



Department of Mathematics

Insurance Mathematics I, 10 ECTS

The Department of Mathematics and the Open University at Åbo Akademi University offer a course on Insurance Mathematics during the autumn of 2015.

The lectures are given by Ph.D. Rainer Avikainen. The lectures will be given in English. Assistant in the course is Ph. Lic. Margrét Halldórsdóttir.

The course starts on **Friday, September 25, at 16 p.m.** and will be held on Fridays and Saturdays till the beginning of December. In addition, exercise sessions will be held during the week. The venue is the Department of Mathematics of Åbo Akademi University, Fänriksgatan 3 B.

Contents (preliminary): Interest rates and funds (simple interest rate, compound interest rates, continuous payments, annuities, internal rate of return), Mortality (period mortality, cohort mortality, mortality reference model, multiple decrement models), Life Insurance (basic life insurance contingencies, commutation functions, multiple life insurance, net premiums, technical provisions, Thiele's differential equation, loadings), Multiple state models (multiple state models, transition intensities), Extras.

Prerequisites are Probability Theory, Differential and Integral Calculus and preferably some knowledge of basic Stochastic Processes.

The exact time-table for the whole course can be found on the home page

<http://web.abo.fi/fak/mnf/mate/kurser/forsakring/>

Please register to:

<https://web.abo.fi/fc/anmalningsdb/> (The Open University – course fee 50 €)

or

<https://minplan.abo.fi/minplan/> (from 25.5.2015, ÅA students)

Deadline is Friday **18.9.2015**.

For further information please contact: Margrét Halldórsdóttir (mhalldor at abo.fi).