

# INTERNATIONAL PROGRAMMES

# **Table of Contents**

Master's degree	2
Master of Science in Quantitative Finance • Kiel University • Kiel	7

# Master's degree



# **Master of Science in Quantitative Finance**

Kiel University • Kiel

## Overview

Degree	Master of Science (MSc) in Quantitative Finance
Teaching language	• English
Languages	In the compulsory section of the programme, all lectures and examinations will be held in English.  In the compulsory elective section and the supplementary subject, some lectures and examinations may be held in German. However, it is always possible to choose subjects such that they are completely held in English as well. German as a foreign language is taught in German. No prior knowledge is needed.
Programme duration	4 semesters
Beginning	Winter and summer semester
Application deadline	<ul> <li>Application period with aBachelor's degree obtained in Germanyvia Kiel University:</li> <li>1 June to 1 August for the following winter semester</li> <li>1 December to 1 February for the following summer semester</li> <li>Application period with aBachelor's degree obtained in other countries via uni-assist:</li> <li>1 March to 15 July for the following winter semester</li> <li>1 November to 15 January for the following summer semester</li> <li>Effectively, formalities for foreign applicants normally require at least three additional months, e.g. visa application, application for scholarships from the DAAD or elsewhere, etc.</li> </ul>
Tuition fees per semester in EUR	None
Combined Master's degree / PhD programme	No
Joint degree / double degree programme	No
Description/content	The MSc in Quantitative Finance enables you to deepen your understanding of financial markets. It provides a sound platform for a career in the finance sector. Courses cover the theory of financial markets, pricing in derivatives markets, corporate finance and the treatment of risk and uncertainty. To prepare you for a wide range of careers, we offer courses in the application of numerical methods as well as a structural introduction to the theory of practice of empirical work in finance.

The programme consists of courses offered by the Departments of Economics, Business Administration, Statistics and Econometrics, and Mathematics. The aim of the programme is to provide graduates with a sound and comprehensive foundation in both quantitative finance and the theory of financial economics.

We offer students access to recent research in specialised seminars. Students also choose additional elective courses from other areas of economics to broaden the scope of their education.

#### **Course Details**

#### Course organisation

The Master's programme is organised in seven parts:

- 1. Compulsory Section Statistics & Econometrics (24 ECTS)
- 2. Compulsory Section Mathematical Finance (24 ECTS)
- 3. Compulsory Elective Section Specialisation in Mathematical Finance (6 24 ECTS)
- 4. Compulsory Elective Section Financial Economics & Corporate Finance (15 48 ECTS)
- 5. Compulsory Elective Section Seminar (5 12 ECTS)
- 6. Supplementary Subject (0 13 ECTS)
- 7. Master's thesis (18 or 30 ECTS)

The regular length of study for the programme is four semesters. Core courses are comprised of lectures from the fields of financial economics, mathematical finance, econometrics and statistics. In addition to a Master's thesis, students have to write a seminar paper.

There are two versions for the completion of the Master's thesis:

- 1. 30 ECTS: six months processing time, or
- 2. 18 ECTS: 15 weeks processing time; two additional modules need to be completed

#### Examination regulations:

www.studservice.uni-kiel.de/sta/fachpruefungsordnung-quantitative-finance-master-1-fachenglisch.pdf

Modules and course descriptions:

www.wiso.uni-kiel.de/de/studium/dateien-studienfaecher/modulhandbuecher/module-manual-economics-master-programmes.pdf

A wide range of specialised courses offered on a regular basis gives students an insight into many areas of economic research arising through cooperation with the Kiel Institute for the World Economy.

For the study plan for the Master's programme in Quantitative Finance, see below:

# A Diploma supplement will be issued

Yes

#### International elements

Kiel University and the Department of Economics offer exchange programmes for spending a semester at a partner university abroad (ERASMUS and direct partnerships with universities worldwide). For students interested in such exchange programmes, we recommend going abroad in the third semester of the programme. The credits from the partner university can be transferred to the programme.

# Description of other international elements

Kiel University and the Department of Economics offer exchange programmes for spending a semester at a partner university abroad (ERASMUS and direct partnerships with universities worldwide). For students interested in such exchange programmes, we recommend going abroad in the third semester of the programme. The credits from the partner university can be transferred to the programme.

