

# Professional Qualification & Training Certified in Quantitative Risk Management - CQRM

## This 4-day intensive course teaches

advanced topics and practical applications of risk management. Upon completion, a validation of knowledge will be conducted to obtain the CQRM professional qualification.

The CQRM course will be coordinated by Prof. Dr. Johnathan Mun and delivered by global experts and accredited certified trainers in risk management. Delegates will:

- Be certified internationally as a Quantitative Risk Manager (CQRM-IIPER).
- Learn from world experts who have outstanding credentials and extensive practical experience in risk management.
- Understand how to make more informed decisions in times of uncertainty and achieve better business outcomes.
- Learn about the latest theoretical approaches and practical applications for risk analysis and management.

Complemented with case studies and examples from risk management companies, the worldwide CQRM is offered by the International Institute of Professional Education and Research (IIPER) in a joint venture with the Institute of Risk Management, approved by the **Project Management Institute (PMI) and endorsed by the Institution of Chemical Engineers** as an accredited training program.



**Delivered in Partnership with:**  
International Institute of Professional Education and Research (IIPER)  
**Supporting Organizations:**  
OSL Risk Management (UK), and Real Option Valuations (US)

## Who should attend?

Any professional interested in acquiring updated and practical knowledge in risk management from a quantitative approach to measure and analyse business data, and make informed decisions.

## Learning outcomes

### By the end of this course you will:

- Learn the concepts and applications of qualitative and quantitative risk management as they pertain to making strategic decisions.
- Understand how to identify, assess, quantify, value, model, optimise, and forecast risks and uncertainties of economic and noneconomic outcomes.
- Learn how to run Monte Carlo risk simulations, perform econometric and predictive modelling, and implement risk diversification in portfolios (products, assets, commodities, etc.).
- Have an understanding of how to mitigate, hedge, and reduce risks through the applications of strategic real options techniques and models.
- Learn how multinational corporations make strategic business decisions under uncertainty, through the use of multiple business cases and hands-on modelling examples.

### Delegates will be provided with:

- CQRM preparation material.
- CQRM Books and certification slides.
- Risk Management technologies (i.e., Risk Simulator, Real Options SLS, and PEAT tools, among other industry applications).

## Bespoke in-house courses

Bespoke courses can be tailored to the needs of your own organisation and can be held on your premises.

### Participants will:

- Be able to discuss with the executive trainers business cases and applications tailored to your organisation.
- Have the capability to openly discuss any proprietary data, models, or strategies belonging to the organisation (covered under mutual nondisclosure agreements).
- Learn how to integrate the IT technologies and software used for the CQRM training into the organisation.

### For more information and pricing options, contact:

e: [joanna.kraska@theirm.org](mailto:joanna.kraska@theirm.org)

## Course outline

8:00 to 17:30 every day

**Day one:** Fundamentals in quantitative risk management.

- MODULE 1: Introduction to Risk Analysis
- MODULE 2: Monte Carlo Simulation with Risk Simulator
- MODULE 3: Advanced Simulation Techniques

**Day two:** Analytical tools, optimization and forecasting

- MODULE 4: Simulation and Analytical Tools
- MODULE 5: Optimization with Risk Simulator
- MODULE 6: Forecasting

**Day three:** Real Options & Industry Applications

- MODULE 7: Real Options Analysis: Theory and Background
- MODULE 8: Real Options Analysis: SLS (Super Lattice Solver) Application
- CQRM REVIEW FOR THE EXAMINATION

**Day four:** Final Examination & Industry Applications

- CQRM EXAM
- Applied CQRM
  - Company Analysis
  - Project Economic Evaluations
  - Project Risk on Cost and Time
  - Enterprise Risk Management (Qualitative and Quantitative ERM)

## Cost (per delegate)

IRM member	£2400 + VAT
Non IRM member	£2600 + VAT

## Training board

### Program Director

**Prof. Dr Johnathan Mun** is the IIPER-CQRM Program Director coordinating worldwide executive programs, professional accreditations, and education standards in quantitative methods and risk management, and also enhancing high-quality teaching among the IIPER Certified Trainers. As the founder and CEO of Real Options Valuation, Inc., Dr. Mun is responsible for the development of its suite of analytical software products and consulting. As the software's creator, with more than 12 patents and 10,000 pages of copyrighted materials, he teaches Risk Analysis, Real Options for Analysts, Risk Analysis for Managers, CQRM, and other courses. He has written over 20 books on the topic of risk. Dr. Mun has consulted on risk analysis, valuation, and real options for many Fortune 500 firms from 3M, BP, Chevron, Airbus, and Boeing to GE, Motorola, and the U.S. government including the Department of Defense. He is also a full professor at the U.S. Naval Postgraduate School and has held other adjunct professorships at various universities.

### Senior Executive Trainer

**Prof. Dr Elvis Hernandez-Perdomo** is a Senior IIPER-CQRM Certified Trainer with over eighteen years of experience in risk management, project management, corporate governance, economic valuations, and real options in energy-related companies. He is Director of OSL Risk Management (UK), Senior Risk Specialist at OSL Consulting Engineering, and Senior Executive Consultant at Real Options Valuations, Inc. (ROV - USA) working on real options, risk management, Monte Carlo Risk Simulation, optimisation, and business intelligence analytics.

Dr. Elvis has a PhD in Finance (University of Hull), PhD in Engineering Science, MSc In Finance, MSc in Operational Research & Statistics, and BS in Economics, and is CQRM Accredited and Associated in Business ERP by SAP Corporation. He is also a Visiting Professor and Associate Fellow at the Academy of Higher Education in the UK, with academic articles published in international peer-review journals in reliability systems, energy markets, engineering, risk, uncertainty, and the like.

For more information contact

## Deirdre Lawlor

e: [deirdre.lawlor@theirm.org](mailto:deirdre.lawlor@theirm.org)  
t: +44 (0)20 7709 9808 ext 227

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CPD

This course contributes 30 hours to your annual career professional development

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