

Israel Association of Valuators and Financial Actuaries



IAVFA's Continuing Education Programs and Professional Certifications

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Israel Association of Valuators and Financial Actuaries (IAVFA)

The Israel Association of Valuators and Financial Actuaries (IAVFA) is a professional organisation, an institution for professional training and a body which specializes in placing professional workers in the financial sector in Israel. IAVFA strives to voluntarily regulate the professions of valuation and financial actuarial science in Israel, both by setting pre-qualification requirements, ethical principles for practitioners in these professions, and by training and certifying quality professionals for these professions. IAVFA provides both placement services in order to integrate its credentialed members in leading positions within the Israeli labor market, and mediation services between valuation consumers and valuation specialists.





IAVFA's Certification programs - your way to success in the Financial World

If you hold a financial degree and interested in working in one of the world's most sought after areas of financing with employment opportunities in Israel and abroad - you came to the right place. Your career starts here!

Actuarial Financial is currently the hottest field in the finance theory which combines knowledge in investment management, statistics, econometrics, stochastic modeling, financial markets and products, valuation and risk models, market risk measurement and management, credit risk measurement and management, operational and integrated risk measurement and management and investment risk measurement and management. The financial actuary involve in mapping, modeling, measuring, and managing financial risks using financing and statistical models and financial instruments both simple and complex. The demand for financial actuaries in Israel and abroad is growing due to regulatory requirements and understanding of boards of directors that financial risk management would lead to an increase in profits and the opening of new markets, which require compliance with international standards.

Valuation is a field which combines knowledge in corporate finance (valuation of businesses and intangible assets), quantitative finance (valuation of derivatives and complex financial instruments) and financial and economic modeling using Excel. Untill 2008, Valuators' work was required mainly in the processes of selling and buying companies, a merger between companies, in the processes of Capital Raising, legal and business disputes, for tax purposes, etc.

Valuators hold analysis positions in commercial banks, insurance companies, financial institutions and investment banks as financial consultants for companies and as expert witnesses in court.

The demand for valuators in Israel has undergone dramatic changes due to the entry of the International Financial Reporting Standards (IFRS) in Israel since 2008 for reporting corporations and by the entry of the new Israeli Accounting Standards for privately-held companies requiring virtually all those companies in the transition to a "fair value" measurement base for certain issues.



IAVFA's Certification programs - your way to success in the Financial World (Continued)

IAVFA's certification programs are the only in Israel which confer a professional certificate and practical knowledge which enable integration at work without the need for additional professional specialization. IAVFA's certification programs are based on the leading international training programs and allow applying the knowledge you have acquired in Israel, also abroad. IAVFA's certification programs are updated annually by IAVFA's certification Committee which consists of a distinguished panel of leading experts from Israel and abroad, to accurately focus on the most current, relevant issues in valuation and financial actuarial science.

Your success is our success too! That is why IAVFA is also involved in the placement of its credentialed members qualified and gives them an exposure to dozens of companies in Israel, whose managers are also IAVFA's credentialed members.

IAVFA's continuing education programs and professional certifications in the areas of valuations (CFV, QFV and FEM) and financial actuarial science (MRA, CRA, ORA, IRA LRA and PRA) will begin in October 2015.

Our team of lecturers consists of competent IAVFA's credentialed members which are currently leading the areas of valuations and financial actuarial science in Israel. Further information on IAVFA's credentialed members is available online at IAVFA's Credentialed Member Directory on our website at <u>www.IAVFA.org</u>.

The studies will take place at Levinsky College Campus, Tel Aviv, beween 16:30 to 21:30.

The parking is free and one can easily arrived by public transport. The cost of each module in the certification programs which includes 48 academic hours over eight weekly sessions is 5,000 NIS (VAT & registration fee included).

For further information please send an email to <u>noam@iavfa.org</u> or contact Mr. Noam Blazberg, Co-Founder & Chairman of IAVFA, at 972-77-507-0590 or 972-52-449-0494



Career Benefits

IAVFA's certifications, as the Israeli recognized professional designations for Valuators and Financial Actuaries clearly differentiates you from your peers, providing you with a competitive advantage with colleagues, clients and prospective employers. Whether you estimate financial value or measure financial risk, achieving IAVFA's certifications is a career enhancer.

Stand out to employers

Employers in Israel realize that the IAVFA's certification programs prepare candidates with the specialized knowledge and skills necessary to succeed in the dynamic financial services industry. IAVFA's designations are by far the best known and most respected designation for financial value or financial risk.

Develop your knowledge and expertise

Mastering the concepts underlying valuation and financial actuarial science in today's dynamic market environment will give you a holistic view of valuation and financial actuarial science. Through IAVFA's certification programs, you will gain state-of-the-art knowledge that is useful on the job every day, because IAVFA's certification programs are designed and updated twice a year by Israeli leading value and risk professionals to reflect current marketplace issues.

Join the elite group

IAVFA's certifications provide you with a lifelong platform to network with the Israeli most prominent valuation and financial actuarial science professionals, expanding your professional opportunities within the the Israeli financial services industry. So by becoming an IAVFA's credentialed member you will become part of an elite group.



Career Benefits (Continued)

Demonstrate your leadership

Mastering the content of IAVFA's certification programs, successfully passing IAVFA's certification exams, and submitting IAVFA's certification reports requires completing the many hours of self-study represents a significant commitment to the valuation and financial actuarial science professions, positioning you as a leader in these fields and signifying your commitment to professional excellence.

Confirm your achievements

Real-world experience is an essential component of attaining IAVFA's certifications. No other financial value or financial risk designations in Israel requires candidates to submit a professional valuation/financial actuarial science report as a proxy for professional experience - so becoming an IAVFA's credentialed member means considerably more than passing 5 exams.

Enhance your reputation

All IAVFA's credentialed members are expected to adhere to principles that promote the highest levels of ethical conduct and disclosure beyond following the letter of applicable rules and regulations. Employers know that IAVFA's will help safeguard their firms' reputations.





Why Hire an IAVFA's Cedentialed Member?

Employing IAVFA's credentialed members is a way to source and identify top-level talent, and is a critical differentiator for those professionals who estimate financial value or measure financial risk.

- □ The rigors of IAVFA's certification programs mean that firms that employ IAVFA's credentialed members can be confident their employees have the relevant knowledge base with which to anticipate respond and adapt to critical new issues.When you hire an IAVFA's credentialed member you are hiring a professional who has committed to to adhering to the highest possible standards of professional conduct. By agreeing to the IAVFA's Code of Conduct, IAVFA's members have pledged to pursue high ethical standards that go well beyond the letter of applicable rules and regulations. Employers know that IAVFA's credentialed members will help safeguard their firms' reputation.
- □ IAVFA's credentialed members acquire state-of-the-art knowledge through IAVFA's certification programs. IAVFA's certified members reflect a mix of foundational theory and current marketplace issues.
- IAVFA's certifications are the only financial value/risk designations that values and requires professional achievement in estimating financial value or measuring financial risk. In order to become a IAVFA's credentialed member, candidates must submit a professional valuation/financial actuarial science report as a proxy for professional experience -- so becoming a IAVFA's credentialed member means considerably more than passing 5 Exams. IAVFA's credentialed members are not only technically competent but that they possess practical experience that is valuable to an employer.
- IAVFA offers its certifieds opportunities to further their skills and knowledge through the Continuing Professional Education (CPE) Program. This IAVFA's credentialed members develop their expertise and stay current in a fast-changing environment.
- □ While there are many other notable professional designations in the financial services industry, IAVFA's certifications are the best-known professional certifications in the value and risk fields, so your employees are being benchmarked against the best in the Israel.



Market Risk Actuary (MRA) Designation





Market Risk Actuary (MRA) Designation

The Market Risk Actuary (MRA) designation is a unique professional designation offered by the Israel Association of Valuators and Financial Actuaries (IAVFA). MRA is a qualification for market risk actuarial science professionals, particularly those who are involved in mapping, modeling, measuring, and managing potential market risk .

Certified MRAs perform a broad variety of functions related to market risk actuarial science within commercial banks, investment banks, insurance companies, accounting firms, financial consulting firms, investment advisory and portfolio management companies, as well as in private and public companies, government ministries, regulatory bodies and statutory authorities.

Market risk actuarial science includes: Fixed income securities (Risk-neutral pricing and Term structure models), Mortgages and mortgage-backed securities (Structure, markets, and valuation), VaR and other risk measures [VaR mapping, Backtesting VaR, Expected shortfall (ES) and other coherent risk measures, Parametric and non-parametric methods of estimation, Modeling dependence: correlations and copulas, and Extreme value theory (EVT)], Volatility: smiles and term structures, Regulation and the Basel Accords (Minimum capital requirements, Methods for market risk, Stress testing, Revisions to the Basel II Accord, The Basel III framework and Comparing Basel II/III to Solvency II).

The MRA certification program includes 240 academic hours divided into 5 modules, 48 academic hours each. The first four modules are common to all the financial actuarial science certifications (MRA, CRA, ORA, IRA, LRA and PRA) and module 5 is the MRA module.

Transition between the modules is contingent upon compliance with the requirements of the module. One can participate in any of the modules and gradually accumulate them until earning the MRA certification, in a period not exceeding 3 years. After earning the MRA designation, one can register only to one specialization module (CRA, ORA, IRA, LRA and PRA) in order to earn an additional financial actuarial science (CRA, ORA, IRA, LRA and PRA).

At the end of the MRA certification program in order to earn the MRA designation, one is required to prepare a MRA report, such as the reports prepared by leading professionals in Israel and abroad in the field of market risk actuarial science.

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Market Risk Actuary (MRA) Designation (Continued)

The MRA report will accompany the certified MRA in meetings with potential employers or in his or her activitiy as a owner of a financial advisory office and will constitute as a entary ticket and a signal that he or she is familiar with the world's best practices in the field of the MRA certification.

Certified MRAs will be added to the valuators and financial actuaries best team in Israel and their details will be posted on our website at <u>www.IAVFA.org</u>. In addition to the MRA certificate and in order to increase the visibility of their MRA designation online Certified MRAs will also receive a MRA certification eBadge, which can be shared on their social and professional networking pages.

The MRA eBadge may be displayed wherever the certified MRA choose - professional and social networking sites like LinkedIn, Facebook, Twitter, or on a blog or website. By displaying the MRA eBadge, potential employers, recruiters and other contacts can verify the certified MRA's skills and achievement in the context of how the certification was earned.

