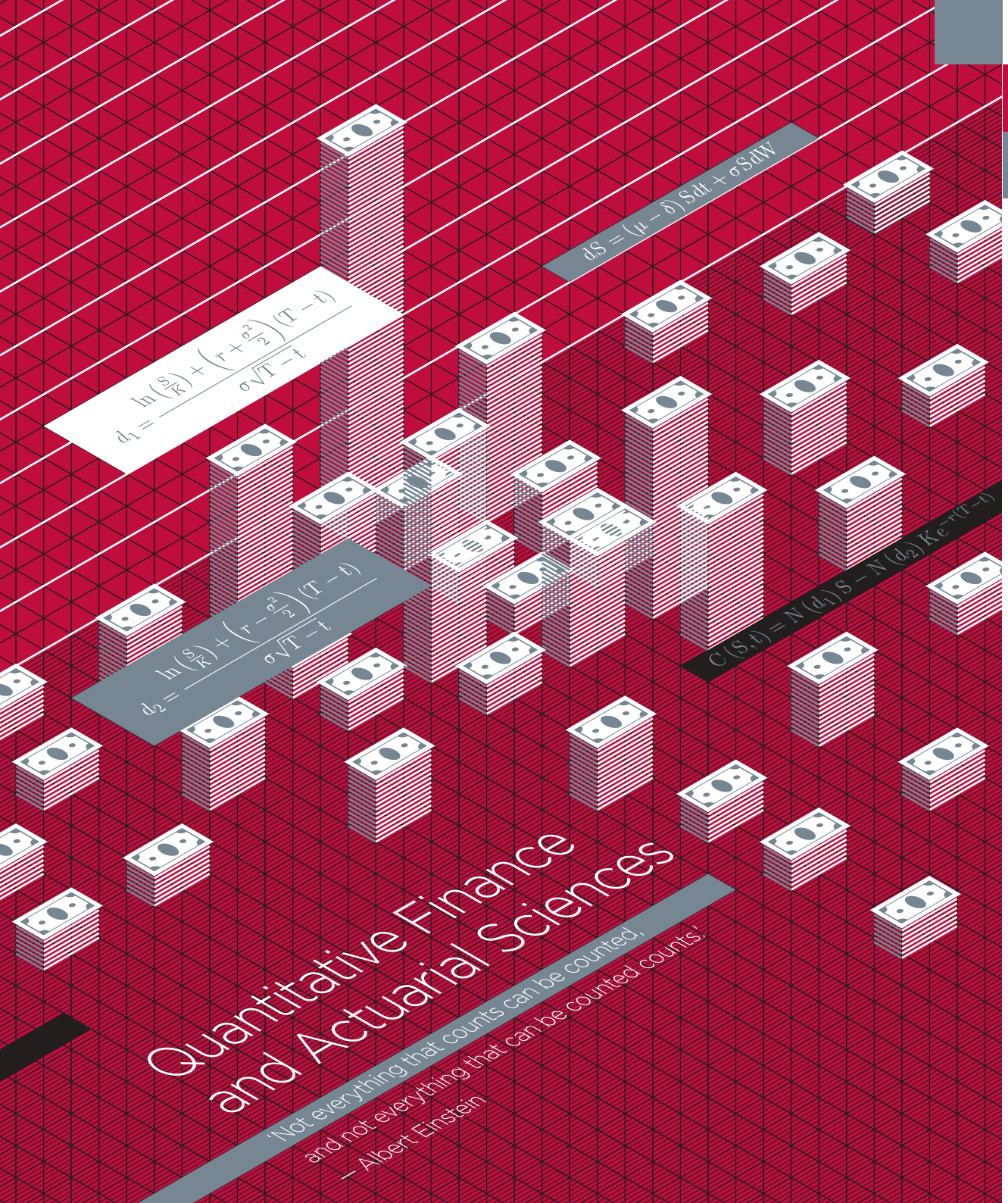
University *of Ljubljana*

SEB SCHOOL OF ECONOMICS AND BUSINESS



Quantitative Finance and Actuarial Sciences

'Not everything that counts can be counted, and not everything that can be counted counts.'
— Albert Einstein

