Master of Philosophy specialising in Financial Technology [CM033BUS29]

Convener: A/Prof C-P Georg

Entrance requirements:
There are limited places on the degree and admission is based on merit. The minimum admission requirements are an NQF level 8 qualification (Honours or four-year equivalent degree).

Admission is at the discretion of the Admissions Committee and meeting the minimum requirements does not guarantee acceptance.

Qualification outline:
The African Institute of Financial Markets and Risk Management in association with the Department of Statistical Sciences offers a full-time and part-time MPhil specialising in Financial Technology by coursework and dissertation. The qualification is intensive and challenging, and combines training in financial, statistical, and computing skills with a solid understanding of financial markets and financial innovation. It consists of 120 credits of coursework and a 60 credit minor dissertation, all of which can be completed within one year.

The primary objective of this Master's degree is to equip students with the necessary technological, methodological, and research skills for the emerging field of financial technology. Admission to this degree is open for students from a broad range of backgrounds, but prior coding experience is helpful and a healthy interest in software development is a prerequisite. Students will graduate with a deep understanding of the core principles of financial systems, and a thorough knowledge of the concepts, tools, and systems of modern information technology.

Upon successful completion, candidates should be well equipped for careers in all areas of financial technology in the financial services, and the information technology sector; and to pursue doctoral research within the broad fields of quantitative finance, statistics, and computer science. The programme has been designed to accommodate students from a wide variety of backgrounds.

Duration:
The degree is offered over one year, full-time or two years, part-time and begins in February.

Prescribed curriculum:

Course code	Course name	HEQSF Credits	HEQF Course Level
DOC5032F	South African Financial Markets	15	8
CSC5007Z	Databases for Data Scientists	12	9
STA5075Z	Statistical & High Performance Computing	12	9
DOC5039F	Financial Software Engineering	15	9
CSC5008Z	Data Visualization	12	9

STA5076Z	Supervised Learning	18	9
STA5077Z	Unsupervised Learning	12	9
DOC5037F	Fintech and Cryptocurrencies	24	9
DOC5005W	Minor Dissertation	60	9
	Total:	**180**	

Assessment:
To qualify for the degree, the student must pass all of the prescribed courses and the minor dissertation.

Readmission rules:
Except with the permission of Senate, a student will not be permitted to renew registration in the degree if he or she fails more than two of the courses, or one course and the minor dissertation.

If a student fails one or two of the courses, during their first year of registration, they will be permitted to repeat this/these course/s in the following academic year. A failed course may only be repeated once.

Distinction rules:
The degree will be awarded with distinction if the candidate obtains a mark of 75% or higher for each of the prescribed courses and the minor dissertation.

Further specific administrative requirements:
In addition to completing the University application form, the applicant must submit academic transcripts, a Curriculum Vitae and a letter of motivation. Application for the following year must be made by 30 September.