One can participate in the 5 modules of the MRA certification program also under the continuing education programs and not in order to obtain the MRA designation. In this case one is not required to complete previous modules as a prerequisite and those modules will not include exams. In order to earn the MRA designation the candidate will have to complete the exams of all the modules, in which he or she was not tested.





Module FA201: Foundations of Financial Actuarial Science

This is the first module in the Principles of Financial Actuarial Science (POFAS) module series. This module provides knowledge and understanding of foundational concepts of financial actuarial science and how financial actuarial science can add value to an organization.

Following are the main topics of study:

- □ The Time Value of Money using Actuarial Mathematics Techniques
- □ The Need for Financial Actuarial Science
- □ Investors and Financial Actuarial Science
- □ Creating Value with Financial Actuarial Science
- □ The Capital Asset Pricing Model and Its Application to Performance Measurement
- □ Expected Returns and Arbitrage Pricing Theory
- Case Studies
- □ Financial Actuarial Science Failures: What Are They and When Do They Happen?
- □ IAVFA Code of Conduct
- □ Excel Application of the Module's Topics

Module Requirements:

- □ Attend for at least 38 hours out of the total 48 hours training program
- □ Submit all required homework on time
- D Pass a comprehensive, two-hour, multiple-choice, proctored examination



Module FA201: Foundations of Financial Actuarial Science (Continued)

At the end of the module participants will be awarded a Certificate of Achievement or a Certificate of Participation by the Israel Association of Valuators and Financial Actuaries (IAVFA)

Location, Date and Fee:

- □ 8 weekly sessions + exam session
- □ Time: 16:30-21:30
- □ Location: Levinsky College Campus, 15 Shoshana Persitz St, Tel Aviv
- □ Module Fee: 5,000 NIS (VAT & registration fee included)
- □ Dates: 08/10/15, 15/10/15, 22/10/15, 29/10/15, 05/11/15, 12/11/15, 19/11/15, 26/11/15, 03/12/15





Module FA202: Quantitative Analysis

This is the second module in the Principles of Financial Actuarial Science (POFAS) module series. This module provides knowledge and understanding of basic probability and statistics, regression and time series analysis, and various quantitative techniques useful in financial actuarial science such as Monte Carlo methods and volatility forecasting models.

Following are the main topics of study

- □ The Nature and Scope of Econometrics
- □ Review of Statistics I: Probability and Probability Distributions
- □ Characteristics of Probability Distributions
- □ Some Important Probability Distributions
- Discrete Probability Distributions
- □ Continuous Probability Distributions
- □ Basic Ideas of Linear Regression: The Two-Variable Model
- □ The Two-Variable Model: Hypothesis Testing
- □ Multiple Regression: Estimation and Hypothesis Testing
- Estimating Volatilities and Correlations
- □ Monte Carlo Methods
- □ Excel Application of the Module's Topics

Module Requirements:

- □ Successful completion of module FA201
- □ Attend for at least 38 hours out of the total 48 hours training program
- □ Submit all required homework on time
- D Pass a comprehensive, two-hour, multiple-choice, proctored examination



Module FA202: Quantitative Analysis (Continued)

At the end of the module participants will be awarded a Certificate of Achievement or a Certificate of Participation by the Israel Association of Valuators and Financial Actuaries (IAVFA)

Location, Date and Fee:

- □ 8 weekly sessions + exam session
- □ Time: 16:30-21:30
- □ Location: Levinsky College Campus, 15 Shoshana Persitz St, Tel Aviv
- □ Module Fee: 5,000 NIS (VAT & registration fee included)
- □ Dates: 17/12/15, 24/12/15, 31/12/15, 07/01/16, 14/01/16, 21/01/16, 28/01/16, 04/02/16, 11/02/16





Module FA203: Financial Markets and Products

This is the third module in the Principles of Financial Actuarial Science (POFAS) module series. This module provides knowledge and understanding of financial products and the markets in which they trade, including equities, commodities, currencies, fixed income, equity options and other derivatives.

Following are the main topics of study:

- □ Clearinghouses, Derivative Product Companies, and Exchanges
- Options, Futures, and Other Derivatives
- Mechanics of Futures Markets
- □ Hedging Strategies Using Futures
- □ Interest Rates and Determination of Forward and Futures Prices
- □ Interest Rate Futures
- □ Swaps
- D Properties of Stock Options and Trading Strategies Involving Options
- □ Fundamentals of Commodity Spot and Futures Markets: Instruments, Exchanges and Strategies
- Commodity Forwards and Futures
- □ Foreign Exchange Risk and Corporate Bonds
- □ Excel Application of the Module's Topics

Module Requirements:

- □ Successful completion of module FA202
- □ Attend for at least 38 hours out of the total 48 hours training program
- □ Submit all required homework on time
- D Pass a comprehensive, two-hour, multiple-choice, proctored examination



Module FA203: Financial Markets and Products (Continued)

At the end of the module participants will be awarded a Certificate of Achievement or a Certificate of Participation by the Israel Association of Valuators and Financial Actuaries (IAVFA)

Location, Date and Fee:

- □ 8 weekly sessions + exam session
- □ Time: 16:30-21:30
- Location: Levinsky College Campus, 15 Shoshana Persitz St, Tel Aviv
- □ Module Fee: 5,000 NIS (VAT & registration fee included)
- □ Dates: 25/02/16, 03/03/16, 10/03/16, 17/03/16, 24/03/16, 31/03/16, 07/04/16, 14/04/16, 21/04/16





Module FA204: Valuation and Financial Actuarial Science Models

This is the fourth module in the Principles of Financial Actuarial Science (POFAS) module series. This module provides knowledge and understanding of valuation techniques and risk analysis models.

Following are the main topics of study:

- □ Bond Prices, Discount Factors, and Arbitrage
- D Bond Prices, Spot Rates, and Forward Rates
- □ Yield to Maturity and One Factor Measures of Price Sensitivity
- D Binomial Trees, Black-Scholes-Merton Model and the Greek Letters
- □ Introduction to Value at Risk and VaR Methods
- D Forecasting Risk and Quantifying Volatility in VaR Models
- Putting VaR to Work and Stress Testing
- □ Principles for Sound Stress Testing Practices and Supervision
- □ Exotic Options
- □ Excel Application of the Module's Topics

Module Requirements:

- □ Successful completion of module FA203
- □ Attend for at least 38 hours out of the total 48 hours training program
- □ Submit all required homework on time
- □ Pass a comprehensive, two-hour, multiple-choice, proctored examination



Module FA204: Valuation and Financial Actuarial Science Models (Continued)

At the end of the module participants will be awarded a Certificate of Achievement or a Certificate of Participation by the Israel Association of Valuators and Financial Actuaries (IAVFA)

Location, Date and Fee:

- □ 8 weekly sessions + exam session
- □ Time: 16:30-21:30
- Location: Levinsky College Campus, 15 Shoshana Persitz St, Tel Aviv
- □ Module Fee: 5,000 NIS (VAT & registration fee included)
- □ Dates: 05/05/16, 12/05/16, 19/05/16, 26/05/16, 02/06/16, 09/06/16, 16/06/16, 23/06/16, 30/06/16





Module FA205: Market Risk Actuarial Science

This is the specialization module of the Market Risk Actuary (MRA) certification program. This module provides knowledge and understanding in performing market risk mapping, modeling, measurement and management.

Following are the main topics of study:

- □ Measures of Financial Risk and Modeling Dependence: Correlations and Copulas
- □ Backtesting VaR and VaR Mapping
- Derametric Approaches (II): Extreme Value
- D Measures of Price Sensitivity Based on Parallel Yield Shifts
- □ Key Rate and Bucket Exposures
- □ The Science of Term Structure Models
- □ An Overview of Mortgages and the Mortgage Market
- □ Mortgage-Backed Securities and Valuation of Mortgage-Backed Securities
- Volatility Smiles
- □ Valuations and Risk Analysis used for 2nd Galai Report (VaR, Sensitivity)
- □ Market Risk in Basel II/III and Solvency II
- □ Excel Application of the Module's Topics

Module Requirements:

- □ Successful completion of module FA204
- □ Attend for at least 38 hours out of the total 48 hours training program
- □ Submit all required homework on time
- □ Submit an actual and sanitized Market Risk Actuary (MRA) report
- □ Pass a comprehensive, two-hour, multiple-choice, Market Risk Actuary (MRA) certification exam

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Module FA205: Market Risk Actuarial Science (Continued)

At the end of the module participants will be awarded a Certificate of Achievement or a Certificate of Participation by the Israel Association of Valuators and Financial Actuaries (IAVFA)

Location, Date and Fee:

- □ 8 weekly sessions + exam session
- □ Time: 16:30-21:30
- □ Location: Levinsky College Campus, 15 Shoshana Persitz St, Tel Aviv
- □ Module Fee: 5,000 NIS (VAT & registration fee included(
- □ Dates: 01/09/16, 08/09/16, 15/09/16, 22/09/16, 29/09/16, 06/10/16, 13/10/16, 20/10/16, 27/10/16





Credit Risk Actuary (CRA) Designation





Credit Risk Actuary (CRA) Designation

The Credit Risk Actuary (CRA) designation is a unique professional designation offered by the Israel Association of Valuators and Financial Actuaries (IAVFA).

CRA is a qualification for credit risk actuarial science professionals, particularly those who are involved in mapping, modeling, measuring, and managing potential credit risk.

Certified CRAs perform a broad variety of functions related to credit risk actuarial science within commercial banks, investment banks, insurance companies, accounting firms, financial consulting firms, investment advisory and portfolio management companies, as well as in private and public companies, government ministries, regulatory bodies and statutory authorities.

Credit risk actuarial science includes: Subprime mortgages and securitization, Counterparty risk [Mitigation techniques, Credit exposure profiles, Collateralization and netting effects, and Pricing credit value adjustments (CVA)], Credit derivatives (Types and uses, Mechanics and structure, Valuation, and Spread curves), Structured finance and securitization (The structuring and securitization process, Agency problems and moral hazard in the securitization process, Tranching, subordination, and support), Default risk (Quantitative methodologies and Estimating defaults and recoveries from market prices and spreads), Expected and unexpected losses, Credit VaR, Regulation and the Basel Accords (Minimum capital requirements, Methods for credit risk, Stress testing, Revisions to the Basel II Accord, The Basel III framework and Comparing Basel II/III to Solvency II).

The CRA certification program includes 240 academic hours divided into 5 modules, 48 academic hours each. The first four modules are common to all the financial actuarial science certifications (MRA, CRA, ORA, IRA, LRA and PRA) and module 5 is the CRA module.

