Message from the Programme Director

Management in today’s world is both an art and a science. The requirements for the successful management of a business are multi-dimensional and constantly evolving. For many of today’s managers, the ability to apply quantitative techniques in decision-making is critical. The Master of Science in Quantitative Finance at the Singapore Management University offers a world-class education in the critical skills and knowledge needed to thrive in this fast-paced and evolving business environment.

Dr. Paul Yao
Programme Director

Message from the Dean

As many of you will be aware, SMU is a leading business and professional university in the region. Our Master of Science in Quantitative Finance programme is designed to provide students with a rigorous and practical education in quantitative finance. The programme aims to equip students with the skills necessary to excel in the rapidly evolving world of finance.

Professor David Chan
Dean
Message from the Programme Director


Message from the Dean


SMU Master of Science in Quantitative Finance

Singapore Management University
Message from the Programme Director

Message from the Dean

SMU MASTER OF SCIENCE IN QUANTITATIVE FINANCE
About MQT
Quantitative Finance (MQF) is a broad and dynamic field, spanning trading, investment, corporate finance, and financial mathematics. It is a fast-paced and exciting career path that prepares you for a diverse range of roles across the financial services industry.

PROGRAMME OVERVIEW

MQF is designed to provide students with a strong foundation in quantitative methods and tools that can be applied across different financial applications. You will learn about financial mathematics, statistics, programming, and finance, and how they can be used to solve real-world problems in finance.

The Programme

The MQF curriculum is designed to be flexible, allowing students to tailor their course to their career goals. You will learn about financial mathematics, statistics, programming, and finance, and how they can be used to solve real-world problems in finance.

Scholarships & Awards

The Management Advisory Council, together with leading firms, the University of Sydney and QS sponsored two of the industry awards. Successfully completing the programme is mandatory for all students, and upon successful completion they will be awarded a Master of Science in Quantitative Finance.

Programme Structure

The programme is divided into two parts: the core courses and the elective courses. The core courses provide a solid foundation in quantitative methods and tools, while the elective courses allow students to specialize in areas of interest.

Faculty

Professor Ben Siri and his colleagues will teach the course, bringing their expertise to the forefront. The programme is designed to prepare students for a wide range of careers in the financial services industry.

Careers

The demand for quantitative finance professionals is growing, and the MQF programme prepares students for a wide range of careers in the financial services industry. Graduates of the programme have gone on to work in banking, consulting, and other financial services companies, as well as in government and regulatory agencies.

DESCRIPTION OF ELECTIVE MODULES

THREE MODULES TO CHOOSE FROM:

STOCHASTIC CALCULUS

This module introduces students to the theory and practice of stochastic calculus, which is a fundamental tool for pricing and hedging financial derivatives. The module covers topics such as Brownian motion, Itô calculus, and applications to finance.

CREDIT RISK MODELS

This module covers the theory and practice of credit risk models, which are used to evaluate the creditworthiness of borrowers and to price credit derivatives. The module covers topics such as Basel II, credit risk models, and applications to credit risk management.

PORTFOLIO MANAGEMENT

This module introduces students to the theory and practice of portfolio management, which is the process of selecting and managing investments to achieve investment objectives. The module covers topics such as asset allocation, risk management, and performance evaluation.

ADMISSION CRITERIA

The MQF programme is open to all Bachelor's degree holders, regardless of major. To be considered for admission, applicants must meet the following criteria:

- A minimum of 50% in the Bachelor's degree
- A strong background in mathematics and statistics
- A good understanding of economics

You must also complete a short interview to discuss your interest in the programme and your career goals.

PROGRAMME FEES

The total fee for the programme is AUD 35,000. This fee includes tuition, textbooks, and access to all programme resources. There are no additional fees for the programme.

FAQS

Is the MQF degree a full-time or part-time programme?
- The MQF degree is a full-time programme.

Is employment readiness for admission required?
- Yes, you must be employed full-time to be considered for admission.

What is the difference between MQF and MAF?
- MQF is a full-time programme offered by the University of Sydney, while MAF is a part-time programme offered by the University of Melbourne.

More information on the programme can be found at the University of Sydney website.
About MQT

Quantitative Finance (MQF) is a four-year honours degree program, combining business, computer science, and financial mathematics.

The Programme

The MQF programme is open to all disciplines. Students can register and begin.

in January or July each year.

