european actuarial academy

ANNOUNCEMENT

EAA Seminar

CERA, Module 0: Quantitative Methods for ERM – A Bridging and Refresher Course

10/11 December 2018 | Barcelona, Spain

Organised by the EAA - European Actuarial Academy GmbH in cooperation with the Collegi d'Actuaris de Catalunya.

Introduction

CERA Education

Over the last decade, the concept of Enterprise Risk Management (ERM) has gained significant momentum in the insurance industry and beyond. This came with the recognition of risk as being something not per se to be avoided, but to be optimally exploited in the frame of a company's risk appetite. ERM is going beyond traditional risk management in that it is holistic, and encompasses strategic risk management as well as risk culture.

Many of these developments are reflected in regulatory changes, such as Solvency II (although these focus on policyholder protection and less on opportunities). Solvency II requires an actuarial and a risk management function in all (re-)insurance undertakings. Actuaries should see this as an opportunity to broaden their role, and to show that they are ideally equipped to carry out these tasks.

Against this backdrop, in November 2009, several actuarial associations launched the CERA credential as a global risk management designation for actuaries. CERA pursues the following goals:

- Strengthen international recognition of the actuarial profession's enterprise risk management (ERM) expertise
- Promote the development of more actuaries internationally with training in ERM
- Present new opportunities for actuaries worldwide to use their expertise in an expanding range of areas
- Send a strong message to employers and candidates that the skill set of actuaries offers significant risk management expertise

Based on the 2011-implemented education und examination system of the German Actuarial Association, the EAA offers a series of training courses and exams (through DAV) to study for the CERA designation to all actuaries who want to deepen their knowledge in Enterprise Risk Management.

The Seminar **Quantitative Methods for ERM - a Bridging and Refresher Course**

The seminar begins with an introduction to risk measures. We will treat Value at Risk and expected shortfall and we give an introduction to the modern theory of coherent risk measures. In order to prepare the analysis of dependent risks we next discuss basics of multivariate modelling. The seminar continues with an introduction to financial mathematics. We begin by studying risk neutral valuation and the hedging of derivatives in discrete-time models, followed by an introduction to financial mathematics in continuous time. Topics covered include Brownian motion and the Ito formula, the Black Scholes model and the pricing of simple stock and bond options.

The seminar consists of lectures and exercise sessions. In fact, exercise sessions, where various exercises and supplementary examples are discussed, form an integral part of the seminar: they help the participants to understand the qualitative and quantitative techniques introduced in the lectures.

Participants

The seminar is open to all persons who are interested in deepening their quantitative skills in the fields of enterprise risk management and financial mathematics.

During this seminar, you will not need your laptop.

Purpose and Nature

The 1.5 day seminar serves a double purpose. On the one hand, it is a bridging course designed to prepare actuaries with a more qualitative background for the quantitative parts of the CERA education. On the other hand, it is an independent refresher course for actuaries wanting to brush up their quantitative skills in the fields of enterprise risk management and financial mathematics.

This seminar is not a formal part of the CERA education.
Please visit www.ceraglobal.org for more information on the CERA designation.

Language

The language of the seminar will be English.

Lecturers

Rüdiger Frey
Rüdiger Frey is Professor of Mathematics and Finance at the Vienna University of Economics and Business (WU). Prior to that, he held positions as Professor of Optimization and Financial Mathematics at the University of Leipzig and various academic positions at the University of Zurich and at the Federal Institute of Technology (ETH) in Zurich. He holds a diploma in mathematics from the University of Bonn where he received his PhD in financial economics in 1996. His main research fields are quantitative risk management, dynamic credit risk models and the pricing and hedging of derivatives under incompleteness and market frictions. Rüdiger has published research papers in leading international academic journals and has given seminars at a number of important international conferences and institutions. He is coauthor of the popular book "Quantitative Risk Management: Concepts Techniques & Tools" (Princeton University Press, second edition 2015), which was rated as one of the Top 10 Technical Books of 2006 on Financial Engineering, by Financial Engineering News. Rüdiger has also been involved in consulting projects for Swiss and German insurance companies and banks and is frequently giving practitioner training courses.

Jochen Wolf
Since 2005, Jochen Wolf has been Professor for Mathematics and Economics at the Hochschule Koblenz. Before, he worked for several years at the German financial supervisor BaFin where he was responsible for various aspects of insurance supervision. At BaFin he was also involved in the Solvency II project. Prior to joining BaFin, Prof. Wolf held various research positions in stochastic analysis at Universität Jena and at the Université Paris-Nord. He holds a diploma in mathematics from the Universität Mainz and a doctorate in mathematics (focus probability) from the Universität Jena. Professor Wolf is actively involved in the actuarial education at the German actuarial association (DAV).

Preliminary Programme

Monday, 10 December 2018

08:45 – 09:00	Registration
09:00 – 09:15	Introduction and Welcome (EAA)
09:15 – 10.45	Introduction to Risk Measures
10:45 – 11:00	Coffee Break
11:00 – 11:45	Exercise Session 1
11:45 – 13:00	Basics of Multivariate Modelling
13:00 – 14:15	Lunch
14.15 – 14:45	Exercise Session 2
14:45 – 15:45	Risk Neutral Valuation

15.45 - 16.00 Coffee Break
16.00 - 16.30 Risk Neutral Valuation
16.30 - 17.30 Exercise Session 3

Tuesday, 11 December 2018
09:00 – 11:00 Introduction to continuous-time finance
11:00 – 11:15 Coffee Break
11:15 – 12:00 The Black Scholes Model and Applications
12:00 – 13:00 Exercise Session 4
13.00-14.15 Lunch

Fees & Registration

Please register for the seminar as soon as possible because of the expected demand. If there are more persons interested in this seminar than places available we will give priority to the registrations received first. Please send your registration as soon as possible by using our online registration form at www.actuarial-academy.com.

Your registration is binding. Cancellation is only possible up to 4 weeks before the first day of seminar. If you cancel later, the full seminar fee is due. You may appoint someone to take your place, but must notify us in advance. EAA has the right to cancel the event if the minimum number of participants is not reached.

Please always give your invoice number when you effect payment. All bank charges are to be borne by the participant. We will send you an invoice, please allow a few days for handling.

Your early-bird registration fee is € 790.00 plus 21 % VAT until 10 October 2018. After this date the fee will be € 970.00 plus 21 % VAT.

Venue & Accommodation

Sallés Hotel Pere IV
Calle Pallars 128-130
08018 Barcelona, Spain
Hotel website

We have arranged special prices for accommodation. The special rate is 85,00 € per night, including breakfast and VAT. It is valid for bookings by 11 November 2018 out of our allotment "EAA Seminar". Our allotment includes a limited number of rooms. Kindly book your accommodation directly with the hotel by sending an email to grupos1@salleshotels.com (reference code *EAA seminar*), and note the hotel's reservation terms and conditions and the hotel's cancellation policy

CPD

For this seminar, the following CPD points are available under the CPD scheme of the relevant national actuarial association:

Austria:	10 points
Belgium:	10 points
Bulgaria:	12 points
Spain - CAC	11 hours
Spain - IAE	11 hours
Czech Republic:	2-3 points (individual accreditation)
Estonia:	10 hours
Germany:	11 hours
Hungary:	11 hours
Italy:	approx. 4 credits (GdLA individual accreditation)
Netherlands:	approx. 10 PE-points (individual accreditation)
Russia:	40 points
Slovakia:	8 CPD points
Slovenia:	50 points
Switzerland:	15 points

No responsibility is taken for the accuracy of this information.