



Enterprise Computing Solutions - Education Services

## OFERTA FORMATIVA

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# IBM Algorithmics Portfolio Replication in Algo Risk Application

<b>CÓDIGO:</b>	<b>DURACIÓN:</b>	<b>Precio:</b>
G1001G	16 Hours (2 días)	€1,100.00

## Description

This course provides a practical overview of portfolio replication for insurance, with hands-on training in the construction of replicating portfolios.

## Objetivos

- Discuss the various concepts of portfolio replication, including theory, processes, and applications
- Understand how RiskWatch and ARA are employed as key Algo components in portfolio replication construction
- Describe the primary steps in portfolio replication
- Select specific replicating asset types
- Describe the Mark-to-Future cube generation process, and build MtF Cubes in RiskWatch for both the assets and liabilities based on the impact of a pre-defined economic scenario set on a variety of risk factors
- Create a replicating portfolio from a given asset universe, using ARA's optimization module
- Use trade restrictions and penalties to improve the quality of replicating portfolios
- Assess the quality of replicating portfolios, including in-depth post-optimization goodness-of-fit analysis in ARA

## Público

This advanced course is for the insurance industry end-user, particularly risk managers, risk analysts, and actuaries.

## Requisitos Previos

Prior training **and/or** experience in RiskWatch **and** ARA is strongly recommended.

## Programa

The two-day course balances instructor-presentation of key portfolio replication for insurance concepts with hands-on training in replicating portfolio construction. Day 1 focuses on the purpose, theory, applications, and process of portfolio replication including familiarization exercises and demonstrations. Day 2 is a workshop where students employ the optimization functionality of the Algo Risk Application (ARA) to build actual optimal replicating portfolios.

### Day 1:

- Portfolio Replication Overview: Purpose, Applications, Process and Theory
- Algo Portfolio Replication Components: RiskWatch and Algo Risk Application (ARA)
- The Steps to Portfolio Replication
- Replicating Universe Asset Types - Modeling in RiskWatch
- Mark-to-Future Asset and Liability Cube Creation in RiskWatch
- RiskWatch Workshop - Creating MtF Cubes in the Stress Room
- Portfolio Optimization in ARA
- Building Portfolio Replication Optimization Problems in ARA
- Assessing Replication Quality: Goodness of Fit Metrics, Standard RP Reports, and Deficiencies
- Improving Replications using Trading Restrictions

### Day 2:

- Portfolio Replication Hands-On Workshop using ARA Optimization Module

- Open Discussion and Wrap-Up

## **Fechas Programadas**

A petición. Gracias por [contactarnos](#).

## **Información Adicional**

Esta formación también está disponible en modalidad presencial. Por favor contáctenos para más información.