

MAGISTER TECHNOLOGIAE: MATHEMATICAL TECHNOLOGY

(Structured)

Qualification code: MTMNST

REMARKS

- a. Admission requirement(s) Any relevant four-year tertiary qualification. A Student has to apply in advance for status to be granted or an equivalent qualification to be recognized. Depending on the nature of such equivalent qualification, the completion of certain additional subjects may be required.
- In addition, he or she should successfully complete Research Methodology in the first year of study if it was not taken for a previous qualification.
- b. Selection criteria: Selection is based on a personal interview with a departmental selection panel. These procedures will be fully explained to each prospective student at his or her personal interview.
- c. Recommended subjects: It is highly recommended that the student should have passed relevant mathematical subjects during undergraduate studies and/or re-register annually for this qualification.
- d. Duration: A minimum of one year and a maximum of three years. Students have to re-register annually for this qualification.
- e. Presentation and campus: Arcadia Campus (block-based classes)
Please note that the campus indicated is subject to change and confirmation.
- f. Structure: This programme consists of subjects offered on a block basis and a research project in the form of a mini-dissertation (research report). In order to obtain a structured magister technologiae, the student has to pass all the relevant subjects and the mini-dissertation (research report) has to be accepted. The student has to present a colloquium before submitting the dissertation.
- Please note:** Before the research report will be accepted for assessment, a draft scientific paper, based on the research and approved by the supervisor, has to be ready for submission to a peer-reviewed journal (preferably accredited). Research findings should have been presented at a regional symposium or conference.
- g. Subject credits: Subject credits are shown in brackets after each subject.

FIRST YEAR:

CODE:	SUBJECT:	CREDIT	PREREQUISITE SUBJECT(S)
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Two of the following subjects

NAS500T	Numerical Analysis V	(0,040)	
NLA500T	Numerical Linear Algebra V	(0,040)	
ONL500T	Ordinary Nonlinear Differential Equations	(0,040)	
PDQ500T	Partial Differential Equations V	(0,040)	

Plus:

LABORATORY

MTP50AT Mathematical Technology: (0,130)
Laboratory Project (A) V

TOTAL CREDITS FOR THE FIRST YEAR: **0,210**

SECOND YEAR

Two of the following subjects (excluding those taken in the first year)

NAS500T Numerical Analysis V (0,040)

NLA500T Numerical Linear Algebra V (0,040)

ONL500T Ordinary Nonlinear Differential
Equations V

PDQ500T Partial Differential Equations V (0,040)

Plus

LABORATORY

MPT50BT Mathematical Technology: (0,130)
Laboratory Project (B) V

TOTAL CREDITS FOR THE SECOND YEAR: **0,210**

THIRD YEAR

CQMS550T Colloquium (0,040)

Numerical Analysis V
Numerical Linear Algebra V
Ordinary Nonlinear Differential Equations V
Partial Differential Equations V

ILM500T Industrial Mathematics (0,040)

RESEARCH

MAY501T Research Report: Mathematical (0,500)
Technology V

Mathematical Technology: Laboratory
Project (A) V
Mathematical Technology:
Laboratory Project (B)V
Numerical Analysis V
Numerical Linear Algebra V
Ordinary Nonlinear Differential
Equations V
Partial Differential Equations V

MAY501R Research Report: Mathematical (0,000)
Technology V
(re-registration)

TOTAL CREDITS FOR THE THIRD YEAR: **(0,580)**

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