Graduate School of Technology Management
GSTM
Management of Technology
MOT & MTM 2012

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Graduate School of Technology Management

www.up.ac.za/gstm

Management of Technology

There can be little doubt that technology is increasingly becoming an important base for competition between companies and also a key factor in international competitiveness. The ability to manage technology and technological innovation in a structured way is the key to a winning organisation.

Objective of Programme

The programmes in Technology Management offered by the Graduate School of Technology Management (GSTM), are aimed at engineers and scientists who have recently completed a bachelor's degree. The objective is to produce engineers and scientists who not only have technological capabilities, but also the ability to manage technology - specialists who know not only how to develop and deploy technology but also why. The degree builds on and adds value to the young engineers' and scientists' undergraduate education by exposing him or her to the management of technology and the management of technological innovation. Thereby skills are acquired that are not normally addressed at undergraduate level, but are nonetheless increasingly being sought after in the industry.

The option for a masters degree after the honours is completed, based either on a research dissertation or on the completion of four theoretical modules and mini-dissertation, is offered. This degree is aimed at graduate business managers and recent graduates with management and leadership potential to prepare them for leadership roles in business through professional post graduate education.

Degrees offered and admission

Four degrees are offered, i.e.
B.Eng (Hons) (Technology Management),
M.Eng (Technology Management),
B.Sc (Hons) (Technology Management),
M.Sc (Technology Management).

The admission requirement for the B.Eng (Hons) is a recognised bachelors degree in engineering and for the B.Sc (Hons) a recognised and appropriate bachelors degree in the natural sciences or an appropriate B.Tech degree. Applicants should submit a full academic record (subjects, marks, time frame for completion) on application. Special attention will be given to Mathematics education and appropriate English language proficiency. The minimum requirement is first year mathematics at university or an equivalent level.

Admission to the masters degree will only be considered after successful completion of the B.Eng/BSc (Hons) (Technology Management) degree. Academic performance and research aptitude will be factors in the selection of candidates for the masters programme.

The Honours Degree

Structure and Curriculum

The honours degree programme consists of eight courses that may be completed in one year of study (all eight courses in one year) or two years' study (four courses per year). The programme starts in January each year. All courses will be presented every year (offering of electives is subject to sufficient demand). Course-work totalling 128 credits is required for the honours degree, i.e. 16 credits per course. It is strongly recommended that students who work full-time complete the course over a period of two years as the University's recommended learning hours for a 16 credit course is 160 hours.

The course curriculum consists of a set of core courses and one elective course, as follows:

Core Modules

Innovation Strategy (INV 781)
Project Management (IPK 780)
Technological Entrepreneurship (IEE 780)
Operations Management (IVV 781)
Systems Engineering (ISE 780)
Quality Management (IKK 780)
Decision Analysis (BEng) (IBD 780) or
Engineering Economics (BSc) (IKN 780)

Elective Modules

Engineering Logistics (IIX 780)
Maintenance Management (IMC 780)
Research Methodology (INI 781) (Compulsory module should you wish to continue with the Master's Programme)

Mode of Presentation

As candidates normally hold full-time positions, the mode of presentation has been designed to cause the least possible disruption in the work environment. Each course is offered by way of two and a half consecutive days of full-time attendance, except for Engineering Economics which is presented over a period of four and a half days. Class attendance is compulsory and important. Distance support is provided via the Internet and complements the contact in the classroom. For this reason, all students are required to have access to the Internet through a suitable browser and be able to take part in discussions using the Internet.

The Masters Degree

Option A:
Masters Dissertation

Complete a masters dissertation. This comprises a significant piece of independent research undertaken by the candidate, on a topic in the subject field of the programme. Only applicants with an average of 65% or higher for the Honours degree will be considered for registration for the dissertation.

A formal proposal must be approved by GSTM's postgraduate research committee. Although a new contribution to knowledge is not required, the research should be original and further the research objectives of the GSTM and/or the Institute for Technological Innovation.

Option B:
Theoretical Modules and Mini-dissertation (MTM)

Complete the following four theoretical modules as well as a mini-dissertation.

• Financial Management (FBS 831)
• Strategic Management (ISM 802)
• Human Resource Management (PEM 884)
• Elective course (Technology Commercialisation [IKG881] or a course from MEM/MPM programmes. Your choice is subject to approval)

As part of the mini-dissertation or dissertation each candidate is required to produce an article for publication and present his or her findings at the final year symposium/colloquium.

Tuition Fees

The approximate fees for 2012 are indicated hereunder.

International students can visit the website www.up.ac.za and click at the top on 'International Students' for more information.

Distance examinations are arranged for students who apply, but at an extra cost of R500 per examination paper within the RSA and SADC countries and R1 100 per examination paper for international countries. Examination fees are reviewed annually, and could thus be higher in 2012.

Honours in Technology Management (MOT)

The course fee for the Honours in Technology Management degree in 2012 will be approximately R 23 580, i.e. R 2 950 per course. The final fee will be available in January 2012.

The total fee is distributed over a maximum of two years and charged on the basis of courses taken in a year. Full-time students are expected to pay the total fee in the first year. Prescribed books are not included in the fee.

Masters in Technology Management (Dissertation)

The course fee for the Masters (Dissertation) in Technology Management degree in 2012 will be approximately R 23 580.

Theoretical Modules and Mini-dissertation (MTM)

The course fee for the Masters in Technology Management degree in 2012 will be approximately R 35 000. Fee for the four courses: R 17 500, i.e. R 4 375 per course. Fee for the Mini-dissertation: R 17 500. The final fee will be available in January 2012.

The total fee is distributed over a maximum of two years and charged on the basis of courses taken in a year. Full-time students are expected to pay the total fee in the first year. The fee includes all textbooks, course material, notes, other programme logistics and meals.

Application Procedures and Forms

Any person who wishes to register at the University for the first time, OR after an interruption of studies:

Please complete the University's on-line application form at www.up.ac.za and click on "Apply for admission".

To receive a hard copy application form, please contact the Client Service Centre at csc@up.ac.za or 012 420 3111. A hard copy application form will then be posted to you.

Current UP studies

Please complete the Honours or Masters degree application form for current UP students at www.up.ac.za/gstm/mot. Please fax or e-mail the form to the specific person indicated at "Contact details".

International Students

All international students whose under-graduate studies was not in English will be obliged to submit a Test of English as a Foreign Language (TOEFL) to the University before registration. Further information with regard to the TOEFL test, including an electronic test, can be found at: www.toefl.org.

Any further queries or information required by foreign students with respect to registration and study permit requirements can be obtained on the University of Pretoria's website - International Affairs Office (IAO). (www.up.ac.za and click on "International Students").

Course Descriptions

For a detailed description on subjects, go to **www.up.ac.za/gstm/mot**

Contact details

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Honours Degree
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Masters Degree
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Closing date for applications

Honours Degree (MOT): Last Friday in November 2011
Masters (Modules and Research Project) (MTM): 1st Friday in November 2011
Master's (Dissertation): 1st Friday in December 2011