

EAA Web Session

CERA, Module A: Quantitative Methods of ERM

17-20 February 2026 | online

Organised by the EAA - European Actuarial Academy GmbH

Introduction

CERA Education

The European Actuarial Academy is one of the main providers of actuarial education – especially when it comes to Enterprise Risk Management (ERM). The concept of ERM has gained significant momentum in the insurance industry and beyond.

We offer a series of four training courses and exams (through DAV) to all actuaries who want to deepen their knowledge in Enterprise Risk Management and gain the international ERM-credential CERA. The defining characteristics of the CERA-credential as offered by the European Actuarial Academy are:

- Provides the most comprehensive and rigorous training in ERM
- Is a fast-growing globally-recognised credential
- Combines a range of business and professional skills with the mathematics of finance and risk
- Equips risk management professionals to empower better business decisions and more profitable business development
- Has a wide range of applications in insurance and finance, and well beyond
- Is supported by actuarial associations worldwide
- Is recognised and transferable internationally
- Has a rigorous and advanced curriculum underpinned by actuarial science, with an emphasis on ERM and professionalism
- Offers career choices outside the traditional actuarial markets

The Web Session 'Quantitative Methods of ERM'

The 4-day web session assists actuaries in broadening their knowledge about modern quantitative financial and actuarial modelling; these topics form an essential part of the CERA syllabus. At the beginning of the online training we give a brief overview of the EAA-route to the CERA designation. The core part of the web session begins with an introduction to the modern theory of risk measures. Next, a number of statistical techniques are discussed, that are highly

relevant for the analysis of actuarial and financial data and for the model-building process in risk management. Among others, we will consider extreme value theory, dependence modelling, copulas, and various aspects of integrated risk management. The training continues with an introduction to the modelling and the management of interest rate and credit risk. In particular, participants will learn how to price simple interest options or Credit Default Swaps, how to account for counterparty risk and how to deal with credit portfolio risk.

The web session 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, and they are a key element in the preparation for the CERA exam.

Participants

The web session is open to all persons who are interested to obtain comprehensive skills on Enterprise Risk Management. Given the fairly quantitative nature of the material discussed, participants should be familiar with basic results of modern statistics, actuarial and financial mathematics. We recommend that participants with weaker quantitative skills do some preparatory reading, using for instance the slides and lecture notes of the course.

Purpose and Nature

This online module is one part in a course that consists of four modules. They can be booked as a whole series to fulfil the requirements for receiving the CERA designation, or individually as CPD training. Written exams on the course are offered subsequently.

Please contact your actuarial association regarding the recognition of the (online) trainings and the exams. The national association has to be at least Acceding Party of the CERA Global Association so that an actuary who passes this course may receive the CERA credential. Please visit www.ceraglobal.org to get information if your association is entitled to issue the CERA designation.

Language

The language of the web session will be English. The exams will be, by your preference, in German or English. Please choose the language during the booking process. The exams are also available in Spanish for the members of the Instituto de Actuarios Españoles (Spanish Institute of Actuaries).

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 actuarial-academy.com

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 co-author 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 serves as 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. Jochen Wolf is a member of the German Actuarial Association (DAV) and a CERA-holder. He is actively involved in the actuarial education at the German actuarial association (DAV).

Preliminary Programme

Tuesday, 17 February 2026

09:00 – 09:30	Overview of the EAA-route to the CERA designation (Frey, Wolf)
09:30 – 10:30	Risk measures (Wolf)
10:30 – 10:45	Break
10:45 – 11:30	Risk Measures (Wolf)
11:30 – 11:45	Break
11:45 – 12:30	Risk Measures and Exercises (Wolf)
12:30 – 13:30	Break
13:30 – 14:15	Exercises (Wolf)
14:15 – 15:15	Tails of distributions and Extreme value theory (Frey)

Wednesday, 18 February 2026

09:00 – 10:30	Multivariate Models and Copulas (Frey)
10:30 – 10:45	Break
10:45 – 11:30	Dependence Modelling and copulas (Frey)
11:30 – 11:45	Break
11:45 – 12:30	Dependence Modelling and exercises (Frey)
12:30 – 13:30	Break
13:30 – 15:00	Integrated Risk Management and exercises (Frey)

