EAA Advanced Training

Actuarial Data Science - Completion

3-5 September 2025 | online

In this three-day training, we deepen techniques and methods of (Actuarial) Data Science and take a rather theoretical tour to complete this course. We will cover important aspects of information theory from coding theory to web computing and close the mathematical foundations of deep learning. Along with insights in relevant aspects of.... <u>read more</u>

CERA, Module B: Taxonomy, Modelling and Mitigation of Risks

15-19 September 2025 | online

The web seminar focuses on quantitative analyses of financial and non-financial risks of an insurance company and the effect and possible applications of risk mitigation techniques. After an introduction to the economic valuation of an insurance company, including stochastic valuation models and approximation techniques for life... read more

Web Session 'IFRS 17 Risk Adjustment: Practical Approaches & Lessons Learned'

23 September 2025 | online

The IFRS 17 standard for Insurance Contracts, published in 2017, has triggered significant implementation projects worldwide. One crucial aspect of IFRS 17 is the concept of risk adjustment, which plays a vital role in measuring the compensation that the entity requires for bearing the uncertainty about the amount and timing of the cash.... read more

Actuarial Data Science – Advanced

24-26 September 2025 | online

In this three-day training, we cover a wide range of topics. This includes an advanced introduction to the concepts and terms of artificial intelligence, modern data management concepts (with a special look at insurance companies), aspects of data protection and the mathematical and statistical concepts of data mining. On our way, we touch..... read more

Web Session 'Open-Source Tools R and Python: Extending the Toolbox of the Actuary'

29/30 September 2025 | online

Over the last years, typical data science tasks like data manipulation and modelling have gained a stronger foothold in the day-to-day professional life of the actuary. Open-source languages are renowned to be especially equipped to deal with these kinds of tasks, but can also be tricky to get started with, especially when one has not been... read more

Web Session 'Cyber Risk and Insurance'

1/2 October 2025 | online

In modern economy, cyber risk has become a major challenge across many industries. As every prevention measure is limited, there is an increasing need for cyber insurance. In the last years, there was a strong evolution of cyber insurance. In this session, the impact of cyber risk on various steps of the value chain is analysed, including (but not... read-more



Web Session 'Assets and Liabilities Management Part 1: Introduction' 8-10 October 2025 | online

This ALM training starts with a first part that is primarily an introduction to main concepts of ALM and is therefore particularly suited for participants coming from different departments (for instance, people dealing with own risk solvency assessment techniques or enterprise risk management) and wanting to develop a broader view on what ALM... <u>read more</u>

Web Session 'Unlocking Actuarial Data Insights: A Practical Guide on RAG and Advanced Techniques'

15 October 2025 | online

In the continuously evolving landscape of Artificial Intelligence (AI), Retrieval Augmented Generation (RAG) has emerged as a disruptive technology transforming how we interact with AI systems. RAG combines the strengths of information retrieval and Large Language Models to create powerful applications that can access and use vast amounts... <u>read more</u>

Seminar 'Storytelling for Actuaries'

16/17 October 2025 | Lisbon, Portugal

In today's data-driven world, actuaries play a crucial role in explaining complex numbers, statistics and models to allow for informed decisions. However, amidst the sea of data, the power of storytelling often gets overlooked. In this immersive 2-day course, we invite actuaries to explore the art of storytelling and discover how it can enhance.... read more

Web Session 'Climate Change Scenarios: Application, Evolution, and Reporting'

21 October 2025 | online

Climate Risk scenarios are commonly used in the insurance industry for stress testing, but interpreting and communicating results is often challenging, given strong limitations and complex assumptions. This session will provide practical guidance on stress testing application in the ORSA context, focusing on financial risks, and provide... read more

Web Session 'Intergenerational Fairness and Pensions'

22 October 2025 | online

Pension funds link generations simply by the time scale of their transactions. Participants pay pension contributions for decades so that getting benefits after retirement, hopefully again for decades. During the course of their career new cohorts start their working life, so there is always active and retired living side-by-side. One group is only... read more

Web Session 'Modern Capital Market Concepts for Life and Pension Products'

23 October 2025 | online

Due to the recent shifts in capital markets and a stricter regulatory environment, insurers need to rethink their product offerings to stay ahead of the competition and offer life and savings solutions well suited to the various requirements of policyholders. This includes the need for capital guarantees in combination with strong performance engines... <u>read more</u>



Web Session 'Risk Aggregation and Capital Allocation: From Calibration to Application and Beyond'

27 October 2025 | online

Risk diversification is at the heart of insurance. In a modern Enterprise Risk Management (ERM) approach, a company's entire risk profile - including risk diversification and concentration - must be considered in decision-making processes such as insurance pricing, product design, asset allocation and reinsurance. The impact on risk-oriented... read more

Web Session 'Machine Learning Finance for Pension Funds with **Examples'**

30 October 2025 | online

In general, machine learning (ML) is the study of algorithms that improve through experience. These algorithms or models can make systematic, repeatable, validated decisions based on historical data. ML has come a long way in recent years, which is reflected in the methods available for time series forecasting (they are also important for assessing... read more

Web Session 'Addressing Class Imbalance in Machine Learning'

3 November 2025 | online

In both life and general insurance, many predictive modelling tasks involve outcomes that occur infrequently—such as policy lapses, claims, or fraud. This leads to class imbalance, a situation where the target variable's classes are not represented equally in the data, often with one class (e.g. policy lapse) being vastly outnumbered by the... read more

Web Session 'Assets and Liabilities Management Part 2: Advanced'