Transition between the modules is contingent upon compliance with the requirements of the module. One can participate in any of the modules and gradually accumulate them until earning the CRA certification, in a period not exceeding 3 years. After earning the CRA designation, one can register only to one specialization module (MRA, ORA, IRA, LRA and PRA) in order to earn an additional financial actuarial science (MRA, ORA, IRA, LRA and PRA).

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Credit Risk Actuary (CRA) Designation (Continued)

At the end of the CRA certification program in order to earn the CRA designation, one is required to prepare a CRA report, such as the reports prepared by leading professionals in Israel and abroad in the field of credit risk actuarial science.

The CRA report will accompany the certified CRA in meetings with potential employers or in his or her activitiy as a owner of a financial advisory office and will constitute as a entary ticket and a signal that he or she is familiar with the world's best practices in the field of the CRA certification.

Certified CRAs will be added to the valuators and financial actuaries best team in Israel and their details will be posted on our website at <u>www.IAVFA.org</u>. In addition to the CRA certificate and in order to increase the visibility of their CRA designation online Certified CRAs will also receive a CRA certification eBadge, which can be shared on their social and professional networking pages.

The CRA eBadge may be displayed wherever the certified CRA choose - professional and social networking sites like LinkedIn, Facebook, Twitter, or on a blog or website. By displaying the CRA eBadge, potential employers, recruiters and other contacts can verify the certified CRA's skills and achievement in the context of how the certification was earned.

One can participate in the 5 modules of the CRA certification program also under the continuing education programs and not in order to obtain the CRA designation. In this case one is not required to complete previous modules as a prerequisite and those modules will not include exams. In order to earn the CRA designation the candidate will have to complete the exams of all the modules, in which he or she was not tested.





Credit Risk Actuary (CRA) Designation (Continued)

For the curriculum of **Module FA201: Foundations of Financial Actuarial Science** – see page 12-13

For the curriculum of **Module FA202: Quantitative Analysis** – see page 14-15

For the curriculum of **Module FA203: Financial Markets and Products** – see page 16-17

For the curriculum of Module FA204: Valuation and Financial Actuarial Science

Models – see page 18-19





Module FA206: Credit Risk Actuarial Science

This is the specialization module of the Credit Risk Actuary (CRA) certification program. This module provides knowledge and understanding in performing credit risk mapping, modeling, measurement and management.

Following are the main topics of study:

- □ The Rating Agencies and External and Internal Ratings
- □ Country Risk Models and Sovereign Risk
- □ Loan Portfolios and Expected Loss and Unexpected Loss
- □ Extending the VaR Approach to Non-tradable Loan
- Default Risk: Quantitative Methodologies and Loss Given Default
- □ Introduction to Portfolio Approaches, Economic Capital and Capital Allocation
- □ Application of Portfolio Approaches and Portfolio Effects: Risk Contributions and Unexpected Losses
- D Measuring and Marking Counterparty Risk, Credit Derivatives and Credit-Linked Notes
- □ The Structuring Process, Securitization, Cash CDO and Synthetic CDO
- □ Studies on Credit Risk Concentration and Understanding the Securitization of Subprime Mortgage Credit
- □ Assessing the Solvency and Financial Strength of a Company
- □ Credit Risk in Basel II/III and Solvency II
- □ Excel Application of the Module's Topics



Module FA206: Credit Risk Actuarial Science (Continued)

Module Requirements:

- □ Successful completion of module FA204
- □ Attend for at least 38 hours out of the total 48 hours training program
- □ Submit all required homework on time
- □ Submit an actual and sanitized Credit Risk Actuary (CRA) report
- □ Pass a comprehensive, two-hour, multiple-choice, Credit Risk Actuary (CRA) certification exam

At the end of the module participants will be awarded a Certificate of Achievement or a Certificate of Participation by the Israel Association of Valuators and Financial Actuaries (IAVFA)

Location, Date and Fee:

- □ 8 weekly sessions + exam session
- □ Time: 16:30-21:30
- □ Location: Levinsky College Campus, 15 Shoshana Persitz St, Tel Aviv
- □ Module Fee: 5,000 NIS (VAT & registration fee included)
- □ Dates: 01/09/16, 08/09/16, 15/09/16, 22/09/16, 29/09/16, 06/10/16, 13/10/16, 20/10/16, 27/10/16





Operational Risk Actuary (ORA) Designation





Operational Risk Actuary (ORA) Designation

The Operational Risk Actuary (ORA) designation is a unique professional designation offered by the Israel Association of Valuators and Financial Actuaries (IAVFA).

ORA is a qualification for operational risk actuarial science professionals, particularly those who are involved in mapping, modeling, measuring, and managing potential operational risk, liquidity risk, and model risk as well as integrated risks.

Certified ORAs perform a broad variety of functions related to operational, liquidity, model and integrated risk measurement within commercial banks, investment banks, insurance companies, accounting firms, financial consulting firms, investment advisory and portfolio management companies, as well as in private and public companies, government ministries, regulatory bodies and statutory authorities.

Operational risk actuarial science includes: Calculating and applying risk-adjusted return on capital (RAROC), Understanding, managing, and mitigating liquidity risk, Understanding and managing model risk, Evaluating the performance of risk management systems, Validating VaR models, Enterprise risk management (ERM), Economic capital, Operational loss data (Frequency and severity distributions, Modeling and fitting distributions, Data sufficiency and Extrapolating beyond the data), Failure mechanics of dealer banks, Risk appetite frameworks, Regulation and the Basel Accords (Minimum capital requirements, Methods for operational risk, Liquidity risk management, Stress testing, Revisions to the Basel II Accord, The Basel III framework and Comparing Basel II/III to Solvency II).

The ORA certification program includes 240 academic hours divided into 5 modules, 48 academic hours each. The first four modules are common to all the financial actuarial science certifications (MRA, CRA, ORA, IRA, LRA and PRA) and module 5 is the ORA module.

Transition between the modules is contingent upon compliance with the requirements of the module. One can participate in any of the modules and gradually accumulate them until earning the ORA certification, in a period not exceeding 3 years. After earning the ORA designation, one can register only to one specialization module (MRA, CRA, IRA, LRA and PRA) in order to earn an additional financial actuarial science (MRA, CRA, IRA, LRA and PRA).

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Operational Risk Actuary (ORA) Designation (Continued)

At the end of the ORA certification program in order to earn the ORA designation, one is required to prepare an ORA report, such as the reports prepared by leading professionals in Israel and abroad in the field of operational risk actuarial science.

The ORA report will accompany the certified ORA in meetings with potential employers or in his or her activitiy as a owner of a financial advisory office and will constitute as a entary ticket and a signal that he or she is familiar with the world's best practices in the field in of the ORA certification.

Certified ORAs will be added to the valuators and financial actuaries best team in Israel and their details will be posted on our website at <u>www.IAVFA.org</u>. In addition to the ORA certificate and in order to increase the visibility of their ORA designation online Certified ORAs will also receive a ORA certification eBadge, which can be shared on their social and professional networking pages.

The ORA eBadge may be displayed wherever the certified ORA choose - professional and social networking sites like LinkedIn, Facebook, Twitter, or on a blog or website. By displaying the ORA eBadge, potential employers, recruiters and other contacts can verify the certified ORA's skills and achievement in the context of how the certification was earned.

One can participate in the 5 modules of the ORA certification program also under the continuing education programs and not in order to obtain the ORA designation. In this case one is not required to complete previous modules as a prerequisite and those modules will not include exams. In order to earn the ORA designation the candidate will have to complete the exams of all the modules, in which he or she was not tested.





Operational Risk Actuary (ORA) Designation (Continued)

For the curriculum of **Module FA201: Foundations of Financial Actuarial Science** – see page 12-13

For the curriculum of **Module FA202: Quantitative Analysis** – see page 14-15

For the curriculum of **Module FA203: Financial Markets and Products** – see page 16-17

For the curriculum of **Module FA204: Valuation and Financial Actuarial Science Models** – see page 18-19





Module FA207: Operational Risk Actuarial Science

This is the specialization module of the Operational Risk Actuary (ORA) certification program. This module provides knowledge and understanding in performing operational risk, liquidity risk, and model risk as well as integrated risks mapping, modeling, measurement and management.

Following are the main topics of study:

- □ Introduction to Operational Risk
- □ Extending the VaR Approach to Operational Risks
- □ LDA at Work and Mode Risk
- □ Aligning Basel II Operational Risk and Sarbanes-Oxley 404 Projects
- □ Enterprise risk management: Theory and Practice
- □ Capital Allocation and Performance Measurement
- □ Risk Measurement, Risk Management and Capital Adequacy in Financial Conglomerates
- Liquidity Risk and Estimating Liquidity Risks
- U What We Know, Don't Know and Can't Know About Bank Risk: A View from the Trenches
- D Principles for Sound Liquidity Risk Management and Supervision
- Operational Risk in Basel II/III and Solvency II
- □ Excel Application of the Module's Topics

Module Requirements:

- □ Successful completion of module FA204
- □ Attend for at least 38 hours out of the total 48 hours training program
- □ Submit all required homework on time
- □ Submit an actual and sanitized Operational Risk Actuary (ORA) report
- □ Pass a comprehensive, two-hour, multiple-choice, Operational Risk Actuary (ORA) certification exam

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Module FA207: Operational Risk Actuarial Science (Continued)

At the end of the module participants will be awarded a Certificate of Achievement or a Certificate of Participation by the Israel Association of Valuators and Financial Actuaries (IAVFA)

Location, Date and Fee:

- □ 8 weekly sessions + exam session
- □ Time: 16:30-21:30
- Location: Levinsky College Campus, 15 Shoshana Persitz St, Tel Aviv
- □ Module Fee: 5,000 NIS (VAT & registration fee included)
- □ Dates: 01/09/16, 08/09/16, 15/09/16, 22/09/16, 29/09/16, 06/10/16, 13/10/16, 20/10/16, 27/10/16





Investment Risk Actuary (IRA) Designation





Investment Risk Actuary (IRA) Designation

The Investment Risk Actuary (IRA) designation is a unique professional designation offered by the Israel Association of Valuators and Financial Actuaries (IAVFA).

IRA is a qualification for investment risk measurement professionals, particularly those who are involved in mapping, modeling, measuring, and managing potential investment risk.

Certified IRAs perform a broad variety of functions related to investment risk measurement within commercial banks, investment banks, insurance companies, accounting firms, financial consulting firms, investment advisory and portfolio management companies, as well as in private and public companies, government ministries, regulatory bodies and statutory authorities.