Thursday, 19 February 2026

09:00 – 10:30	Interest rates: products and models (Wolf)
10:30 – 10:45	Break

10:45 – 11:30	Interest-rate models (Wolf)
11:30 – 11:45	Break
11:45 – 12:30	Exercises (Wolf)
12:30 – 13:30	Break
13:30 – 15:15	Interest rate risk management (incl. exercises) (Wolf)

Friday, 20 February 2026

09:00 – 10:15	Credit risk: basics and modelling (Frey)
10:15 – 10:30	Break
10:30 – 11:30	Credit Risk modelling (Frey)
11:30 – 11:45	Break
11:45 – 12:30	Credit risk: modelling and management (Frey)
12:30 – 13:30	Break
13:30 – 14:30	Credit risk: special topics and exercises (Frey)

All times are given in CET (Central European Time)

Recommended Literature

Course material will be distributed via the EAA. As background reading we recommend the “Panjer Syllabus” of the CERA education as published on the website www.ceraglobal.org and the book “Quantitative Risk Management, 2nd edition” by McNeil, Frey and Embrechts, Princeton University Press 2015.

Fees & Registration

Early Bird Registration Fee (until 6 January 2026):

- For private customers in the EU: €975.00 + VAT of the billing country (example Germany: €1,160.75 incl. 19% VAT)
- For private customers outside the EU: €1,160.75 (incl. 19% VAT)
- For businesses within the EU (excl. Germany, with valid VAT ID): €975.00 (net, reverse charge applies)
- For businesses in Germany: €1,160.75 (incl. 19% VAT)

Regular Registration Fee (from 7 January 2026):

- For private customers in the EU: €1,080.00 + VAT of the billing country (example Germany: €1,285.20 incl. 19% VAT)
- For private customers outside the EU: €1,285.20 (incl. 19% VAT)
- For businesses within the EU (excl. Germany, with valid VAT ID): €1,080.00 (net, reverse charge applies)
- For businesses in Germany: €1,285.20 (incl. 19% VAT)

Important VAT Information:

- For private customers with a billing address in an EU country: VAT will be charged at the applicable rate in the country of the billing address. The final amount, including VAT, will be calculated upon invoicing.

- For customers with a non-EU (third country) billing address: Only a non-company billing address is accepted for VAT compliance reasons. 19% VAT applies to all non-EU private customers.
- For businesses within the EU (excluding Germany), Iceland, Liechtenstein, Norway, Switzerland, and the UK with a valid VAT ID: The reverse charge mechanism applies (net price; VAT will not be charged). Please ensure your valid VAT ID is entered correctly during registration.
- For all customers with a billing address in Germany: 19% VAT applies.

Please submit your registration using this [booking form](#). Closer to the event, you will receive further login details to join the web session.

Your registration is binding. Cancellation is only possible up to 4 weeks before the first day of the event. If you cancel later, the full participation 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.

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

Registration is open until two working days before the web session. If registration has already been closed for this web session, please call us or send an email to contact@actuarial-academy.com in order to find out whether a late registration is still possible.

Technical Requirements

Please check with your IT department if your firewall and computer settings support web session participation (the programme Zoom will be used for this online training). Please also make sure to join the web session with a stable internet connection.

CPD

For this web session, the following CPD credits are available under the CPD scheme of the relevant national actuarial association:

Austria:	18 points
Belgium:	18 points
Bulgaria:	20 points
Croatia:	individual accreditation
Czechia:	18 hours
Denmark	20 credits
Estonia:	18 hours
Finland:	11 points
France:	108 points
Germany:	20 hours
Greece:	24 points

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Hungary:	18 hours
Iceland:	18 credits
Ireland:	18 hours
Italy:	approx. 4 credits (individual accreditation)
Latvia:	18 hours
Lithuania:	18 hours
Netherlands:	approx. 18 points (individual accreditation)
Norway:	18 points
Poland:	18 hours
Portugal:	18 hours
Serbia:	5 hours
Slovakia:	8 points
Slovenia:	50 points
Spain:	CAC: 18 hours, IAE: 18 hours
Switzerland:	15 points
USA:	SOA (Section B): up to 21.60 hours

No responsibility is taken for the accuracy of this information.