Course-specific, integrated No German language courses  Course-specific, integrated No English language courses		
		NO
0	Course-specific, integrated English language courses	No

## Costs / Funding

Tuition fees per semester in EUR	None
Semester contribution	An <b>enrolment fee</b> ("Einschreibgebühr") of 55 EUR is charged for the first enrolment at Kiel University. A <b>semester contribution</b> ("Semesterbeitrag") currently amounting to 277 EUR must be paid each semester at Kiel University. This covers free public transport ("landesweites Semesterticket") for trains and buses in Schleswig-Holstein and Hamburg, reduced lunch prices, and other benefits for students.
Costs of living	The monthly costs of living in Germany are currently at least 934 EUR per month. Please note that when applying for a visa (from countries requiring a visa) and also later in Germany when extending a residence permit, financial means in the amount of the living costs for one year (11,208 EUR) must be proven.  More information can be found here: www.international.uni-kiel.de/en/advising-activities-services/service-information/visa.
Funding opportunities within the university	No

# Requirements / Registration

# Academic admission requirements

Applicants are expected to hold a **Bachelor's degree** or a comparable university degree (minimum grade 2.5) with a regular duration of university education of three years or more, and with 180 ECTS credit points or more.

In the 180 credit points, the following needs to be included:

- 35 credit points from courses on principles of economics (i.e. courses on microeconomic
  theory and courses on macroeconomic theory) with no overlapping in substance, and in
  courses on quantitative methods with no overlapping in substance
  of which:
  - **20 credit points** from courses on **quantitative methods**, i.e. courses on analysis, algebra, statistics and econometrics.

Applicants with a minimum overall grade of 3.0 may also be eligible to participate in the Master's programme in Quantitative Finance if the weighted average grade (weighted with the credit points) from courses in economics and on quantitative methods is at least 2.5.

The programme also welcomes applications from students in fields such as mathematics, physics or computer science who have a proven interest in financial topics.

With regards to content and comparability an official module manual has to be submitted. In case of unavailability of an official manual, module descriptions approved by the offering institution of higher education are accepted. To avoid unnecessary paper piles, it is also allowed to provide a link

to an official online handbook. The module manual needs to be provided either in German or English language.

Admission requirements can be found here:https://www.wiso.uni-kiel.de/en/study/misc/info-inst-econ/application

and here: https://www.wiso.uni-kiel.de/en/study/master/quantitative-finance

We also provide an optional entry-level self testfor your own assessment of knowledge that is required in our Master's programmes. Further information can be found here.

#### **Recommended Literature**

Please find a list of recommended literature here.

#### Language requirements

Proof of English language skills by

- C1/CEFR
- TOEFL (paper-based test): 550 points or an equivalent test e.g., IELTS 6.5 or TOEFL iBT 79
- Bachelor's degree with English as the language of instruction

#### **Application deadline**

Application period with a Bachelor's degree obtained in Germany via Kiel University:

- 1 June to 1 August for the following winter semester
- 1 December to 1 February for the following summer semester

Application period with a Bachelor's degree obtained in other countries via uni-assist:

- 1 March to 15 July for the following winter semester
- 1 November to 15 January for the following summer semester

Effectively, formalities for foreign applicants normally require at least three additional months, e.g. visa application, application for scholarships from the DAAD or elsewhere, etc.

#### Submit application to

Bachelor's degree obtained in Germany: Kiel University

Bachelor's degree obtained in other countries:uni-assist

More Information: programme website

### **Services**

Possibility of finding part	-
time employment	

The Department of Economics and the Kiel Institute for the World Economy offer jobs as student assistants. Students can apply for these jobs upon availability.

#### Accommodation

Please find information on accommodation in Kiel on the following website: www.international.uni-kiel.de/en/advising-activities-services/service-information/accomodation-in-kiel/.

#### Career advisory service

Career coaching: www.careercenter.uni-kiel.de/de/career-coaching

Career Center seminars: www.careercenter.uni-kiel.de/de/seminarangebote/sem-c-c

Support for international students and doctoral candidates

- Welcome event
- Tutors
- Cultural and linguistic preparation

General services and support for international students and doctoral candidates International students receive support by Kiel University's International Centre in manifold ways: www.international.uni-kiel.de/en/about-the-international-center



# Kiel University Interfaces

Kiel University (CAU) uses research, teaching and the transfer of science to address the great challenges of our time in health, environmental and cultural change, technology and energy. In doing so, it ensures peace and preserves livelihoods for future generations.

#### » more:

https://www.youtube.com/watch? v=WYX\_XFd0ROM

# **Kiel University**

#### **Kiel University**

© Marvin Radke - standbildtechniker.de

Kiel University (also referred to as the CAU) was founded in 1665. It is Schleswig-Holstein's oldest, largest and best-known university, with 27,000 students and 3,700 staff members. It is also the only full-fledged university in the state. Seven Nobel Prize winners have worked here. The CAU has been successfully taking part in the Excellence Initiative since 2006.

We use research, teaching and the transfer of science to address the great challenges of our time in health, environmental and cultural change, nutrition and energy. In doing so, we ensure peace and preserve livelihoods for future generations. We use responsible actions to make sure that scientific discoveries are transferred into all sectors of our society by interdisciplinary thought – regardless of short-lived trends – where they are incorporated into political, economic and social decisions aimed at securing peace and prosperity.

