



International Certification in IRRBB & ALM

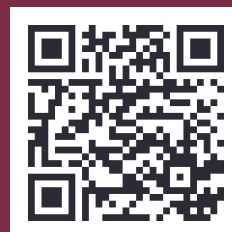
A deep dive into Advanced Interest Rate Risk in the Banking Book, Behavioral Models, Yield Curve Engineering, and Stress Testing.



info@fermacrisk.es



+34 613 33 95 89



Scan the
QR Code for
More Information!

Advance your career in banking with our
specialized IRRBB & ALM certification.



Advanced IRRBB,
Behavioral Models,
Yield Curve
Engineering & Stress
Testing

Gain expertise in managing
interest rate risk and asset liability
management with our
comprehensive, hands-on
certification program.



<https://www.fermacrisk.com/certifications-alm>

About the Certification

This advanced certification provides a deep dive into Interest Rate Risk in the Banking Book (IRRBB) and Asset Liability Management (ALM). Designed for finance professionals, it covers critical topics like behavioral modeling, yield curve engineering, and stress testing to equip you with the skills needed to navigate complex financial markets.

Course Overview

Practical Application

Apply your knowledge with hands-on Python, R, and Excel exercises, a yield curve modeling notebook with datasets, and a full ALM/IRRBB final project.

What's Included

Includes 20-25 hours of advanced videos, hands-on exercises in Python, R, and Excel, a comprehensive study book, and a dedicated IRRBB AI Assistant.

Advanced Modeling & Testing

Master behavioral models for prepayments, NMDs, and early redemptions. Dive deep into yield curve engineering and a dedicated stress testing module.

Key Benefits

- Master advanced IRRBB & ALM concepts
- Enhance your modeling skills
- Gain practical experience with industry tools
- Improve career prospects in banking
- Earn a professional certification



Duration & Workload

Duration: 6 weeks
Workload: 40-50 hours
Effort: 4-6 hours per week
Access: 12 months



Testimonial

"The hands-on projects and real-world datasets were invaluable for understanding complex concepts."

- A. Smith, Financial Analyst

"This course provided the deep, practical knowledge I needed to excel in my ALM role. Highly recommended."

- J. Doe, Risk Manager

IRRBB (≈30 hours)

Module 1. Transition from LIBOR to Replacement Rates

Module 2. Interest Rate Risk in the Banking Book (IRRBB) in Basel III

Module 3. Behavioral Models for NMDs & Prepayments

Module 4. Gap Analysis, EVE & NII Methodologies

Module 5. Advanced IRRBB Models: Dynamic Balance Sheet, Replication, FTP

Module 6. Stress Testing & Scenario Analysis for IRRBB

Module 7. Machine Learning for IRRBB

Module 8. Deep Learning & Quantum Algorithms for IRRBB

Module 9. Model Validation for IRRBB Models

Liquidity Risk (≈30 hours)

Module 10. Liquidity Risk Framework in Basel III / IV

Module 11. LCR & NSFR Modeling

Module 12. Cashflow Projections & Liquidity Gaps

Module 13. Liquid Asset Buffer & Stress Scenarios

Module 14. Intraday Liquidity Risk

Module 15. Funding Concentration & Contingency Funding Plans

Module 16. Machine Learning for Liquidity Risk Forecasting

Module 17. Deep Learning for Liquidity Stress Testing

Module 18. Validation of Liquidity Risk Models

ALM (≈21 hours)

Module 19. ALM Foundations & Governance

Module 20. Balance Sheet Management & Earnings Dynamics

Module 21. FTP – Funds Transfer Pricing

Module 22. Modeling Stable Deposits & Indefinite-Maturity Liabilities

Module 23. ALM under Inflation & Interest Rate Hikes

Module 24. ALM Stress Testing & ICAAP Integration

Module 25. Machine Learning for ALM

Module 26. Quantum Computing Applications in ALM

Module 27. Model Validation for ALM

SYLLABUS



IMMEDIATE CAREER IMPACT

Increase your opportunities in:

- ALM
- Liquidity Risk
- IRRBB
- Stress Testing
- Model Validation
- Treasury / Balance Sheet Strategy