Investment risk actuarial science includes: Portfolio construction, Portfolio-based performance analysis, Tests of the Capital Asset Pricing Model (CAPM), Portfolio and component VaR, Risk budgeting, Risk monitoring and performance measurement, Hedge funds (Hedge fund strategies, Due diligence and fraud detection Liquidity, and Risk management of hedge funds), Private equity, and Regulation (Supervision Model regulation for ETFs companies and Trading Platform regulation for Forex companies).

The IRA certification program includes 240 academic hours divided into 5 modules, 48 academic hours each. The first four modules are common to all the financial actuarial science certifications (MRA, CRA, ORA, IRA, LRA and PRA) and module 5 is the IRA module.

Transition between the modules is contingent upon compliance with the requirements of the module. One can participate in any of the modules and gradually accumulate them until earning the IRA certification, in a period not exceeding 3 years. After earning the IRA designation, one can register only to one specialization module (MRA, CRA, ORA, LRA and PRA) in order to earn an additional financial actuarial science (MRA, CRA, ORA, LRA and PRA).



Investment Risk Actuary (IRA) Designation (Continued)

At the end of the IRA certification program in order to earn the IRA designation, one is required to prepare an IRA report, such as the reports prepared by leading professionals in Israel and abroad in the field of investment risk actuarial science.

The IRA report will accompany the certified IRA in meetings with potential employers or in his or her activitiy as a owner of a financial advisory office and will constitute as a entary ticket and a signal that he or she is familiar with the world's best practices in the field of the IRA certification.

Certified IRAs will be added to the valuators and financial actuaries best team in Israel and their details will be posted on our website at <u>www.IAVFA.org</u>. In addition to the IRA certificate and in order to increase the visibility of their IRA designation online Certified IRAs will also receive a IRA certification eBadge, which can be shared on their social and professional networking pages.

The IRA eBadge may be displayed wherever the certified IRA choose - professional and social networking sites like LinkedIn, Facebook, Twitter, or on a blog or website. By displaying the IRA eBadge, potential employers, recruiters and other contacts can verify the certified IRA's skills and achievement in the context of how the certification was earned.

One can participate in the 5 modules of the IRA certification program also under the continuing education programs and not in order to obtain the IRA designation. In this case one is not required to complete previous modules as a prerequisite and those modules will not include exams. In order to earn the IRA designation the candidate will have to complete the exams of all the modules, in which he or she was not tested.




Investment Risk Actuary (IRA) Designation (Continued)

For the curriculum of **Module FA201: Foundations of Financial Actuarial Science** – see page 12-13

For the curriculum of **Module FA202: Quantitative Analysis** – see page 14-15

For the curriculum of **Module FA203: Financial Markets and Products** – see page 16-17

For the curriculum of Module FA204: Valuation and Financial Actuarial Science

Models – see page 18-19





Module FA208: Investment Risk Actuarial Science

This is the specialization module of the Investment Risk Actuary (IRA) certification program. This module provides knowledge and understanding in performing investment risk mapping, modeling, measurement and management.

Following are the main topics of study:

- □ Portfolio Construction
- □ Performance Analysis
- □ Risk Monitoring and Performance Measurement
- D Portfolio Risk: Analytical Methods
- □ VaR and Risk Budgeting in Investment Management
- □ Risk Budgeting for Pension Funds and Investment Managers Using VaR
- □ Hedge Funds: Past, Present and Future
- □ Individual Hedge Fund Strategies
- □ Funds of Hedge Funds
- □ Style Drifts: Monitoring, Detection and Control
- □ Excel Application of the Module's Topics

Module Requirements:

- □ Successful completion of module FA204
- □ Attend for at least 38 hours out of the total 48 hours training program
- □ Submit all required homework on time
- □ Submit an actual and sanitized Investment Risk Actuary (IRA) report
- □ Pass a comprehensive, two-hour, multiple-choice, Investment Risk Actuary (IRA) certification exam

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Module FA208: Investment Risk Actuarial Science (Continued)

At the end of the module participants will be awarded a Certificate of Achievement or a Certificate of Participation by the Israel Association of Valuators and Financial Actuaries (IAVFA)

Location, Date and Fee:

- □ 8 weekly sessions + exam session
- □ Time: 16:30-21:30
- □ Location: Levinsky College Campus, 15 Shoshana Persitz St, Tel Aviv
- □ Module Fee: 5,000 NIS (VAT & registration fee included)
- □ Dates: 01/09/16, 08/09/16, 15/09/16, 22/09/16, 29/09/16, 06/10/16, 13/10/16, 20/10/16, 27/10/16





Life Risk Actuary (LRA) Designation





Life Risk Actuary (LRA) Designation

The Life Risk Actuary (LRA) designation is a unique professional designation offered by the Israel Association of Valuators and Financial Actuaries (IAVFA).

LRA is a qualification for life risk actuarial science professionals, particularly those who are involved in mapping, modeling, measuring, and managing potential life risk.

Certified LRAs perform a broad variety of functions related to life risk actuarial science within commercial banks, investment banks, insurance companies, accounting firms, financial consulting firms, investment advisory and portfolio management companies, as well as in private and public companies, government ministries, regulatory bodies and statutory authorities.

Life risk actuarial science includes: Introduction to Israel's Life Insurance Market and Common Types of Contracts, Survival Functions and Life Tables (The Normal Mortality Table, The Selective Mortality Table, and Mortality Table which represents an exposure to variable risks), Life Annuities (Fixed Life Annuities, Changing Life Annuities, and Deferred and Temporary Life Annuities), Introduction to Existing Life Insurance Contracts and Their Pricing (Pure Endowment Insurance, Term Life Insurance, Whole Life Insurance, Endowment Insurance, and Additional Life insurance Contracts with incline and decline premiums), Economic Approach to Pricing Life Insurance Contracts (Utility Function Revised- Risk Aversion, Risk Neutral, etc. Measures of Risk Aversion, Determining Insurance Premiums by Using the Utility Function from the perspective of both the customer and the firm), Calculation of Reserves in the Life Insurance Portfolio of an Insurance Company (Retrospective Reserve, Prospective Reserve and Zillmer Reserve).

The LRA certification program includes 240 academic hours divided into 5 modules, 48 academic hours each. The first four modules are common to all the financial actuarial science certifications (MRA, CRA, ORA, IRA, LRA and PRA) and module 5 is the LRA module.

Transition between the modules is contingent upon compliance with the requirements of the module. One can participate in any of the modules and gradually accumulate them until earning the LRA certification, in a period not exceeding 3 years. After earning the LRA designation, one can register only to one specialization module (MRA, CRA, ORA, IRA and PRA) in order to earn an additional financial actuarial science (MRA, CRA, ORA, IRA and PRA).

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Life Risk Actuary (LRA) Designation (Continued)

At the end of the LRA certification program in order to earn the LRA designation, one is required to prepare an LRA report, such as the reports prepared by leading professionals in Israel and abroad in the field of life risk actuarial science.

The LRA report will accompany the certified LRA in meetings with potential employers or in his or her activitiy as a owner of a financial advisory office and will constitute as a entary ticket and a signal that he or she is familiar with the world's best practices in the field of the LRA certification.

Certified LRAs will be added to the valuators and financial actuaries best team in Israel and their details will be posted on our website at <u>www.IAVFA.org</u>. In addition to the LRA certificate and in order to increase the visibility of their LRA designation online Certified LRAs will also receive a LRA certification eBadge, which can be shared on their social and professional networking pages.

The LRA eBadge may be displayed wherever the certified LRA choose - professional and social networking sites like LinkedIn, Facebook, Twitter, or on a blog or website. By displaying the LRA eBadge, potential employers, recruiters and other contacts can verify the certified LRA's skills and achievement in the context of how the certification was earned.

One can participate in the 5 modules of the LRA certification program also under the continuing education programs and not in order to obtain the LRA designation. In this case one is not required to complete previous modules as a prerequisite and those modules will not include exams. In order to earn the LRA designation the candidate will have to complete the exams of all the modules, in which he or she was not tested.





Life Risk Actuary (LRA) Designation (Continued)

For the curriculum of **Module FA201: Foundations of Financial Actuarial Science** – see page 12-13

For the curriculum of **Module FA202: Quantitative Analysis** – see page 14-15

For the curriculum of **Module FA203: Financial Markets and Products** – see page 16-17

For the curriculum of **Module FA204: Valuation and Financial Actuarial Science Models** – see page 18-19





Module FA209: Life Risk Actuarial Science

This is the specialization module of the Life Risk Actuary (LRA) certification program. This module provides knowledge and understanding in performing life risk mapping, modeling, measurement and management for pricing life insurance contracts.

Following are the main topics of study:

- □ Introduction to Israel's Life Insurance Market and Common Types of Contracts
- □ Survival Functions and Life Tables
- □ Life Annuities
- □ Introduction to Existing Life Insurance Contracts and Their Pricing
- Economic Approach to Pricing Life Insurance Contracts
- □ Calculation of Reserves in the Life Insurance Portfolio of an Insurance Company
- □ Excel Application of the Module's Topics

Module Requirements:

- □ Successful completion of module FA204
- □ Attend for at least 38 hours out of the total 48 hours training program
- □ Submit all required homework on time
- □ Submit an actual and sanitized Life Risk Actuary (LRA) report
- Dess a comprehensive, two-hour, multiple-choice, Life Risk Actuary (LRA) certification exam



Module FA209: Life Risk Actuarial Science (Continued)

At the end of the module participants will be awarded a Certificate of Achievement or a Certificate of Participation by the Israel Association of Valuators and Financial Actuaries (IAVFA)

Location, Date and Fee:

- □ 8 weekly sessions + exam session
- □ Time: 16:30-21:30
- Location: Levinsky College Campus, 15 Shoshana Persitz St, Tel Aviv
- □ Module Fee: 5,000 NIS (VAT & registration fee included)
- □ Dates: 01/09/16, 08/09/16, 15/09/16, 22/09/16, 29/09/16, 06/10/16, 13/10/16, 20/10/16, 27/10/16





Pensions Risk Actuary (PRA) Designation





Pensions Risk Actuary (PRA) Designation

The Pensions Risk Actuary (PRA) designation is a unique professional designation offered by the Israel Association of Valuators and Financial Actuaries (IAVFA).

PRA is a qualification for pensions risk actuarial science professionals, particularly those who are involved in mapping, modeling, measuring, and managing potential pensions risk.