When it was founded back in 1665, the CAU had the motto "Pax Optima Rerum: peace is the most valuable asset." This maxim is as applicable today as it was over 350 years ago. We want to follow this key idea and contribute towards creating a peaceful, fair world in which everyone lives freely and comfortably. We aim to create a world in which treating the environment with respect also enables future generations to enjoy the same benefits.

#### CAU's mission:

Our mission is to deliver research and teaching that contribute to peace, prosperity and maintaining a pluralistic, free society as well as address the challenges we are facing. Our strong disciplines carry out this mission. The fulfilment of this mission requires interdisciplinary collaboration and involves transdisciplinary issues. We find solutions to today's pressing problems and implement these solutions together with stakeholders from society, industry and politics.

#### Teaching profile:

We are dedicated to research-based teaching and learning. Therefore, the development of new teaching approaches is evolving constantly

at the interfaces between research from the different scientific disciplines. Students from all over the world benefit from this: research results are quickly integrated into programme curricula and our academic staff is trained in state-of-the-art teaching methods.

#### Research profile:

The CAU is Schleswig-Holstein's only full-fledged university with a major focus on research. Over time, four dynamic priority research areas have systematically developed. These are based on strong disciplines interacting together – Marine Science, Life Science, Societal and Cultural Change, and Nano Surface and Interface Science. Each individual research area makes a substantial contribution towards dealing with at least one of the grand challenges of our time.

#### Transfer profile:

A university is not an island. It is an entity that impacts on, with and for society in a number of ways, by offering space for new ideas, passing on knowledge and values, and enabling debates about controversial subjects. Universities train specialists, produce innovative products and start-ups, help companies to develop further and assist politics by giving advice and warnings. The CAU encompasses top quality, innovative science, a sense of responsibility and the transfer of knowledge. We advocate for the university's active role in society and aim to work closely together with the community to be the driving force behind regional, national and international development by looking for and finding pioneering solutions for our most pressing issues. This is the reason why we maintain a variety of active connections with our partners in science, industry, politics and society.

Read more about our profiles.



### 9

#### University location

The city of Kiel is located directly on the Baltic Sea coast and is the capital of the northernmost German federal state, Schleswig-Holstein. Famous for its sailing tradition, Kiel has hosted two Olympic sailing competitions. The city's annual "Kiel Week" is the world's largest sailing event and one of the biggest cultural festivals in northern Europe. Kiel's international flair is enhanced by its port, where Scandinavian ferries dock next to cruise liners and historic ships. Those who enjoy going out will benefit from the city's lively cultural life as well as the many clubs and bars to be found between the campus and the city centre. Kiel is a strong centre of science and research. Our students benefit from studying by the sea in a city that offers short distances and a wide range of leisure facilities by the waterside. It takes less than 20 minutes to get from the lecture hall to the beach. A fresh breeze on your face and the right books on hand create a great atmosphere for learning. The social conditions for studying in Kiel are excellent. Freshmen receive a welcome payment of 100 EUR when they come to Kiel to commence their undergraduate studies. Here, they have the opportunity to live in one of the many halls of residence, which are reasonably priced and situated close to the universities. In our bicycle-friendly city, not only the universities but also other inner-city locations can be reached conveniently by bike. The new scientific generation represents the most important resource for making Kiel, the state capital, fit for the future.

www.kiel.de.

### **Contact**

#### **Kiel University**

Faculty of Business, Economics and Social Sciences

Dr Cristina Sattarhoff

Wilhelm-Seelig-Platz 1 24118 Kiel

#### Tel. +49 4318803369

- sb.qf@economics.uni-kiel.de
  Course website: https://www.wiso.uni-kiel.de/en/study/master/quantitative-finance
- f https://www.facebook.com/kieluni
- https://twitter.com/kieluni
- in https://www.linkedin.com/school/kieluni/
- https://www.instagram.com/kieluni/
- https://www.youtube.com/kieluni/

Last update 03.05.2024 06:50:31

# International Programmes in Germany - Database

www.daad.de/international-programmes www.daad.de/sommerkurse

#### Editor

DAAD - Deutscher Akademischer Austauschdienst e.V. German Academic Exchange Service Section K23 – Information on Studying in Germany Kennedyallee 50 D-53175 Bonn www.daad.de

#### **GATE-Germany**

Consortium for International Higher Education Marketing www.gate-germany.de

#### Disclaimer

The data used for this database was collected and analysed in good faith and with due diligence. The DAAD and the Content5 AG accept no liability for the correctness of the data contained in the "International Programmes in Germany" and "Language and Short Courses in Germany".

The publication is funded by the German Federal Ministry of Education and Research and by contributions of the participating German institutions of higher education.