PROGRAMME OFFERED IN ENGLISH

www.ef.uni-lj.si/en

EQUIS ACCREDITED

AACSB ACCREDITED

ASSOCIATION AMBA ACCREDITED

QUANTITATIVE FINANCE AND ACTUARIAL SCIENCES

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The master's programme in Quantitative Finance and Actuarial Sciences is designed to develop in-depth knowledge and specific skills in asset management, risk management, and actuarial sciences for future employees in the financial industry. The programme's goal is to acquaint the students with specific features of the finance and insurance industry. As part of core courses and specific track courses, students learn the basics of quantitative finance, actuarial sciences, the insurance industry, econometric analysis, and modelling. Given the programme's methodological demands and level of difficulty, adequate prior knowledge of mathematics, microeconomics, and macroeconomics is required. Students demonstrate this by passing exams and fulfilling requirements in the relevant courses or holding a recognized undergraduate degree. Apart from candidates holding degrees in economics and business studies, the programme is suitable primarily for students with backgrounds in mathematics, physics, as well as machine and electrical engineering.

The basic goals of the master's programme in Quantitative Finance and Actuarial Sciences are to provide students with the following basic expertise and to develop the following competences and skills:

- To master statistics, microeconomics, finance, and the insurance industry;
- To acquaint students with the special features of financial and actuarial quantitative models and their application in practice;
- To teach students how to think critically and to make complex decisions based on the accessible data from the viewpoint of suitable risk management and achieving suitable profitability;
- To train students to seek new sources and create new knowledge as well as use modern interdisciplinary research methods to address the challenges and issues they encounter during their work in the financial sector;
- To provide excellent preparation for students in the following professions: Actuary, Quantitative Analyst / "Quant", Portfolio Manager, Risk Manager, Quantitative Bank Supervisor.

GENERAL CURRICULUM

1. year
1. semester
Probability and Statistics
Asset Pricing Theory
Financial Institutions Accounting
2. semester
Time-Series and Panel Data Econometrics
Valuation of Financial Derivatives
Contract Theory in Finance and Insurance
ELECTIVE COURSE

2. year
3. semester
*Risk Management / *Risk Modeling in Insurance
**Empirical Finance / **Life and Pension Insurance
MASTER'S THESIS PROPOSAL
4. semester
*Quantitative Behavioral Finance / *Non-life Insurance
ELECTIVE COURSE
MASTER'S THESIS

* Student selects one Course type 11 within semester.
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Students can select several courses and self-design either a more Quantitative Finance-oriented track or a more Actuarial Sciences-oriented track. The Quantitative Finance courses provide expertise that focuses on modelling, risk management, and decisions connected with evaluating, selecting, and managing assets, including the analysis of information problems and regulatory issues within finance. The second track provides training primarily to those who wish to acquire the specific expertise of analysing, managing, and controlling risks within financial institutions, especially risks that affect the liabilities of financial institutions, with a focus on insurance companies.

The course-specific and conceptual structure of the Actuarial Sciences track meets most of Actuarial Association of Europe requirements for actuary course content prescribed by the Slovenian licensor (i.e., the Insurance Supervision Agency) as a prerequisite for granting an authorized actuary license.

The double degree master's programme in Banking & Finance and Economics at the Stockholm Business School as well as ample student exchange opportunities with some of the very best European schools allow for a high level of internationalization. Several top foreign lecturers and guest lecturers from practice bring novel developments in quantitative finance and actuarial science to students and help them connect the theoretical perspectives with practice. This ensures outstanding employment opportunities for programme graduates in the highly globalized financial sector.

ERASMUS EXCHANGE:

1. TILBURG UNIVERSITY, TILBURG SCHOOL OF ECONOMICS AND MANAGEMENT (NETHERLANDS)
2. UNIVERSITY OF GRONINGEN, FACULTY OF ECONOMICS AND BUSINESS (NETHERLANDS)
3. UNIVERSITY OF ZURICH, FACULTY OF BUSINESS, ECONOMICS AND INFORMATICS (SWITZERLAND)
4. BI NORWEGIAN BUSINESS SCHOOL (NORWAY)
5. NORWEGIAN SCHOOL OF ECONOMICS, NHH (NORWAY)
6. KU LEUVEN, FACULTY OF ECONOMICS AND APPLIED ECONOMICS (BELGIUM)
7. LUISS - LIBERA UNIVERSITÀ INTERNAZIONALE DEGLI STUDI SOCIALI - GUIDO CARLI (ITALY)
8. UNIVERSITY OF TORINO (ITALY)
9. UNIVERSIDADE DE LISBOA, LISBON SCHOOL OF ECONOMICS AND MANAGEMENT, ISEG (PORTUGAL)

DOUBLE DEGREE:

1. STOCKHOLM UNIVERSITY SCHOOL OF BUSINESS (SWEDEN)

CONTACTS
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