Certified PRAs perform a broad variety of functions related to life risk actuarial science within commercial banks, investment banks, insurance companies, accounting firms, financial consulting firms, investment advisory and portfolio management companies, as well as in private and public companies, government ministries, regulatory bodies and statutory authorities.

Pensions risk actuarial science includes: Introduction to Israel's Pension Insurance Market and Common Types of Contracts (Introduction, basic concepts, pension funds, senior employees insurance, supportive insurance, and loss of working capacity), The Second Pension Tier in Israel (The Basic Pension, Comprehensive Pension, The budget Pension, Senior Employees Insurance, and Advantages and Disadvantages of a Comprehensive Pension and Senior Employees Insurance), Building Pension-Actuarial Reduction Tables (Actives Table, Fund Planholders Table, Married Table, Wage Growth Table, Disability Rates Table, and Contribution), Calculation of the Pension Portions, and the Rights of the Fund Members (Method for calculating the Determining salary: 3 years Method, Average Method, Portion Method, Calculation of the new portions in the pension funds and the rights of the fund members), Pension Pricing Principles-Calculating the Rights of the Fund Members (Past and Future) (The Pricing Principles, Surviving Relatives Pension, Old Age Pension, Widow Pension, and Disability Pension using the Averages Method and the Monthly Balance Method), and Methods for Preparing Actuarial Balance Sheets of Pension Fund.

The PRA certification program includes 240 academic hours divided into 5 modules, 48 academic hours each. The first four modules are common to all the financial actuarial science certifications (MRA, CRA, ORA, IRA, LRA and PRA) and module 5 is the PRA module.



Pensions Risk Actuary (PRA) Designation (Continued)

Transition between the modules is contingent upon compliance with the requirements of the module. One can participate in any of the modules and gradually accumulate them until earning the PRA certification, in a period not exceeding 3 years. After earning the PRA designation, one can register only to one specialization module (MRA, CRA, ORA, IRA and LRA) in order to earn an additional financial actuarial science (MRA, CRA, ORA, IRA and LRA).

At the end of the PRA certification program in order to earn the PRA designation, one is required to prepare an PRA report, such as the reports prepared by leading professionals in Israel and abroad in the field of pensions risk actuarial science.

The PRA report will accompany the certified PRA in meetings with potential employers or in his or her activitiy as a owner of a financial advisory office and will constitute as a entary ticket and a signal that he or she is familiar with the world's best practices in the field of the PRA certification.

Certified PRAs will be added to the valuators and financial actuaries best team in Israel and their details will be posted on our website at <u>www.IAVFA.org</u>. In addition to the PRA certificate and in order to increase the visibility of their PRA designation online Certified PRAs will also receive a PRA certification eBadge, which can be shared on their social and professional networking pages.

The PRA eBadge may be displayed wherever the certified PRA choose - professional and social networking sites like LinkedIn, Facebook, Twitter, or on a blog or website. By displaying the PRA eBadge, potential employers, recruiters and other contacts can verify the certified PRA's skills and achievement in the context of how the certification was earned.

One can participate in the 5 modules of the PRA certification program also under the continuing education programs and not in order to obtain the PRA designation. In this case one is not required to complete previous modules as a prerequisite and those modules will not include exams. In order to earn the PRA designation the candidate will have to complete the exams of all the modules, in which he or she was not tested.



Pensions Risk Actuary (PRA) Designation (Continued)

For the curriculum of **Module FA201: Foundations of Financial Actuarial Science** – see page 12-13

For the curriculum of **Module FA202: Quantitative Analysis** – see page 14-15

For the curriculum of **Module FA203: Financial Markets and Products** – see page 16-17

For the curriculum of Module FA204: Valuation and Financial Actuarial Science

Models – see page 18-19





Module FA210: Pensions Risk Actuarial Science

This is the specialization module of the Pensions Risk Actuary (PRA) certification program. This module provides knowledge and understanding in performing pensions risk mapping, modeling, measurement and management for pricing life insurance contracts.

Following are the main topics of study:

- □ Introduction to Israel's Pension Insurance Market and Common Types of Contracts
- □ The Second Pension Tier in Israel
- □ Introduction to Actuarial Mathematics Foundations
- Building Pension-Actuarial Reduction Tables
- □ Calculation of the Pension Portions, and the Rights of the Fund Member
- Dension Pricing Principles- Calculating the Rights of the Fund Members (Past and Future)
- □ Methods for Preparing Actuarial Balance Sheets of Pension Fund
- □ Excel Application of the Module's Topics

Module Requirements:

- □ Successful completion of module FA204
- □ Attend for at least 38 hours out of the total 48 hours training program
- □ Submit all required homework on time
- □ Submit an actual and sanitized Pensions Risk Actuary (PRA) report
- □ Pass a comprehensive, two-hour, multiple-choice, Pensions Risk Actuary (PRA) certification exam



Module FA210: Pensions Risk Actuarial Science (Continued)

At the end of the module participants will be awarded a Certificate of Achievement or a Certificate of Participation by the Israel Association of Valuators and Financial Actuaries (IAVFA)

Location, Date and Fee:

- □ 8 weekly sessions + exam session
- □ Time: 16:30-21:30
- □ Location: Levinsky College Campus, 15 Shoshana Persitz St, Tel Aviv
- □ Module Fee: 5,000 NIS (VAT & registration fee included)
- □ Dates: 01/09/16, 08/09/16, 15/09/16, 22/09/16, 29/09/16, 06/10/16, 13/10/16, 20/10/16, 27/10/16





Financial and Economist Modelist (FEM) Designation





Financial and Economist Modelist (FEM) Designation

The Financial and Economic Modelist (FEM) designation is an Israeli professional certification offered by the Israel Association of Valuators and Financial Actuaries (IAVFA).

FEM is a qualification for financial and economic modeling professionals, particularly those who are involved in financial and economic modeling in Excel for valuation, risk management, investment management and project finance.

Certified FEMs use sophisticated tools to build complex financial projections for business performance, investment, projects, etc. Their extensive comprehensive, wide scale knowledge in accounting, statistics, finance, economics, securities and financial instrument analysis, and portfolio management provides them with the necessary tools to implement an in depth understanding of the uncertainties, variables and scenarios needed to be factored into their forecasts and also for building complex financial and economic models.

Certified FEMs perform a broad variety of functions related to financial and economic modeling within commercial banks, investment banks, insurance companies, accounting firms, financial consulting firms, investment advisory and portfolio management companies, as well as in private and public companies, government ministries, regulatory bodies and statutory authorities.

Financial and economic modeling includes :Building and using sophisticated tools for financial planning and forecasting, Building and using sophisticated tools for business valuation, Building and using sophisticated tools for portfolio management, Building and using sophisticated tools for pricing options and futures contracts, Building and using sophisticated tools for fixed income portfolio management, Building and using sophisticated tools for estimating and modeling the term structure of interest rates and yield curve approximation, Building and using sophisticated tools for creating complex economic models (including PPP and BOT), and Modeling and Consulting for Control Premium, Minority interest, Nuisance Value and Discount for Lack of Marketability.

The FEM certification program includes 240 academic hours divided into 5 modules, 48 academic hours each.



Financial and Economist Modelist (FEM) Designation (Continued)

Transition between the modules is contingent upon compliance with the requirements of the module. One can participate in any of the modules and gradually accumulate them until earning the FEM certification, in a period not exceeding 3 years.

At the end of the FEM certification program in order to earn the FEM designation, one is required to prepare a FEM report, such as the reports prepared by leading professionals in Israel and abroad in the field of financial and economic modeling.

The FEM report will accompany the certified FEM in meetings with potential employers or in his or her activitiy as a owner of a financial advisory office and will constitute as a entary ticket and a signal that he or she is familiar with the world's best practices in the field of the FEM certification.

Certified FEMs will be added to the valuators and financial actuaries best team in Israel and their details will be posted on our website at <u>www.IAVFA.org</u>. In addition to the FEM certificate and in order to increase the visibility of their FEM designation online Certified FEMs will also receive a FEM certification eBadge, which can be shared on their social and professional networking pages.

The FEM eBadge may be displayed wherever the certified FEM choose - professional and social networking sites like LinkedIn, Facebook, Twitter, or on a blog or website. By displaying the FEM eBadge, potential employers, recruiters and other contacts can verify the certified FEM's skills and achievement in the context of how the certification was earned.

One can participate in the 5 modules of the FEM certification program also under the continuing education programs and not in order to obtain the FEM designation. In this case one is not required to complete previous modules as a prerequisite and those modules will not include exams. In order to earn the FEM designation the candidate will have to complete the exams of all the modules, in which he or she was not tested.



Module FV201: Corporate Finance Models

This is the first module in the Principles of Financial Modeling (POFM) module series. This module provides theoretical and practical tools for financial planning and forecasting and valuation methods, with emphasis and implementing in an electronic spreadsheet (Excel).

Following are the main topics of study:

- □ Basic Financial Calculations
- □ Calculating the Cost of Capitol
- □ Financial Statement Modeling
- □ Using Financial Statement Models for Valuation
- □ The Financial Analysis of Leasing
- □ The Financial Analysis of Leveraged Leases
- □ The Gauss-Seidel Method and Excel Functions
- □ Some Excel Hints

Module Requirements:

- □ Attend for at least 38 hours out of the total 48 hours training program
- □ Submit all required homework on time
- □ Pass a comprehensive, two-hour, multiple-choice, proctored examination



Module FV201: Corporate Finance Models (Continued)

At the end of the module participants will be awarded a Certificate of Achievement or a Certificate of Participation by the Israel Association of Valuators and Financial Actuaries (IAVFA)

Location, Date and Fee:

- □ 8 weekly sessions + exam session
- □ Time: 16:30-21:30
- Location: Levinsky College Campus, 15 Shoshana Persitz St, Tel Aviv
- □ Module Fee: 5,000 NIS (VAT & registration fee included)
- □ Dates: 9/11/15, 16/11/15, 23/11/15, 30/11/15, 07/12/15, 14/12/15, 21/12/15, 28/12/15, 04/01/16





Module FV202: Portfolio Models

This is the second module in the Principles of Financial Modeling (POFM) module series. This module provides theoretical and practical tools for investment portfolio management, with emphasis and implementing in an electronic spreadsheet (Excel).

