University of Pretoria Yearbook 2018

MIT (12254014)

Minimum duration of study	2 years
Total credits	180

Programme information

This degree programme is presented in English only.

Also consult G Regulations G.30 to G.54

The curriculum is determined in consultation with the programme organiser.

A student will have to apply to the Dean of the Faculty of Engineering, Built Environment and Information Technology if he/she requires more than three years to complete the degree.

Admission requirements

i. Subject to the stipulations of Gen. Reg. G.1.3, G.30 and G.62, an appropriate honours or bachelor's degree is a requirement for admission to Stream A and Stream B; and an honours degree is an admission requirement for Stream C.
ii. A pass mark in Mathematics at grade 12 level or another qualification in Mathematics, Statistics or Mathematical Statistics, which the Chairperson of the School of Information Technology considers to be sufficient. This requirement is not applicable to Stream C.
iii. Sufficient appropriate practical experience in the technology field in the opinion of the Chairperson of the School of Information Technology. This requirement is not applicable to Stream C.
iv. The Chairperson of the School of Information Technology may impose additional requirements for admission. In particular, this will apply to candidates with insufficient academic background in Information Technology. This requirement is not applicable to Stream C.
v. Selection of candidates will take place.
vi. The result of the selection is final and no correspondence will be entered into.

See additional requirements for Stream C: Big Data Science below.

vii. A minimum pass rate of 65% for the previous degree, AND
viii. Successfully completed higher education modules, or other modules with similar content, as part of the previous degree in:

- Statistics,
- Calculus I,
- Linear Algebra I,
- Programming,
- Database systems, and
- Research Methods; AND

ix. Success in the selection process based on:

- Previous education,
- passing an English test, and
- passing a proficiency test in Databases, Programming, Mathematics and Statistics.

Examinations and pass requirements

A minimum semester mark of 40% is required in order to be admitted to the final examinations in all the prescribed modules of the degree. A final mark of 50% is required to pass all coursework modules and the mini-dissertation.

Discontinuation of studies
The Dean may, on the recommendation of the admissions committee, cancel the studies of a student who fails more than one module. A module may only be repeated once.

Deregistration of modules
Deregistration of modules for Stream C is only allowed before the early deadline.

Conferment of the degree
The Master's degree in Information Technology Stream A and Stream B is conferred on a student who successfully completes the following:

- Mini-dissertation – 90 credits
- Core modules – 90 credits
- Total – 180 credits

The Master's degree in Information Technology Stream C is conferred on a student who successfully completes the following:

- Mini-dissertation – 90 credits
- Core modules – 55 credits
- Research methods – 5 credits
- Projects – 20 credits
- Elective modules – 10 credits
- Total – 180 credits

Pass with distinction

The degree is conferred with distinction on students who have obtained at least 75% for the mini-dissertation and a minimum of 75% weighted average final mark for the coursework modules.

Curriculum: Year 1

Minimum credits: 74

Core modules

Introduction to big data science 800 (MIT 800) - Credits: 5.00
Introduction to machine and statistical learning 801 (MIT 801) - Credits: 15.00
Introduction to data platforms and sources 802 (MIT 802) - Credits: 5.00
Introduction to Information Ethics for Big Data Science 803 (MIT 803) - Credits: 5.00
Introduction to mathematical optimization for big data science 804 (MIT 804) - Credits: 5.00
Big data 805 (MIT 805) - Credits: 10.00
Big data management 806 (MIT 806) - Credits: 10.00
Research methods for big data science 809 (MIT 809) - Credits: 5.00
Information and knowledge management 835 (MIT 835) - Credits: 8.00
Organisational behaviour and management 841 (MIT 841) - Credits: 8.00
Computer science in perspective 842 (MIT 842) - Credits: 5.00
Information in perspective 843 (MIT 843) - Credits: 5.00
Life-cycle and maturity models for IT 850 (MIT 850) - Credits: 8.00
Digital economy 851 (MIT 851) - Credits: 8.00
ICT project management 852 (MIT 852) - Credits: 8.00
Corporate IT systems 853 (MIT 853) - Credits: 8.00
ICT infrastructure management 860 (MIT 860) - Credits: 8.00
IT research 862 (MIT 862) - Credits: 8.00
Web trends in the library 865 (MIT 865) - Credits: 8.00
Digital repositories 866 (MIT 866) - Credits: 8.00
The knowledge society and international librarianship 867 (MIT 867) - Credits: 8.00
Facilitating information retrieval and information use 868 (MIT 868) - Credits: 8.00
IT systems in libraries 869 (MIT 869) - Credits: 8.00
Knowledge management 872 (MIT 872) - Credits: 8.00
Network technologies 873 (MIT 873) - Credits: 6.00
Organisational behaviour and leadership 875 (MIT 875) - Credits: 6.00
Strategic ICT management 876 (MIT 876) - Credits: 5.00
IT Research 879 (MIT 879) - Credits: 8.00

Elective modules

Big data science elective 801 (COS 801) - Credits: 5.00
Big data science elective 802 (COS 802) - Credits: 5.00
Big data science elective 801 (ERZ 801) - Credits: 5.00
Big data science elective 802 (ERZ 802) - Credits: 5.00
Big data science elective 801 (INF 801) - Credits: 5.00
Big data science elective 802 (INF 802) - Credits: 5.00
Big data science elective 820 (INL 820) - Credits: 5.00
Statistics elective 801 (STK 801) - Credits: 5.00
Statistics elective 802 (STK 802) - Credits: 5.00
Big data science elective 801 (WTW 801) - Credits: 5.00
Big data science elective 802 (WTW 802) - Credits: 5.00

Curriculum: Final year

Minimum credits: 106

Core modules

Mini dissertation in big data science 807 (MIT 807) - Credits: 90.00
Big data science project 808 (MIT 808) - Credits: 20.00
Mini-dissertation 840 (MIT 840) - Credits: 90.00
Strategic ICT management 844 (MIT 844) - Credits: 8.00
IT financial management 864 (MIT 864) - Credits: 8.00
Computer science in perspective 874 (MIT 874) - Credits: 6.00
ICT project management 877 (MIT 877) - Credits: 5.00
IT financial management 878 (MIT 878) - Credits: 6.00
Mini-dissertation 880 (MIT 880) - Credits: 90.00
Mini-dissertation 881 (MIT 881) - Credits: 90.00
Mini-dissertation 882 (MIT 882) - Credits: 90.00

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.