MIT (Big Data Science) (Coursework) (12254017)

Department	Computer Science
Minimum duration of study	2 years
Total credits	180
NQF level	09

Programme information

This degree programme is presented in English only.
Refer also to G31-G41.
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

1. Relevant honours degree with a cumulative weighted average of at least 65% for the honours degree **or** relevant four-year bachelor's degree with a weighted average of at least 65% at final-year level and

1. The following modules passed at first-year level:
   a. Mathematical Statistics or Statistics and
   b. Mathematics (preferably Calculus and Linear Algebra) and
   c. Programming
2. A recommendation letter from the employer/line manager, indicating a commitment that they will make time available for the employee to devote to the studies
3. An essay/motivation letter motivating the interest in this degree
4. Comprehensive intellectual CV

Other programme-specific information

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.

Examinations and pass requirements

The stipulations of the relevant Faculty regulations are applicable.

The Dean may, on recommendation of the relevant head of department, exempt a student from the examination on the dissertation.

The average mark awarded by all the examiners is the final mark, with the pass mark being at least 50%.

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 (not rounded) final mark for the coursework modules and completed the degree within the minimum time.

Curriculum: Year 1

Additional information:
Students are required to take two (2) elective modules with a minimum number of 10 elective credits.

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

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 820 (INL 820) - Credits: 5.00
Digital economy 845 (MIT 845) - Credits: 15.00
Enterprise systems 854 (MIT 854) - Credits: 10.00
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

Core modules

Mini dissertation in big data science 807 (MIT 807) - Credits: 90.00
Big data science project 808 (MIT 808) - Credits: 20.00

The regulations and rules for the degrees published here are subject to change and may be amended after the publication of this information.

The General Academic Regulations (G Regulations) and General Student Rules apply to all faculties and registered students of the University, as well as all prospective students who have accepted an offer of a place at the University of Pretoria. On registering for a programme, the student bears the responsibility of ensuring that they familiarise themselves with the General Academic Regulations applicable to their registration, as well as the relevant faculty-specific and programme-specific regulations and information as stipulated in the relevant yearbook. Ignorance concerning these regulations will not be accepted as an excuse for any transgression, or basis for an exception to any of the aforementioned regulations.