UNIVERSITY OF TARTU
1632

Master of Science in Natural Sciences –

FINANCIAL AND ACTUARIAL MATHEMATICS

1-year Master's program preparing specialists for financial sector, banking and insurance industries in quantitative methods of risk assessment and hedging, providing knowledge and skills in two major areas - financial engineering and insurance mathematics.

What you can expect from this program

- Special emphasis on applied mathematical models and quantitative methods.
- Only program of this kind in the region, meeting EU educational standards in actuarial mathematics.
- Graduates very competitive on national and international job market as analysts, actuaries and risk engineers.
- Knowledge, practical skills and competence needed to succeed in careers at banks, insurance companies, consulting, financial utilities and financial supervisory authorities.

Why choose the University of Tartu for your Master's

- The University of Tartu, founded in 1632, is one of the oldest universities in Northern Europe, offering a true academic environment and modern facilities for studies.
- Tartu is a unique university town with an intellectual atmosphere, rich history and student traditions. It is a great place to study and live.
- All graduates of Financial Mathematics can find jobs easily in Estonia and around the world.

Professor Kalev Pärna, Ph. D.

Program Manager

The Institute of Mathematical Statistics at the University of Tartu has considerable international experience in both training and research, starting with the EU Tempus project "Training of Specialists in Mathematical Models for the Market Economy".

Artur Sepp, Ph. D.

Associate, Merrill Lynch (New York)

The Master's program in Financial and Actuarial Mathematics at the University of Tartu provided me with a solid basis on how to use mathematical methods to solve some practical problems in the field of finance. Importantly, the enthusiastic and helpful faculty has leveraged my knowledge base and expertise.

Actuarial Math

www.ut.ee/finmath

General admission requirements:

- Applicants must have 240 ECTS earned prior to their application to this program. Graduates with Bachelor's degrees in Mathematics, Statistics, Economics or Physics are candidates well-suited for the program.
- Applicants with a 3-year Bachelor's degree (180 ECTS) must complete one more year (60 ECTS) of university studies elsewhere or in Tartu before applying to this Master's program.
- Prior learning prerequisites: eligible applicants must have completed the following in their prior learning period:
  a) Mathematics, including Calculus, Measure-Theoretic Probability, Statistics (at least 30 ECTS),
  b) Economics, including Corporate Finance, Investments and Derivatives, Microeconomics (at least 15 ECTS),
  c) Computer Science (at least 9 ECTS).
- English language requirement: international applicants for whom English is not a native language need to provide proof of English language proficiency. One of the following is accepted: TOEFL 550 or higher (computer based–213, internet based-79/80); IELTS 6.5; Cambridge Certificate of Proficiency in English – C; Cambridge Certificate in Advanced English – B.

Application process:

1. Complete the online application form for Master's studies by the indicated deadline: www.ut.ee/studentoffice/studies/ma/english.
2. Print and sign the paper application form, and mail it together with the necessary documents by the indicated deadline to: International Student Service, University of Tartu, Ülikooli 18, Tartu 50090, ESTONIA.

NB! Applicants graduating in 2009 with diplomas issued later than the set deadlines (e.g. in July), please send the application form and the most recent Transcript of Records by the required deadline. Indicate to the International Student Service when your diploma will be issued. For further information contact the International Student Service directly.

Documents to be submitted:

- application form for Master`s studies;
- application form for assessing prior learning;
- copy of the Bachelor diploma (or highest preceding study level) and diploma supplement (transcript/mark sheet) in the original language (a copy certified by the educational institution issuing the document or a notarised copy);
- official translation of the diploma and diploma supplement (transcript/mark sheet) into English, translation certified;
- certified copy of the upper secondary school certificate and with a grade list (non-EU applicants only);
- official translation of the upper secondary school certificate and with a grade list into English, translation certified (non-EU applicants only);
- official test results of the English language proficiency;
- copy of the identification document.

All applicants will receive a confirmation upon receipt of their application and its status. Complete applications will be considered by the Admission Commission and students accepted to the program will be notified of their admission immediately.

NB! Before applying please check for current information at **www.ut.ee/studentoffice/studies/ma/english**

Application deadline:

Non-EU applicants: April 15
EU applicants: June 1

Curriculum structure:

Compulsory module	30 ECTS
Master's thesis	30 ECTS
TOTAL	**60 ECTS**

Courses:

Autumn semester 18 ECTS
Non-Life Insurance Mathematics
Life Insurance Mathematics
Risk Theory
Computational Finance

Spring semester 12 ECTS
Models of Financial Mathematics
Simulation Methods in Financial Mathematics
Martingales

Language of instruction: English

Program duration: 1 year, with prior learning prerequisites of 240 ECTS.

Tuition fee:

Program fee is €3068 in 2009/2010 and covers tuition, teaching materials, supervision and advising of thesis preparation. Housing, food, insurance and other living expenses are extra (about €250/ month). For current tuition fees please visit http://www.ut.ee/studentoffice/admission/fees/.

Teaching staff:

The teaching staff consists of professors highly qualified in the field of Financial Mathematics, who have also done extensive research and have international experience. Some of the lectures in the program will be delivered by visiting international staff.

PhD opportunities:

This Master's program prepares students for professional opportunities or further PhD studies in Mathematical Statistics at the University of Tartu or elsewhere. The University of Tartu offers doctoral programs in Mathematics, Economics or Mathematical Statistics with specialization in Financial Mathematics.

To get more information:

Financial and Actuarial Mathematics website:
www.ms.ut.ee/english/studies/studies.htm

University of Tartu	**www.ut.ee**
Admissions	**www.ut.ee/studentoffice**
Tartu	**www.tartu.ee**
Estonia	**www.visitestonia.com**

Address for inquiries:

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University of Tartu
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Telephone +(372) 737 6109, 737 5152
Fax +(372) 737 5153
studyinfo@ut.ee

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