University of Applied Sciences BFI Vienna

FH

# LEARN MORE

# Quantitative Asset and Risk Management

Master programme | Career-parallel



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University of Applied Sciences BFI Vienna | Economics, Management and Finance

#### Raphael Siegert, MA, CFA Graduate and Fund Manager 3 Banken-Generali Investment

"Quantitative Asset and Risk Management is a very intensive master programme, which is just the thing for number-crunchers interested in finance, mathematics and statistics. The degree programme offers comprehensive quantitative know-how in asset and risk management, winning you over with practice-oriented applications. Since the studies are quite internationallyoriented, there are numerous possibilities for a successful career in finance and insurance."

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#### Dear prospective student,

We are delighted that you are interested in the Master's programme in Quantitative Asset and Risk Management.

The programme, of particular interest for students with an inclination towards analytical thinking and mathematics, is an ideal opportunity for continuing your studies and enhancing your CV. Students in the programme gain extensive expertise in asset and risk management with a focus on quantitative methods. Theory of financial models is combined with their practical application in today's financial industry. You will benefit from a faculty of academic and professional experts, who are passionate about their subjects and, based on their wide range of working experience, provide an insight into the life of a finance professional.

Our programme, aimed at an international student body, is run in English and requires students to spend part of their study time abroad. The practical nature of our courses and the international orientation of the programme equips our graduates with the skills required to practice their professions anywhere in the world, be it in the financial industry or at a financial regulatory authority. On our programme you will learn how to use the most important programming languages and tools in the world of finance. We have also been awarded the CeQUINT seal, which stands for the high quality and international orientation of our degree programme.

This is an ideal environment for you to enhance your personal and professional networks. We know that a master's degree is an investment in your future and, like you, we are keen to see this investment pay off.



Prof.<sup>in</sup> (FH) Mag.<sup>a</sup> Silvia Helmreich

Degree programme director

# Quantitative Asset and Risk Management

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#### What you can expect from your studies

The degree programme is optimally aligned with the current requirements and developments of the working world and provides you with the competencies and content relevant to practice. Graduates are able to:

- describe and analyse the connections between asset and risk management in finance.
- quantify and assess risk types in risk management and infer measures for the integrated management of banks and insurance companies.
- analyse various asset classes and their products.
- · carry out portfolio selections and calculate key performance and risk measures.
- apply financial mathematics and statistics to develop financial models.

#### What awaits you after graduation

After completing your studies, a wide range of career opportunities are open to you:

- Asset management
- Risk management and risk controlling
- Liability management
- Private banking and family office
- · Compliance and regulatory reporting

## Main focus

The master programme offers you a scientifically sound as well as practice-oriented education at the cutting edge.



#### Curriculum

#### 1st SEMESTER

Course title	Type of course	Language	Module	ECTS
Fundamentals of Mathematics & Statistics	ILV	Е	Fundamental Quantitative Methods & Finance	4
Fundamentals of Finance	ILV	E		5
Programming & Databases	ILV	E		4
Fundamentals of Economics	ILV	E		3
Multivariate Methods	ILV	Е	Financial Econometrics	5
Time Series Analysis	ILV	E		3
Equity & Foreign Exchange Derivatives	ILV	Е	Derivative Pricing	2
Fixed Income & Credit Derivatives	ILV	E	2 citra i foling	4
Total ECTS				30

#### Total ECTS

#### 2nd SEMESTER

Course title	Type of course	Language	Module	ECTS
Measurement of Market Risk Measurement of Credit Risk Measurement of Non-Life Risk Measurement of Life Risk	ILV ILV ILV ILV	E E E	Risk Measurement	4 4 2 3
Introduction to Asset Management Asset Class Interest Rate Products Asset Class Equity Asset Class Foreign Exchange Asset Class Credit Products Alternative Investments Structured Products	ILV ILV ILV ILV ILV ILV	E E E E E E	Asset Management	2 2 1 2 2 2 2
Research Methods Research Seminar	UE* SE	E E	Research Methods	1 3

#### Total ECTS

#### 3rd SEMESTER

Course title	Type of course	Language	Module	ECTS
Bank Management Risk Controlling & Organisation of Market Risk Risk Controlling & Organisation of Credit Risk Operational Risk for Banks	ILV ILV ILV ILV	E E E	Asset Liability Management & Risk Management for Banks	5 2 3 2
Management of Life Risk Management of Non-Life Risk ALM & Insurance Management	ILV ILV ILV	E E E	Asset Liability Management & Risk Management for Insurances	3 3 3
Integrating Aspects of Asset Management Legal Framework & Ethics	ILV ILV	E E	Applied Asset Management	6 3
Total ECTS				30

4th SEMESTER

Course title	Type of course	Language	Module	ECTS
Applied Research in Asset & Risk Ma- nagement – Advanced Topics in Asset Management	PS	E	Applied Research in Asset & Risk Management – Advanced Topics in Asset Management	6
Master Thesis		Е		18
Diploma Examination		Е		6
Total ECTS				30

ILV: Integrated course I UE\*: Practical course with low assessment load I SE: Seminar I PS: Project seminar













It has been a pleasure for me to participate in the programme "Advanced topics in asset and risk management". It was great to have the chance to bring the knowledge acquired during my tudies into play.

