.00
Prerequisites	No prerequisites.
Contact time	12 discussion classes, 20 lectures per week, 22 other contact sessions per week
Language of tuition	Module is presented in English
Department	Engineering and Technology Management
Period of presentation	Semester 1

Information management 884 (ILB 884)

Module credits	10.00
Prerequisites	No prerequisites.
Contact time	14 lectures per week, 2 web-based periods per week, 22 other contact sessions per week, 6 discussion classes per week
Language of tuition	Module is presented in English
Department	Informatics
Period of presentation	Semester 1

Legal aspects of project management 803 (ILC 803)

Module credits	10.00
Prerequisites	No prerequisites.
Contact time	20 contact hours per semester
Language of tuition	Module is presented in English
Department	Engineering and Technology Management
Period of presentation	Semester 2

New ventures and entrepreneurship 801 (IOE 801)

Module credits	10.00
Prerequisites	No prerequisites.
Contact time	20 contact hours per semester

Language of tuition	Module is presented in English
Department	Engineering and Technology Management
Period of presentation	Semester 1 or Semester 2

Project quality management 801 (IQM 801)

Module credits	10.00
Prerequisites	No prerequisites.
Contact time	20 contact hours per semester
Language of tuition	Module is presented in English
Department	Engineering and Technology Management
Period of presentation	Semester 1 or Semester 2

Decision analysis and risk management 801 (IRI 801)

Module credits	10.00
Prerequisites	No prerequisites.
Contact time	20 contact hours per semester
Language of tuition	Module is presented in English
Department	Engineering and Technology Management
Period of presentation	Semester 1

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.