

MAGISTER TECHNOLOGIAE: ENGINEERING: INDUSTRIAL (Field of specialisation: Technology Management) (Structured) Qualification code: MTEIS0

Campus where offered: Pretoria Campus (block-mode classes and research)
Last year of new intake: 2015
Phase-out date: 31 December 2019

Students registered for this qualification should complete their studies according to the teach-out date prescribed for the qualification, subject to the stipulations of Regulation 3.1.11 and 3.1.13 in the Students' Rules and Regulations.

Information on phased-out programmes can be obtained from the TUT website, www.tut.ac.za.

Key to asterisks:

* Information does not correspond to information in Report 151.
(Deviations approved by the Senate in August 2005.)

CURRICULUM

Consult the 2014 Faculty Prospectus for the full contents of the qualification.

ATTENDANCE

CODE	SUBJECT	CREDIT
RRT500T	Research Report: Technology Management V (year subject)	(0,500)
RRT500R	Research Report: Technology Management V (re-registration)	(0,000)
RRT501R	Research Report: Technology Management V (re-registration) (semester option)	(0,000)

FIRST SEMESTER

EBU501T	Engineering Business Dynamics V	(0,100)
EDY501T	Engineering Data Analysis V	(0,100)

SECOND SEMESTER

LCY501T	Life Cycle Management V	(0,100)
TVC501T	Technology Venture Creation V	(0,100)

plus one of the following subjects:

BNL501T	Business Law V	(0,100)
IPM501T	Intellectual Property Management V	(0,100)
SPP501T	Supply Chain Management V	(0,100)
SUV501T	Sustainability Development V	(0,100)

TOTAL CREDITS FOR THE QUALIFICATION: **1,000**



SUBJECT INFORMATION (OVERVIEW OF SYLLABUS)

The syllabus content is subject to change to accommodate industry changes. Please note that a more detailed syllabus is available at the Department or in the study guide that is applicable to a particular subject. On 8 August 2018, the syllabus content was defined as follows:

B

BUSINESS LAW V (BNL501T)

CONTINUOUS ASSESSMENT

(Subject custodian: Department of Industrial Engineering)

Labor law, contracts, the law of corporations and other business organisations, securities law, antitrust, secured transactions, commercial paper, income tax, pensions and benefits, trusts and estates, immigration law, employment law and bankruptcy. (Total tuition time: ± 80 hours)

E

ENGINEERING BUSINESS DYNAMICS V (EBU501T)

CONTINUOUS ASSESSMENT

(Subject custodian: Department of Industrial Engineering)

Fundamentals of system dynamics, system thinking, and utilisation of stock's, flows and causal loops diagram when drawing a system dynamics module. Stella software is used to draw the module. (Total tuition time: ± 80 hours)

ENGINEERING DATA ANALYSIS V (EDY501T)

CONTINUOUS ASSESSMENT

(Subject custodian: Department of Industrial Engineering)

Innovation, decision-making and engineering data analysis tools are discussed to ensure effective problem solving skills. (Total tuition time: ± 80 hours)

L

INTELLECTUAL PROPERTY MANAGEMENT V (IPM501T)

CONTINUOUS ASSESSMENT

(Subject custodian: Department of Industrial Engineering)

Intellectual property development, protection, marketing and exchange are discussed. These aspects are linked to business success. In order for a business to achieve growth plans, it should have a strong IP Portfolio. (Total tuition time: ± 80 hours)

L

LIFE CYCLE MANAGEMENT V (LCY501T)

CONTINUOUS ASSESSMENT

(Subject custodian: Department of Industrial Engineering)

Total quality, asset and environmental management integration in managing the organisation effectively. (Total tuition time: ± 80 hours)

R

RESEARCH REPORT: TECHNOLOGY MANAGEMENT V (RRT500T/R, RRT501R)

MINI-DISSERTATION ASSESSMENT

(Subject custodian: Department of Industrial Engineering)

Syllabus content not available. Please contact the Head of the Department.

S

SUPPLY CHAIN MANAGEMENT V (SPP501T)

CONTINUOUS ASSESSMENT

(Subject custodian: Department of Industrial Engineering)

This is about engineering inventory planning and control, linking materials requirement planning and entity resource planning with increasing customer service excellence. Integrating just in time, warehousing and technology with supplier management to optimise logistics engineering and taking care of risks. (Total tuition time: ± 80 hours)



SUSTAINABILITY DEVELOPMENT V (SUV501T)**CONTINUOUS ASSESSMENT*****(Subject custodian: Department of Industrial Engineering)***

Introduction of sustainability in the engineering environment, matching of finance and technology to sustainability, profitable and environmentally friendly technologies and alternative energy systems, incorporating ethical dimensions and social awareness. Efficient design of products and services, with case studies and exercises. (Total tuition time: ± 80 hours)

T**TECHNOLOGY VENTURE CREATION V (TVC501T)****CONTINUOUS ASSESSMENT*****(Subject custodian: Department of Industrial Engineering)***

Translation of ideas into commercially viable high technology venture. Development of business plan and funding strategies are discussed. To elucidate the role of creativity, entrepreneurial and innovative business activities, and their management, within a global environment, and also of gender and ethnic diversity. (Total tuition time: ± 80 hours)