It also was challenging and instructive to work in international teams, create networks, and get insights from the business professionals of Raiffeisen Bank.



#### Alessandro Putoto, BA

Student and Credit Rating Analyst, Generali Group

## **Experience internationality**

The University of Applied Sciences BFI Vienna cooperates with over 80 partner universities all over the world. This international network results in joint projects and an intensive exchange of lecturers and students. A stay abroad offers you the unique opportunity to make international contacts, expand your foreign language skills, get to know other cultures and develop professionally and personally. In addition, it opens up a wide range of career opportunities for you.

#### Intensive programme: Advanced topics in asset and risk management

That is why a stay abroad is obligatory in the second academic year of the master programme. You can choose between long-term mobility (<u>Semester abroad, double degree</u>programme) or short-term mobility (Intensive programme: Advanced topics in asset and risk management). As a participant of the intensive programme you will spend two weeks at one of our partner universities and have the opportunity to receive inspiring input from experts in workshops and lectures, as well as working on a business case in intercultural teams.

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#### **APPLICATION DEADLINE**

For semester abroad in the winter semester: 15 March (Double degree applicants: 1 April) For semester abroad in the summer semester: 15 September (Double degree applicants: 1 October)



DOUBLE DEGREE PROGRAMME University of Bologna (Bologna, Italy) University of Economics in Katowice (Katowice, Poland)



PARTNER UNIVERSITIES e.g. in China, Italy, Poland, Spain, Slovenia & Romania



SEMESTER ABROAD recommended in 3rd or 4th semester



Mag. Claus Inanger Coordinator Outgoing students claus.inanger@fh-vie.ac.at +43/1/720 12 86 - 22



## Studying at UAS BFI Vienna

#### **Admission requirements**

If you meet these admission requirements for the master programme, nothing more stands in the way of your application:

- Secondary school leaving-certificate (High school diploma)
- Completion of a social studies/business/natural science/law/technical bachelor degree in Austria or equivalent bachelor degree abroad
- Qualifications in economic sciences (at least 9 ECTS), mathematics or statistics (at least 6 ECTS)

For this degree programmes you require English **CEFR**-competence **level C1**. German language competence is not necessary for this programme.

#### **Bridging courses for missing ECTS**

Take advantage of the free <u>bridging courses</u> offered by the UAS BFI Vienna (May to July) to acquire missing ECTS and qualify for admission to a master programme.

#### Your application in 6 steps



#### Admission procedure for your desired degree programme

The admission procedure consists of an online multiple-choice test and an admission interview. The test takes place from March to June. Once your application documents have been fully checked, you can select a date for your individual admission test via the application portal within seven days. From the end of January, preparation materials for the admission test will be available on our <u>website</u>, which you can use to prepare yourself optimally. All applicants who have passed the test are then invited to the interview.

In the guide <u>"Application and admission"</u> we give you a comprehensive overview of the admission procedure at our UAS – from your registration on the application portal to the admission to your chosen degree programme.



## Highlights

#### of the degree programme Quantitative Asset and Risk Management



Learn programming languages and tools such as Python, R, SAS and more



Opportunity to obtain the SAS Joint Certificate



Diverse offerings to gain international experience



### 7 good reasons

for studying at University of Applied Sciences BFI Vienna

#### **1** Practical focus

Close ties with companies and lecturers from the economy

#### 2 Innovative

Outstanding academic expertise

#### **3** Compatible with employment

Specially timetabled and online courses

#### 4 Forward-looking

Cutting-edge degree programmes

#### **5** International

Part of a worldwide network

#### 6 People-centered

Small, motivated groups and supportive teaching staff

#### 7 Top location

In the heart of Vienna, the most liveable city in the world

## Let's stay in touch

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- instagram.com/fhdesbfiwien
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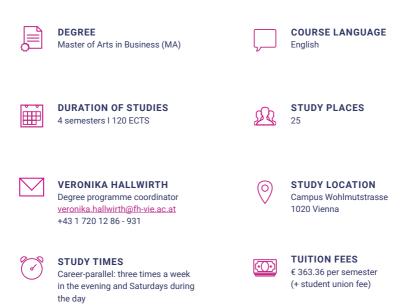
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## ALL UAS BFI VIENNA STUDENTS CAN GET THE **PRO VERSION** OF THE STUDO APP **FOR FREE!**



## Quantitative Asset and **Risk Management**

#### At a glance



#### My Future. My Studies.





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CFA Society FENION SSAS 3 Wolters Kluwer VOLKSBANK