Following are the main topics of study:

- D Portfolio Models—Introduction
- □ Calculating the Variance-Covariance Matrix
- □ Calculating Efficient Portfolios When There Are No Short-Sale Restrictions
- □ Estimating Betas and the Security Market Line
- □ Efficient Portfolios without Short Sales
- □ Value at Risk (VaR)
- Data Tables
- □ Matrices

Module Requirements:

- □ Successful completion of module FV201
- □ Attend for at least 38 hours out of the total 48 hours training program
- □ Submit all required homework on time
- D Pass a comprehensive, two-hour, multiple-choice, proctored examination



Module FV202: Portfolio Models (Continued)

At the end of the module participants will be awarded a Certificate of Achievement or a Certificate of Participation by the Israel Association of Valuators and Financial Actuaries (IAVFA)

Location, Date and Fee:

- □ 8 weekly sessions + exam session
- □ Time: 16:30-21:30
- Location: Levinsky College Campus, 15 Shoshana Persitz St, Tel Aviv
- □ Module Fee: 5,000 NIS (VAT & registration fee included)
- □ Dates: 18/01/16, 25/01/16, 01/02/16, 08/02/16, 15/02/16, 22/02/16, 29/02/16, 07/03/16, 14/03/16





Module FV203: Option-Pricing Models

This is the third module in the Principles of Financial Modeling (POFM) module series. This module provides theoretical and practical tools for pricing options and futures, and portfolios insurance using derivative products, with emphasis and implementing in an electronic spreadsheet (Excel).

Following are the main topics of study:

- □ An Introduction to Options
- □ The Binomial Option-Pricing Model
- □ The Lognormal Distribution
- □ The Black-Scholes Model
- Portfolio Insurance
- □ Real Options
- □ Early Exercise Boundaries
- Random Number

Module Requirements:

- □ Successful completion of module FV202
- □ Attend for at least 38 hours out of the total 48 hours training program
- □ Submit all required homework on time
- D Pass a comprehensive, two-hour, multiple-choice, proctored examination



Module FV203: Option-Pricing Models (Continued)

At the end of the module participants will be awarded a Certificate of Achievement or a Certificate of Participation by the Israel Association of Valuators and Financial Actuaries (IAVFA)

Location, Date and Fee:

- □ 8 weekly sessions + exam session
- □ Time: 16:30-21:30
- Location: Levinsky College Campus, 15 Shoshana Persitz St, Tel Aviv
- □ Module Fee: 5,000 NIS (VAT & registration fee included)
- □ Dates: 28/03/16, 04/04/16, 11/04/16, 18/04/16, 25/04/16, 02/05/16, 09/05/16, 16/05/16, 23/05/16





Module FV204: Bonds and Duration

This is the fourth module in the Principles of Financial Modeling (POFM) module series. This module provides theoretical and practical tools for fixed income portfolio management, with emphasis and implementing in an electronic spreadsheet (Excel).

Following are the main topics of study:

- □ Duration
- □ Immunization Strategies
- □ Modeling the Term Structure
- □ Calculating Default-Adjusted Expected Bond Returns
- Duration and the Cheapest-to-Deliver Problem for Treasury bond Futures Contracts

Module Requirements:

- □ Successful completion of module FV203
- Attend for at least 38 hours out of the total 48 hours training program
- □ Submit all required homework on time
- □ Pass a comprehensive, two-hour, multiple-choice, proctored examination



Module FV204: Bonds and Duration (Continued)

At the end of the module participants will be awarded a Certificate of Achievement or a Certificate of Participation by the Israel Association of Valuators and Financial Actuaries (IAVFA)

Location, Date and Fee:

- □ 8weekly sessions + exam session
- □ Time: 16:30-21:30
- Location: Levinsky College Campus, 15 Shoshana Persitz St, Tel Aviv
- □ Module Fee: 5,000 NIS (VAT & registration fee included(
- □ Dates: 06/06/16, 13/06/16, 20/06/16, 27/06/16, 04/07/16, 11/07/16, 18/07/16, 25/07/16, 01/08/16





Module FV205: Financial and Economic Modeling

This is the specialization module of the Financial and Economic Modelist (FEM) certification program. This module provides knowledge and understanding in performing financial and economic modeling using advanced Excel functions or by building unique functions with the built-in programming language in Excel (Visual Basic for Applications).

Following are the main topics of study:

- □ User-Defined Functions with Visual Basic for Applications
- □ Types and Loops
- Macros and User Interaction
- □ Arrays
- □ Objects
- Building Complex Economic Models (including PPP and BOT)
- Modeling Control Premiums, Minority Discounts, Nuisance Value and Discount for Lack of Marketability (DLOM)

Module Requirements:

- □ Successful completion of module FV204
- □ Attend for at least 38 hours out of the total 48 hours training program
- □ Submit all required homework on time
- □ Submit an actual and sanitized Financial and Economic Modelist (FEM) report
- □ Pass a comprehensive, two-hour, multiple-choice, Financial and Economic Modelist (FEM) certification exam



Module FV205: Financial and Economic Modeling (Continued)

At the end of the module participants will be awarded a Certificate of Achievement or a Certificate of Participation by the Israel Association of Valuators and Financial Actuaries (IAVFA)

Location, Date and Fee:

- □ 8 weekly sessions + exam session
- □ Time: 16:30-21:30
- Location: Levinsky College Campus, 15 Shoshana Persitz St, Tel Aviv
- □ Module Fee: 5,000 NIS (VAT & registration fee included)
- □ Dates: 31/10/16, 07/11/16, 14/11/16, 21/11/16, 28/11/16, 05/12/16, 12/12/16, 19/12/16, 26/12/16





Corporate Finance Valuator (CFV) Designation





Corporate Finance Valuator (CFV) Designation

The Corporate Finance Valuator (CFV) designation is a unique professional designation offered by the Israel Association of Valuators and Financial Actuaries (IAVFA).

CFV is a qualification for corporate finance valuation professionals, particularly those who are involved in valuing businesses and intangible assets to provide expert analysis relating to litigation, tax planning, M&A's and business transactions.

Certified CFVs perform a broad variety of functions related to corporate finance valuation within commercial banks, investment banks, insurance companies, accounting firms, financial consulting firms, investment advisory and portfolio management companies, as well as in private and public companies, government ministries, regulatory bodies and statutory authorities.

Corporate finance valuations includes: Corporate and Business Segment Valuations, Valuations of Intangible Assets, PPA – Purchase Price Allocation, Impairment (Goodwill and other Intangible Assets Valuation), Fair Value Embedded Options & Real Options, ESOP including 409A, Splitting Equity Components and Complicated Equity or Liabilities Instruments (PWERM/ CCM /OPM), Valuations of Contingent Liabilities, Guarantees and Loans, At Arm's Length Principle of Transfer Pricing, and Valuations for Merger and Acquisitions Purposes and other Transaction Consulting.

The CFV certification program includes 240 academic hours divided into 5 modules, 48 academic hours each.

Transition between the modules is contingent upon compliance with the requirements of the module. One can participate in any of the modules and gradually accumulate them until earning the CFV certification, in a period not exceeding 3 years.

At the end of the CFV certification program in order to earn the CFV designation, one is required to prepare a CFV report, such as the reports prepared by leading professionals in Israel and abroad in the field of corporate finance valuation.

The CFV report will accompany the certified CFV in meetings with potential employers or in his or her activitiy as a owner of a financial advisory office and will constitute as a entary ticket and a signal that he or she is familiar with the world's best practices in the field of the CFV certification.

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Corporate Finance Valuator (CFV) Designation (Continued)

Certified CFVs will be added to the valuators and financial actuaries best team in Israel and their details will be posted on our website at <u>www.IAVFA.org</u>. In addition to the CFV certificate and in order to increase the visibility of their CFV designation online Certified CFVs will also receive a CFV certification eBadge, which can be shared on their social and professional networking pages.

The CFV eBadge may be displayed wherever the certified CFV choose - professional and social networking sites like LinkedIn, Facebook, Twitter, or on a blog or website. By displaying the CFV eBadge, potential employers, recruiters and other contacts can verify the certified CFV's skills and achievement in the context of how the certification was earned.

One can participate in the 5 modules of the CFV certification program also under the continuing education programs and not in order to obtain the CFV designation. In this case one is not required to complete previous modules as a prerequisite and those modules will not include exams. In order to earn the CFV designation the candidate will have to complete the exams of all the modules, in which he or she was not tested.





Module FV301: The Income Approach and Cost of Capital

This is the first module in the Principles of Corporates Valuation (POCV) module series. This module provides knowledge and understanding in performing corporate valuations using the income approach.

Following are the main topics of study:

- □ Introduction to Financial Valuation
- □ Research and Its Presentation
- □ Financial Statement and Company Risk Analysis
- □ Income Approach
- □ Cost of Capital/Rates of Return
- □ Excel Application of the Module's Topics

Module Requirements:

- □ Attend for at least 38 hours out of the total 48 hours training program
- □ Submit all required homework on time
- □ Pass a comprehensive, two-hour, multiple-choice, proctored examination



Module FV301: The Income Approach and Cost of Capital (Continued)

At the end of the module participants will be awarded a Certificate of Achievement or a Certificate of Participation by the Israel Association of Valuators and Financial Actuaries (IAVFA)

Location, Date and Fee:

- □ 8 weekly sessions + exam session
- □ Time: 16:30-21:30
- Location: Levinsky College Campus, 15 Shoshana Persitz St, Tel Aviv
- □ Module Fee: 5,000 NIS (VAT & registration fee included)
- □ Dates: 13/12/15, 20/12/15, 27/12/15, 03/01/16, 10/01/16, 17/01/16, 24/01/16, 31/01/16, 07/02/16





Module FV302: The Market Approach, Asset Approach and Discounts and Premiums

This is the second module in the Principles of Corporates Valuation (POCV) module series. This module provides knowledge and understanding in performing corporate valuations using the market approach and the asset approach.

Following are the main topics of study:

- □ Market Approach
- □ Asset Approach
- Valuation Discounts and Premiums
- □ Business Valuation Standards (USPAP)
- □ Report Writing
- □ Excel Application of the Module's Topics

Module Requirements:

- □ Successful completion of module FV301
- □ Attend for at least 38 hours out of the total 48 hours training program
- □ Submit all required homework on time
- D Pass a comprehensive, two-hour, multiple-choice, proctored examination



Module FV302: The Market Approach, Asset Approach and Discounts and Premiums (Continued)

At the end of the module participants will be awarded a Certificate of Achievement or a Certificate of Participation by the Israel Association of Valuators and Financial Actuaries (IAVFA)

Location, Date and Fee:

- □ 8 weekly sessions + exam session
- □ Time: 16:30-21:30
- Location: Levinsky College Campus, 15 Shoshana Persitz St, Tel Aviv
- □ Module Fee: 5,000 NIS (VAT & registration fee included)
- □ Dates: 21/02/16, 28/02/16, 06/03/16, 13/03/16, 20/03/16, 27/03/16, 03/04/16, 10/04/16, 17/04/16





Module FV303: Valuation of Pass-Through Entities

This is the third module in the Principles of Corporates Valuation (POCV) module series. This module provides knowledge and understanding in performing valuation of pass-through entities.

