



Actuarial Engineering

from 22nd to 23rd May 2019

Dear all!

We kindly invite you to attend a professional seminar organized by the Slovenian Actuarial Association in cooperation with Prime Re Academy in Ljubljana, entitled **Actuarial Engineering**, to be held

from 22nd to 23rd May 2019

in Ljubljana, Čopova ulica 11, in the large conference hall of the main Ljubljana post office (the entrance is opposite the Muller's shop).

Participants should **bring along their own laptops** so that they can implement and test the theoretical concepts with the Excel® prototypes we will hand over to them.

Registration fee for participation in the seminar is EUR 450 for the members of the Slovenian Actuarial Association, upon registration for the seminar up to 26.3.2019 inclusive, and otherwise EUR 600. For non-members, the application for the seminar is 700 EUR at registration made up to 26.3.2019 inclusive, otherwise 850 EUR. If at least 10 participants register from one organizational unit, the fee for each of them is 100 EUR lower. The registration includes lunch and snacks between breaks, materials and prepared models in Excel®. Registration to the seminar is possible until 7.5.2019.

You are all kindly invited to join us!

The participants of the seminar will receive 50 credits for CPD for SAA.

Please apply for the seminar by the e-mail address of the association: aktuarnica@gmail.com with the note: Actuarial Engineering, no later than 7. 5. 2019. Please state the names, surnames, email addresses and the company in which the participants are present employees. Please specify who will be the payer and, if the payer is a company, provide the tax number of the company. We'll send you an invoice after receiving your email. The registration is valid and confirmed if the invoice is paid within the prescribed time limit. In case of seminar cancellation, the registration fee will be fully refunded.

Ljubljana, januar 25, 2019

Board of SAA

Timetable

Wednesday 22.05.2019

| Time | Schedule |
|---------------|--------------|
| 8.00 – 9.00 | Registration |
| 9.00 – 12.30 | Workshop |
| 12.30 – 14.00 | Lunch |
| 14.00 – 18.30 | Workshop |

Thursday 23.05.2019

| Time | Schedule |
|---------------|----------|
| 9.00 – 12.30 | Workshop |
| 12.30 – 14.00 | Lunch |
| 14.00 – 18.30 | Workshop |

Contents

The workshop aims at learning or refreshing some actuarial techniques used in the insurance and in the financial industry and their implementation in Excel® and/or VBA. These relatively simple and quick calculations can be used to test more sophisticated softwares, to build prototypes or only to understand how methods work in practice.

The topics addressed in the workshop will include:

- Fundamental programming hygiene in Excel and VBA
- Data smoothing (Whittaker–Henderson, ...)
- Calibrations and model fitting (max likelihood, χ^2 , ...)
- Stochastic simulations (collective models, ...)
- Risk aggregation (copulas, ...)
- Pricing ((G)LM, ...)
- Stochastic reserving (bootstrapping, ...)
- Claims development (neural networks, ...)
- Market risks (cellular automata, ...)

It addresses both, the underlying theory and concepts, as well as their practical implementations with Excel® and VBA templates. In particular, it enables participants to implement the techniques directly on their laptop, to later apply them in their daily assignments.

Target Group

The workshop is designed for all professionals who are interested in actuarial and financial modelling. Participants do not need to be fully qualified actuaries, however, they will benefit from a good command of Excel® (excluding VBA). In addition, they should be familiar with elementary concepts of insurance, statistics and stochastic modelling.

Conceptual framework

The Prime Re Academy workshops are of technical nature and structured so that theory and practice alternately complement each other, creating a lively learning platform. We simultaneously present on two separate screens the theoretical foundations in PowerPoint® format and the matching practical applications on an Excel® platform. Thanks to the interlocking of theory and practice, the course contents can be taught in a most efficient manner and the participants can be challenged intensively.

Lecturer



Dr. Frank Cuypers

Has led numerous actuarial engineering and modeling courses and workshops in Europe and Latin America. He comes with a vast lecturing experience and a prominent scientific track-record in modeling complex systems. As a Swiss Re Executive and Chief Actuary at the former Zurich Re in Cologne, he has wide experience in most actuarial disciplines and lines of business, which he has deployed at KPMG and PwC to advise leading providers of financial services and Government Agencies. He is a fully qualified member of the German and Swiss Actuarial Associations (DAV and SAV), which he has served on numerous committees.