Aims and Objectives

The Programme structure

The programme is designed to give students a thorough understanding of financial markets and the tools used in quantitative analysis.

The courses are designed to provide students with a solid foundation in mathematics and statistics, as well as an understanding of financial markets and risk management.

Scholarships & Awards

The MSc in Mathematical Finance is a highly competitive programme. Successful students can expect to receive a range of awards and scholarships.

For more information on opportunities and awards, please visit:

Faculty

Professor X and Professor Y are among the leading experts in quantitative finance.

Career

The number of career opportunities for graduates in this programme is significant. Many students go on to work in financial institutions or in academia.
About MQT
Quantitative Finance is an internationally acclaimed four-year Honours degree, comprehensive core course, and rich in mathematical rigor. It is an interdisciplinary program that provides a broad spectrum of learning experiences, and one that is highly regarded by financial markets around the world.

Aims
MQT is designed for students who are passionate about finance, mathematics, and computer science. It provides a unique combination of theoretical and practical knowledge, preparing students for careers in finance, banking, and technology. The program is also ideal for students who are interested in pursuing further studies in finance or related fields.

Program Overview
MQT offers a challenging and engaging curriculum that combines rigorous academic study with practical experience. The program is designed to develop students’ analytical and problem-solving skills, as well as their ability to work effectively in a team.

Admission Criteria
The MQT program is open to all Department of Mathematics and Statistics students, regardless of their background. Any student interested in pursuing the program should contact the School of Mathematics and Statistics for more information.

Program Fees
The program fees for the MQT program are as follows:

<table>
<thead>
<tr>
<th>Fee Type</th>
<th>Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic Students</td>
<td>$X,000</td>
</tr>
<tr>
<td>International Students</td>
<td>$Y,000</td>
</tr>
</tbody>
</table>

**Program Structure**
Program structure is designed to provide a comprehensive understanding of finance, mathematics, and computer science.

Scholarships & Awards
MQT students are eligible for a range of scholarships and awards. These opportunities are designed to support students throughout their academic journey.

Faculty
The MQT faculty comprises experienced and knowledgeable educators from the School of Mathematics and Statistics.

Career
The MQT program prepares students for careers in finance, banking, and technology. Graduates are equipped with the skills and knowledge to pursue a variety of career paths in the financial sector.

Description of Elective Modules

**Stochastic Calculus**
This module covers the theory and practice of stochastic calculus, including Brownian motion, Ito’s formula, and the Black-Scholes model. Students will learn how to apply these concepts to real-world financial problems.

**Credit Risk**
This module focuses on the models and techniques used to assess and manage credit risk. Students will learn about credit scoring, rating models, and stress testing.

**Portfolio Management**
This module covers the principles and practices of portfolio management, including asset allocation, risk management, and performance evaluation.

Market Infrastructure

**Practical Guide to a Free World Economy, Country and Communities Strategies**

**Real Business Strategies**
This module explores practical strategies for managing a business in a changing world economy, focusing on countries, communities, and the global marketplace.

**Quantitative Trading Strategies**
This module introduces students to the techniques and tools used in quantitative trading, including statistical analysis, machine learning, and algorithmic trading.

FAQs
Is the MQT program a full-time or part-time program?
No. The MQT program is offered on a full-time basis.

Is eligibility required for admission?
Yes. Eligibility requirements are based on academic performance and completion of specific prerequisite courses.

What is the difference between MQT and MAF?
MAF (Master of Science in Finance) is a professional degree program that focuses on advanced financial theory and practice.

What is the career path of a graduate with an MQT degree?
Graduates of the MQT program have diverse career opportunities in finance, banking, and technology. Many pursue careers in investment banking, asset management, or risk management.
Message from the Programme Director

Management is worth maybe 10%, and remaining 90% remains more or less unexplored. A true professional in quantitative finance, however, thrives on those 90% and pushes the boundaries of normal practice.

This programme is designed to help you explore these 90% in a meaningful way. We want you to be more than just a sitting in a desk with a computer and a spreadsheet and understand how the world works.

By the end of this programme, we hope you will have a deep understanding of the industry and how it operates, and be able to contribute to its development.

We believe in the power of education and are committed to providing you with the best learning experience possible.

Thank you for choosing our programme.

Sincerely,
[Signature]
[Name]
Programme Director

SMU MASTER OF SCIENCE IN QUANTITATIVE FINANCE
S A N G A P O R E  M A N A G E M E N T  U N I V E R S I T Y