Following are the main topics of study:

- □ Valuation of Pass-Through Entities
- □ Estate, Gift, and Income Tax Valuations
- □ Valuation of Family Limited Partnerships
- □ Summary of Court Case Issues
- □ Shareholder Disputes
- □ Valuation Issues in Employee Stock Ownership Plans
- □ Valuation in the Divorce Setting
- Valuation Issues in Small Businesses
- □ Strategic Benchmarking for Value
- □ Excel Application of the Module's Topics

Module Requirements:

- □ Successful completion of module FV302
- □ Attend for at least 38 hours out of the total 48 hours training program
- □ Submit all required homework on time
- D Pass a comprehensive, two-hour, multiple-choice, proctored examination


Module FV303: Valuation of Pass-Through Entities (Continued)

At the end of the module participants will be awarded a Certificate of Achievement or a Certificate of Participation by the Israel Association of Valuators and Financial Actuaries (IAVFA)

Location, Date and Fee:

- □ 8 weekly sessions + exam session
- □ Time: 16:30-21:30
- Location: Levinsky College Campus, 15 Shoshana Persitz St, Tel Aviv
- □ Module Fee: 5,000 NIS (VAT & registration fee included)
- □ Dates: 01/05/16, 08/05/16, 15/05/16, 22/05/16, 29/05/16, 05/06/16, 12/06/16, 19/06/16, 26/06/16





Module FV304: Valuation of Intangible Assets

This is the fourth module in the Principles of Corporates Valuation (POCV) module series. This module provides knowledge and understanding in performing valuation of intangible assets.

Following are the main topics of study:

- Valuation of Intangible Assets
- □ Business Damages
- □ Valuations for Public Companies and/or Financial Reporting
- □ Valuation Issues in Buy-Sell Agreements Valuing Debt
- □ Valuation Issues in Preferred Stock
- Restricted Stock Valuation
- □ Valuation of Early-Stage Technology Companies
- □ Valuation Issues Related to Stock Options and Other Share-Based Compensation
- Real Option Valuations
- Maximizing Shareholder Value
- □ Excel Application of the Module's Topics

Module Requirements:

- □ Successful completion of module FV303
- □ Attend for at least 38 hours out of the total 48 hours training program
- □ Submit all required homework on time
- Description Pass a comprehensive, two-hour, multiple-choice, proctored examination



Module FV304: Valuation of Intangible Assets (Continued)

At the end of the module participants will be awarded a Certificate of Achievement or a Certificate of Participation by the Israel Association of Valuators and Financial Actuaries (IAVFA)

Location, Date and Fee:

- □ 8 weekly sessions + exam session
- □ Time: 16:30-21:30
- Location: Levinsky College Campus, 15 Shoshana Persitz St, Tel Aviv
- □ Module Fee: 5,000 NIS (VAT & registration fee included)
- □ Dates: 30/10/16, 06/11/16, 13/11/16, 20/11/16, 27/11/16, 04/12/16, 11/12/16, 18/12/16, 25/12/16, 25/12/16





Module FV305: Corporate Finance Valuations

This is the specialization module of the Corporate Finance Valuator (CFV) certification program. This module provides provides knowledge and understanding of Corporate Valuations.

Following are the main topics of study:

- □ Business Valuation for Companies and Entities in the fields of Construction, Auto Dealerships, Radio, Cable TV, Bars and Nightclubs, and Restaurants
- D PPA Purchase Price Allocation.
- □ Impairment (Goodwill and other Intangible Assets Valuation)
- Valuations of Intangible Assets
- □ Fair Value Embedded Options & Real Options
- □ ESOP including 409A
- Splitting Equity Components and Complicated Equity or Liabilities Instruments (PWERM / CCM / OPM)
- Damage Quantification, Valuations of Contingent Liabilities, Guarantees and Loans
- Expert opinion in Litigation Purposes
- □ Valuations for Merger and Acquisitions Purposes and other Transaction Consulting
- □ Excel Application of the Module's Topics

Module Requirements:

- □ Successful completion of module FV304
- □ Attend for at least 38 hours out of the total 48 hours training program
- □ Submit all required homework on time
- □ Submit an actual and sanitized Corporate Finance Valuator (CFV) report
- □ Pass a comprehensive, two-hour, multiple-choice, Corporate Finance Valuator (CFV) certification exam



Module FV305: Corporate Finance Valuations (Continued)

At the end of the module participants will be awarded a Certificate of Achievement or a Certificate of Participation by the Israel Association of Valuators and Financial Actuaries (IAVFA)

Location, Date and Fee:

- □ 8 weekly sessions + exam session
- □ Time: 16:30-21:30
- Location: Levinsky College Campus, 15 Shoshana Persitz St, Tel Aviv
- □ Module Fee: 5,000 NIS (VAT & registration fee included)
- □ Dates: 08/01/17, 15/01/17, 22/01/17, 29/01/17, 05/02/17, 12/02/17, 19/02/17, 26/02/17, 05/03/17



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Quantitative Finance Valuator (QFV) Designation





Quantitative Finance Valuator (QFV) Designation

The Quantitative Finance Valuator (QFV) designation is a unique professional designation offered by the Israel Association of Valuators and Financial Actuaries (IAVFA).

QFV is a qualification for quantitative finance valuation professionals, particularly those who are involved in determining the current fair values of financial asset and liabilities to provide expert analysis for financial statement reporting and for audit, statutory, regulatory, legal, tax and M&A purposes.

Certified QFVs perform a broad variety of functions related to quantitative finance valuation within commercial banks, investment banks, insurance companies, accounting firms, financial consulting firms, investment advisory and portfolio management companies, as well as in private and public companies, government ministries, regulatory bodies and statutory authorities.

Quantitative finance valuations includes: Consulting and Conducting Hedge Effectiveness Tests, Fair Value of Embedded Derivatives, Valuations and Risk Analysis used for 2nd Galai Report (VaR, Sensitivity), Valuations and Risk Analysis for IFRS 7 & IFRS 9, Financial and Inflation Related Models (IAS 39, AG7, AG8), Convertible Bond Valuations, Financial Options and Complex Derivative Positions, Credit Risk Analysis.

The QFV certification program includes 240 academic hours divided into 5 modules, 48 academic hours each.

Transition between the modules is contingent upon compliance with the requirements of the module. One can participate in any of the modules and gradually accumulate them until earning the QFV certification, in a period not exceeding 3 years.

At the end of the QFV certification program in order to earn the QFV designation, one is required to prepare a QFV report, such as the reports prepared by leading professionals in Israel and abroad in the field of quantitative finance valuation.

The QFV report will accompany the certified QFV in meetings with potential employers or in his or her activitiy as a owner of a financial advisory office and will constitute as a entary ticket and a signal that he or she is familiar with the world's best practices in the field of the QFV certification.

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Quantitative Finance Valuator (QFV) Designation (Continued)

Certified QFVs will be added to the valuators and financial actuaries best team in Israel and their details will be posted on our website at <u>www.IAVFA.org</u>. In addition to the QFV certificate and in order to increase the visibility of their CFV designation online Certified QFVs will also receive a QFV certification eBadge, which can be shared on their social and professional networking pages.

The QFV eBadge may be displayed wherever the certified QFV choose - professional and social networking sites like LinkedIn, Facebook, Twitter, or on a blog or website. By displaying the QFV eBadge, potential employers, recruiters and other contacts can verify the certified QFV's skills and achievement in the context of how the certification was earned.

One can participate in the 5 modules of the QFV certification program also under the continuing education programs and not in order to obtain the QFV designation. In this case one is not required to complete previous modules as a prerequisite and those modules will not include exams. In order to earn the QFV designation the candidate will have to complete the exams of all the modules, in which he or she was not tested.





Module FV401: Options and Futures Markets

This is the first module in the Principles of Derivatives Valuation (PODV) module series. This module provides knowledge and understanding in performing valuation of forward, futures and options.

Following are the main topics of study:

- □ Introduction to Options, Futures, and Other Derivatives
- □ Mechanics of Futures Markets
- □ Hedging Strategies Using Futures
- □ Interest Rates
- Determination of Forward and Futures Prices
- □ Interest Rate Futures and Swaps
- Mechanics of Options Markets
- Properties of Stock Options
- □ Trading Strategies Involving Options
- □ Binomial Trees
- □ Wiener Processes and Ito's Lemma
- □ The Black-Scholes-Merton Model
- □ Excel Application of the Module's Topics

Module Requirements:

- □ Attend for at least 38 hours out of the total 48 hours training program
- □ Submit all required homework on time
- D Pass a comprehensive, two-hour, multiple-choice, proctored examination



Module FV401: Options and Futures Markets (Continued)

At the end of the module participants will be awarded a Certificate of Achievement or a Certificate of Participation by the Israel Association of Valuators and Financial Actuaries (IAVFA)

Location, Date and Fee:

- □ 8 weekly sessions + exam session
- □ Time: 16:30-21:30
- Location: Levinsky College Campus, 15 Shoshana Persitz St, Tel Aviv
- □ Module Fee: 5,000 NIS (VAT & registration fee included)
- □ Dates: 13/01/16, 20/01/16, 27/01/16, 03/02/16, 10/02/16, 17/02/16, 24/02/16, 02/03/16, 09/03/16





Module FV402: Derivative Products and Financial Actuarial Science

This is the second module in the Principles of Derivatives Valuation (PODV) module series. This module provides knowledge and understanding in performing valuation of a broad range of derivative products and risks which managed by the middle office of a financial institution.

