Important information for UCT's **MPhil specialising in Financial Technology**

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First things first: there is a list of frequently asked questions at the end of this document. Before you send me an email, please check the list.

Important note for 2020: The degree is being moved within the Commerce Faculty for 2020 because I have been awarded the South African Reserve Bank Chair in Financial Stability Studies. Consequently, I have moved departments and will be based at the School of Economics going forward. The degree remains an MPhil in Financial Technology but we might change some of the courses and some courses will get new course codes.

Applications open 1 August and close 30 September. If you have applied before this date, please double-check that you have selected the correct registration (if you have registered for CM033BUS29 as degree code and DOC5032F, DOC5039F, DOC5037F, and DOC5005W as course codes, they are likely to change. Please check http://cogeorg.github.io in early August for an update).

Information technology is becoming pivotal for the financial services industry, which faces a changing skills need in order to deal with an increasingly complex regulatory framework and increased competitive pressure from fintech start-ups.

UCT through the Departments of Statistics and Computer Science, the School of Economics, and the UCT Financial Innovation Lab is ideally positioned to address the shortage of suitably trained graduates in this area. Based on an existing MSc specialising in Data Science, an interdisciplinary degree convened by the Department of Statistics, UCT has created this new degree in Financial Technology by offering three elective courses as well as a 60-credit dissertation convened by the Financial Innovation Lab. The course is designed as a part-time degree. It is suitable for continuing students, i.e. students who are currently working in the financial services industry who want to use the degree to learn the skills needed to adapt to a rapidly changing financial industry.

In this Master's degree, students acquire the necessary skills in both finance and computer science to start a career in the financial services industry. Specifically, the degree will cover the following courses:

Semester 1 - 2020

Code / Course / NQF Credits / HEQSF Level

CSC5007Z / Databases for Data Scientists / 12 / 9

STA5075Z / Statistical & High Performance Computing / 12 / 9

STA5076Z / Supervised Learning / 18 / 9

STA5077Z / Unsupervised Learning / 12 / 9

Semester 2 - 2020

Code / Course / NQF Credits / HEQSF Level

ECO5037S / Fintech and Cryptocurrencies / 24 / 9

ECO4053S / Financial Economics / 14 /8

INF5XXXS / Financial Systems Design / 14 / 9

ECO4131S / Digital Economics / 14 / 8

ECO5016W / Minor Dissertation in FinTech / 60 / 9

TOTAL: 181 credits

The Fintech and Cryptocurrencies course will be taught en bloc at the end of the first semester and all practicals for this course will be project focused.

Students are encouraged to collaborate with fintech startups in the vibrant Cape Town ecosystem and work on practical projects for their thesis. Through this collaboration we hope to instill an *entrepreneurial spirit* in the students. Because of the practical focus of the degree as a whole and the Minor Dissertation in particular, we envisage that some of the dissertation projects might lead to commercially viable ideas.

Cost 2019 (will be similar in 2020, but has not been fully finalized):

Semester 1

DOC5032F South African Financial Markets	R 5,690
(will be replaced in 2020)	
CSC5007Z Databases for Data Scientists	R 6,590
STA5075Z Statistical and HPC	R 6,590
DOC5039F Financial Software Engineering	R 5,678
(will have new course code in 2020)	
CSC5008Z Data Visualization	R 6,590
STA5076Z Supervised Learning	R 9,720
STA5077Z Unsupervised Learning	R 6,590

Semester 2

DOC5037F Fintech and Cryptocurrencies   R 9,084
(will have new course code in 2020)
DOC5005W Minor Dissertation   R 9,040
(will have new course code in 2020)

TOTAL   **R65,572**

Information on the official UCT online application will be updated in this document by 15 August 2019. Please note that this degree is a 120 credit coursework and 60 credit thesis degree and that students will be awarded a Master of Philosophy upon completion.

Additional Information

Entrance requirements
A relevant Honours degree or equivalent (equivalent to a UCT Hons degree), with at least a good 2nd class pass (above 65%). Note that the 65% threshold is not a binding restriction.

Finance
UCT has a number of scholarships available. Check UCT website for opportunities.

Frequently Asked Question

Q: Can I apply via email?
A: Note that we cannot accept applications via email. As indicated on our website, you must apply online through the application form:
http://www.students.uct.ac.za/students/applications/apply/forms
Every applicant <u>must</u> complete the official online application form above.

Q: I do not have a four year degree, can I still apply?
A: You need a four year degree (e.g. a Bachelors + Honours) to be eligible for this Masters, i.e. an NQF level 8 qualification. Unfortunately, we cannot count work experience towards your qualifications.

Q: I do not have a background in computer science or statistics, can I still apply?
A: The requirement of having a background in computer science and statistics is not a binding one. We are interested in top students from a variety of backgrounds. You will need a healthy dose of mathematics, though, and must have at least a strong desire to learn how to program.

Q: I do not have 65% in my Honours, can I still apply?
A: The requirement of having 65% is not a binding one. Note, however, that admission into the course will be highly competitive.

Q: Should I submit my CV as part of the online application?
A: Yes. We will still consider your application if the CV is missing, but to give us a full overview of your background, please include it. If you forgot to submit your CV and you cannot change your application, please send it to co-pierre.georg@uct.ac.za with your full name and student number (if available).

Q: What level of mathematics and coding do I need?
A: In terms of math, you will need some basic calculus (in particular you need to understand what a gradient is) and statistics. We don't per se require you to have taken coding classes at university before, but ideally you have coding experience or at the very least a strong interest in learning how to code.

Q: I want to do the degree part-time. When are classes and do I need to be based in Cape Town?
A: The program can be done both full time and part-time, but you will need to be in Cape Town either way since classes will be in the morning or late afternoon. There is also some teaching en bloc from mid June to mid July. For both full time and part-time students the degree will be one year since part-time students will have some professional experience already which should make it a bit easier for them to

cope with the workload. We do not have the full schedule yet but will update this document as soon as we have.

Q: My coding is a bit rusty, what can I do to brush it up?
A: One way of doing this is to do some of the online courses offered by codecademy, udemy, or coursera. We will be using a lot of python in the degree. Check https://github.com/cogeorg/teaching and in particular our wikis for extensive reading lists and a collection of self-study materials that will help you be optimally prepared.

Q: How many students will you admit to the program?
A: We will be admitting no more than 15 students in 2020. The program will be heavily oversubscribed. However, we will give every single application our full consideration and want to encourage all interested students to apply.