5-7 November 2025 | online

For an insurance company, ensuring the proper coordination between assets and liabilities in order to achieve targeted financial objectives is of paramount interest. A strategy used to reach such objectives is "asset and liability management" (ALM in short). ALM can therefore be viewed as any ongoing process that defines, implements, and monitors.... read more

Web Session 'Hands-on Adaptive Learning of GLMs for Risk Modelling in R'

10/11 November 2025 | online

In recent years, machine learning techniques have found their way into the insurance world. While these methods generally improve model accuracy, both explainability and manual interventions continue to play a key role in risk and tariff modelling. This is why practitioners in many lines of business still apply Generalised Linear Models... read more

Web Session 'Applying & Governing AI in Actuarial Work: Implications Assessed'

12 November 2025 | online

Artificial intelligence (AI) is a topic of increasing relevance in our societies, especially regarding its applications within the insurance industry and actuarial work. While it presents certain risks, it also offers numerous opportunities. This session will provide an overview of the types of risks associated with AI, highlight key risk management practices, and... read more



Web Session 'Emerging Risks: Statistical Analysis and Scenario Building'

13/14 November 2025 | online

In a context of widespread instability, the actuarial analysis of emerging risks takes on particular importance to facilitate the adaptation of insurance to these profound changes. Whether it be old risks with poorly anticipated consequences (such as the epidemiological risk, as demonstrated by the recent Covid-19 crisis, whose consequences can... read more

Web Session 'Stochastic Projection Models in Life Insurance'

19 November 2025 | online

With the introduction of new accounting frameworks, the corresponding alignment of planning and performance management and with the increasing need for sophisticated asset liability management, the stochastic assessment of risk and value in connection with participating life insurance portfolios has become the industry standard over... <u>read more</u>

Web Session 'Quantifying the Prospective Impact of Air Pollution on Mortality'

20 November 2025 | online

As climate change accelerates in the 21st century, the need to consider its effects is growing, particularly with regard to emerging risks and their impact on the insurance sector on a global scale. As a result, financial and insurance institutions must integrate environmental factors into their risk management frameworks. The consequences of climate... read more

Web Session 'FIDA for Actuaries: Challenge or Opportunity?'

21 November 2025 | online

Open insurance is once again the talk of the town: Despite a lot of resistance from the industry, its relevance will certainly increase over time. Driven by the market – but also driven by regulation. This web session will provide insights into the new Financial Data Access regulation (FIDA) that is currently one of the hot topics discussed between the... <u>read more</u>

Web Session 'Communication for Actuaries'

25-28 November 2025 | online

The work that actuaries perform plays an important role in society and in a wide variety of areas as the profession is also developing in non-traditional fields. The most common challenge in your work often refers to communicating your findings, results, ideas and arguments to various stakeholders (e.g. non-actuaries) who don't have that... read more

CERA, Module 0: A Refresher Course in Financial Mathematics and Risk Measurement

1/2 December 2025 | online

The web session gives an introduction to modern financial mathematics and derivative pricing. It is designed to prepare actuaries without adequate training in these fields for the quantitative parts of the CERA education. The web session is moreover an ideal learning opportunity for actuaries who want to become acquainted with or refresh their.... read more

EAA Advanced Training



Conference 'EAA Anniversary Conference'

4 December 2025 | online

This year, we are proud to celebrate our 20th anniversary. To mark this milestone, we are hosting the EAA Anniversary Conference - a full-day online event, free of charge for the entire actuarial community. Together, we will celebrate two decades of collaboration, growth and learning. This special event brings together voices from our network... read-more

Web Session 'GenAI Beyond the Basics: Advanced Concepts for Actuaries'

10 December 2025 | online

Generative AI (GenAI) tools, such as ChatGPT, are rapidly reshaping the way actuaries approach problem-solving, analysis, and communication. Beyond their familiar web-based interfaces, these tools offer powerful functionalities through programmatic integration, which allows users to directly access and interact with the underlying Large... <u>read more</u>

EAA Certificate in Actuarial Data Science

Under the heading Actuarial Data Science, many relevant modern procedures and methods are embedded in the actuarial context. Due to the importance of this topic and to provide actuaries and participants working in the field of (actuarial) data science with the necessary expertise, the EAA offers a brand new <u>EAA Certificate in Actuarial Data Science</u> consisting of four modules:

- Actuarial Data Science Basic (**SAVE THE DATE!** 23-25 February 2026)
- Actuarial Data Science Advanced, 24-26 September 2025 | online
- Actuarial Data Science Immersion (SAVE THE DATE! 23-25 March 2026)
- Actuarial Data Science Completion, 3-5 September 2025 | online

CERA

Based on the 2011-implemented education and examination system of the German Actuarial Association (DAV), the EAA offers a series of training courses and exams (through DAV) to study for the CERA designation, e.g.:

- CERA, Module B: Taxonomy, Modelling and Mitigation of Risks, 15-19 September 2025 | online
- CERA, Module 0: A Refresher Course in Financial Mathematics and Risk Measurement, 1/2 December 2025
 | online
- CERA, Module A: Quantitative Methods of ERM (SAVE THE DATE! 20-23 January 2026)
- CERA, Module C: Processes in ERM (SAVE THE DATE! 5/6 February 2026)
- CERA, Module D: ERM Economic Capital (SAVE THE DATE! 2-3 March 2026)

Please visit <u>www.ceraglobal.org</u> to get information if your association is entitled to issue the CERA designation. For more information please also feel free to contact the EAA directly.