Following are the main topics of study:

- Derivative Markets in Developing Countries
- Options on Stock Indices and Currencies
- Options on Futures
- □ Greek Letters
- Volatility Smiles
- Basic Numerical Procedures
- □ Value at Risk (VaR)
- □ Estimating Volatilities and Correlations
- □ Credit Risk
- □ Business Valuation Standards (USPAP)
- □ Report Writing
- □ Excel Application of the Module's Topics

Module Requirements:

- □ Successful completion of module FV401
- □ Attend for at least 38 hours out of the total 48 hours training program
- □ Submit all required homework on time
- D Pass a comprehensive, two-hour, multiple-choice, proctored examination



Module FV402: Derivative Products and Financial Actuarial Science (Continued)

At the end of the module participants will be awarded a Certificate of Achievement or a Certificate of Participation by the Israel Association of Valuators and Financial Actuaries (IAVFA)

Location, Date and Fee:

- □ 8 weekly sessions + exam session
- □ Time: 16:30-21:30
- Location: Levinsky College Campus, 15 Shoshana Persitz St, Tel Aviv
- □ Module Fee: 5,000 NIS (VAT & registration fee included)
- □ Dates: 23/03/16, 30/03/16, 06/04/16, 13/04/16, 20/04/16, 27/04/16, 04/05/16, 11/05/16, 18/05/16





Module FV403: Advanced Derivatives

This is the third module in the Principles of Derivatives Valuation (PODV) module series. This module provides knowledge and understanding the use of unique models and advanced numerical techniques for the valuation of derivatives.

Following are the main topics of study:

- □ Credit Derivatives
- □ Exotic Options
- □ More on Models and Numerical Procedures
- Martingales and Measures
- □ Interest Rate Derivatives: The Standard Market Models, Models of the Short Rate, HJM and LMM
- Convexity, Timing and Quanto Adjustments
- □ Swaps Revisited
- □ Energy and Commodity Derivatives
- □ Real Options
- Derivatives Mishaps and What We Can Learn from Them
- Distributions
- □ Some Useful Formulas
- □ Excel Application of the Module's Topics

Module Requirements:

- □ Successful completion of module FV402
- $\hfill\square$ Attend for at least 38 hours out of the total 48 hours training program
- □ Submit all required homework on time
- D Pass a comprehensive, two-hour, multiple-choice, proctored examination



Module FV403: Advanced Derivatives (Continued)

At the end of the module participants will be awarded a Certificate of Achievement or a Certificate of Participation by the Israel Association of Valuators and Financial Actuaries (IAVFA)

Location, Date and Fee:

- □ 8 weekly sessions + exam session
- □ Time: 16:30-21:30
- Location: Levinsky College Campus, 15 Shoshana Persitz St, Tel Aviv
- □ Module Fee: 5,000 NIS (VAT & registration fee included)
- □ Dates: 01/06/16, 08/06/16, 15/06/16, 22/06/16, 29/06/16, 06/07/16, 14/07/16, 28/07/16, 04/08/16





Module FV404: Derivatives Modeling Using VBA

This is the fourth module in the Principles of Derivatives Valuation (PODV) module series. This module provides knowledge and understanding the use of the built-in programming language in Excel (Visual Basic for Applications) for the valuation of plain vanilla options and exotic, non-standard instruments.

Following are the main topics of study:

- □ Black-Scholes-Merton
- □ Black-Scholes-Merton Greeks
- □ Analytical Formulas for American Options
- □ Exotic Options on Single Asset
- □ Exotic Options on Two Assets
- □ Black-Scholes-Merton Adjustments and Alternatives
- □ Trees and Finite Difference Methods
- □ Monte Carlo Simulation
- Options on Stocks That Pay Discrete Dividends
- Commodity and Energy Options
- Interest Rate Derivatives
- Volatility and Correlation

Module Requirements:

- □ Successful completion of module FV403
- □ Attend for at least 38 hours out of the total 48 hours training program
- □ Submit all required homework on time
- D Pass a comprehensive, two-hour, multiple-choice, proctored examination



Module FV404: Derivatives Modeling Using VBA (Continued)

At the end of the module participants will be awarded a Certificate of Achievement or a Certificate of Participation by the Israel Association of Valuators and Financial Actuaries (IAVFA)

Location, Date and Fee:

- □ 8 weekly sessions + exam session
- □ Time: 16:30-21:30
- Location: Levinsky College Campus, 15 Shoshana Persitz St, Tel Aviv
- □ Module Fee: 5,000 NIS (VAT & registration fee included)
- □ Dates: 26/10/16, 02/11/16, 09/11/16, 16/11/16, 23/11/16, 30/11/16, 07/12/16, 14/12/16, 21/12/16





Module FV405: Quantitative Finance Valuations

This is the specialization module of the Quantitative Finance Valuator (QFV) certification program. This module provides provides knowledge and understanding of Corporate Valuations.

Following are the main topics of study:

- □ Hedge Effectiveness Tests
- □ Fair Value of Embedded Derivatives
- □ Valuations and Risk Analysis used for 2nd Galai Report (VaR, Sensitivity)
- □ Valuations and Risk Analysis for IFRS 7 and IFRS 9
- Convertible Bond Valuations, Financial Options and Complex Derivative Positions
- □ Financial and Inflation Related Models (IAS 39, AG7, AG8)
- □ Credit Risk Analysis
- □ Excel Application of the Module's Topics

Module Requirements:

- □ Successful completion of module FV404
- □ Attend for at least 38 hours out of the total 48 hours training program
- □ Submit all required homework on time
- □ Submit an actual and sanitized Quantitative Finance Valuator (QFV) report
- □ Pass a comprehensive, two-hour, multiple-choice, Quantitative Finance Valuator (QFV) certification exam



Module FV405: Quantitative Finance Valuations (Continued)

At the end of the module participants will be awarded a Certificate of Achievement or a Certificate of Participation by the Israel Association of Valuators and Financial Actuaries (IAVFA)

Location, Date and Fee:

- □ 8 weekly sessions + exam session
- □ Time: 16:30-21:30
- Location: Levinsky College Campus, 15 Shoshana Persitz St, Tel Aviv
- □ Module Fee: 5,000 NIS (VAT & registration fee included)
- □ Dates: 04/01/17, 11/01/17, 18/01/17, 25/01/17, 01/02/17, 08/02/17, 15/02/17, 22/02/17, 01/03/17







The Israel Association of Valuators and Financial Actuaries (IAVFA) strives to voluntarily regulate the professions of valuation and financial actuarial science in Israel, both by setting pre-qualification requirements, ethical principles for practitioners in these professions, and by training and certifying quality professionals for these professions. IAVFA provides both placement services in order to integrate its credentialed members in leading positions within the Israeli labor market, and mediation services between valuation consumers and valuation specialists.

IAVFA Membership Application

Please complete the information below (Print or Type): Your name and address exactly as you wish it to appear in IAVFA's Certifieds page on our website at www.IAVFA.com. To better serve you, IAVFA requests a curriculum vitae and a business photo (head shot) be submitted along with your application. This application is also available online at www. IAVFA.com.

Date:

SECTION A

Member Information:

Full Name:						
Designations:						
Firm Name:			_E-mail: _			
Website:						
Address:						
Country/State:		_City:			ZIP:	
Tel:	Cell:			Fax:		
Position in Firm:						
Areas of Expertise:						



SECTION B

Shipping Address: (*If different from address above*)

Firm Name:			
Address:			
Country/State:	City:	ZIP:	

SECTION C

SECTION D

Professional Conduct:

- Have you ever been convicted of any felony or any crime carrying a punishment of time in prison, whether or not time was served?
 Yes I No If Yes, please explain:
- 2. Have you been convicted of a misdemeanor involving moral turpitude (lying, cheating, stealing, or other dishonest conduct) or any substantially equivalent crime in any court of law?

🗋 Yes 🗖 No	If Yes, please explain:
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3. Have you had any professional license, professional certification, or professional membership revoked, refused, or suspended (other than for nonpayment of dues)?
Yes Weithintow.org No If Yes, please explain:

SECTION E

I have included a recent curriculum vitae and a business photo with this application.

SECTION F

Education:

High School Diploma:	Y es	D No	
University/College:			Years Attended:
Degree:			
University/College:			Years Attended:
Degree:			
University/College:			Years Attended:
Degree:			

SECTION G

Professional Licenses and Designations:	
Association:	Designation /License:
Designation/License #:	Year Certified/Licensed:
Association:	Designation /License:
Designation/License #:	Year Certified/Licensed:
Association:	_ Designation /License:
Designation/License #:	Year Certified/Licensed:

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SECTION H

I am a:

- <u>Practitioner</u> pursuing the MRA/CRA/ORA/IRA/LRA/PRA/FEM/QFV/CFV: **Ves** Yes No
- <u>Government Employee</u> pursuing MRA/CRA/ORA/IRA/LRA/PRA/FEM/QFV/CFV:
 Yes No
- <u>Academician</u> pursuing the MRA/CRA/ORA/IRA/LRA/PRA/FEM/QFV/CFV: \Box Yes \Box No
- <u>Professional</u> pursuing the MRA/CRA/ORA/IRA/LRA/PRA/FEM/QFV/CFV: **Ves** No
- <u>Student</u> full-time pursuing the MRA/CRA/ORA/IRA/LRA/PRA//FEM/QFV/CFV: Yes
 No
- ______ full-time pursuing the MRA/CRA/ORA/IRA/LRA/PRA//FEM/QFV/CFV:

Check the Applicable Option: (payable only by credit card)

- <u>Practitioner</u> Annual Membership Dues: \$495*
- <u>Government Employee</u> Annual Membership Dues: \$495*
- Academician Annual Membership Dues: \$225*
- <u>Professional</u> Annual Membership Dues: \$225*
- <u>Student</u> full-time Annual Membership Dues: \$135*

*Annual Membership is subject to change.

By signing this form, applicant agrees to abide by the rules governing IAVFA and its members and agrees to hold IAVFA harmless from any claims arising from or related to membership in IAVFA. IAVFA reserves the right to refuse membership and/or certification to any person. A IAVFA member or holder of a IAVFA certification may have his or her membership or certification terminated based on appropriate grounds therefor as determined by the IAVFA's Executive Advisory Board.

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SECTION I

Payment:			
Amount Due \$_			
Card Number:		EXP Date:	_
CVV#: (3-4 digit s	ecurity code)		_
Billing Address:			_
City:	ST:	ZIP:	

By signing, you authorize IAVFA to charge your account for the amount indicated. IAVFA can also initiate credit entries to your account in the event a credit or correction is due. Your signature authorizes us to confirm the above information via e-mail or fax and to use either for future communications. IAVFA will not disclose or share this information with third parties. Authorized Signature: Date:

Membership Application Checklist

Before submitting your application, please verify that you have included all of the following:

- Completed application, including felony question
- Completed three reference letter forms from business references which you wrote down on the application
- Curriculum vitae and a business photo
- Copies of all the academic degrees which you wrote down on the application
- Copies of all the professional licenses and designations which you wrote down on the application





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