# Hamed *Behairy*

An internationally renowned financial consultant and trainer over the past 18 years. With global experience in the fields of financial analysis, modelling, corporate governance, consultation and training, Hamed has been consistently acclaimed as one of the top financial consultants in many countries around the world. The presenter is widely renowned as a seasoned valuation modelling expert. Hamed is the founder and CEO of Radix Training Academy (Pty) Ltd and cofounder and CEO of Radix Corporate Governance (Pty) Ltd based in Cape Town, South Africa. His clients include multinational corporates, pension funds, asset management companies, among others in South Africa, The United States of America, Hong Kong, Singapore, Malaysia, Saudi Arabia, the UAE and other countries. Hamed is arguably one of the best financial trainers globally. Hamed has extensive training experience. His workshops combine professional knowledge along with excellent presentation skills. Participants' comments of Hamed's workshops indicate that they leave with deep understanding of the material covered and conclusive ability to apply these concepts at their workplace upon completion of his courses. He has substantial experience in training corporate executives on strategic matters including valuation modelling, corporate restructuring, M&A modelling, applied corporate finance modelling, advanced financial modelling using Excel and VBA, attribution analysis modelling and other modelling courses. He currently lectures postgraduate students at the University of Cape Town certain subjects including Valuation Modelling, Portfolio Optimization and Financial Modelling. He is the founder of the charitable organization "Do It Project". Hamed is a Chartered Financial Analyst (CFA). He qualified with BCom (honours) in accounting - cum laude with first class honour, and BCom (honours) in Financial Analysis and Portfolio Management - cum laude, with first class honour. Hamed's hands-on training approach is mixed with energy, humour and continuous interaction with delegates. The systematic build up of his workshops ensures a bottom-up explanation, leading delegates quickly from the basics through the more advanced topics.

## 5 KEY TAKE AWAYS

| | |
|---|---|
| **1** | Develop a thorough understanding of excel and vba software(s) for financial modelling purposes. |
| **2** | Learn the needed tools to build models that are less time and effort consuming |
| **3** | Gain the best practice in modelling forecasted financial statements (BalanceSheet, Income Statement and Cash Flow Statement) |
| **4** | Work with over 1 million rows of data in seconds with Power Pivot Data MAshup and Data Exploration |
| **5** | See the way how to get from the basics of VBA to building a loan amortization table using a VBA macro |

## WHO SHOULD ATTEND?

All Excel Users particularly:
» Financial Analysts
» Chief Executive Officers
» Chief Financial Officers
» Portfolio managers
» Corporate accountants
» Credit analysts
» Private equity managers
» Actuarist
» Venture capitalists
» Corporate finance analysts
» Risk managers
» Board members
» Investment bankers
» Regulators
» Financial government officials
» Strategic planners
» Trustees
» Compliance officers
» Management consultants
» Bank lending officers
» Internal auditors
» Management consultants
» Corporate Finance lawyers

LEORON Professional Development Institute is registered with the National Association of State Boards of Accountancy (NASBA) as a sponsor of continuing professional education on the National Registry of CPE Sponsors. State boards of accountancy have final authority on the acceptance of individual courses for CPE credit. Complaints regarding registered sponsors may be submitted to the National Registry of CPE Sponsors through its website: www.learningmarket.org

## BENEFITS OF ATTENDING

**Successful completion of this course makes you a CFM™ Certified Financial Modeler. You can use CFM™ on your business card and resume.**
» Up to 18 months membership to the IABFM professional body
» Access to the IABFM network and body of information online
» Preferred access to education centers in USA, UK, Europe, Asia, Middle East and Latin America
» Access to the IABFM journal published online Gold Embossed Certificate with your name and designation as MIAFM (Member of the International Academy of Business and Financial Management

The International Academy of Business and Financial Management™ is one of the world's fastest growing professional associations with more than 200,000 members, associates and affiliates in 145 countries. IABFM™ hosts and organizes certification training worldwide and offers exclusive board designations to candidates who meet the highest professional standards and assessment criteria.

The IABFM is credited by the American National Standards Institute (ANSI) the International Standards setting authority.

## COURSE REQUIREMENTS AND CERTIFICATES

Delegates must meet the following criteria to be eligible to become CFM™:
» Attendance - delegates must attend all sessions of the course. Delegates who miss more than two hours of the course sessions will not be eligible to receive the Certificate
» Successful completion of the course assessments

# COURSE OVERVIEW

The ability to create and understand financial models is one of the most valued skills in business and finance today. Microsoft Excel with Visual Basic for Application (VBA) macros programming has been the dominant vehicle used by finance and corporate professionals in the preparation and utilization of the full range of financial models and other applications.

However, as a result of the so called '95/5' rule it can be concluded that 95% of Excel users probably only use a mere 5% of the program's power.

Most users know that they could be getting more out of Excel especially by using VBA which would result in them being able to build more flexible, dynamic and professional models. Unfortunately, this aspect of Excel and VBA often appears to be complex and intimidating. This intensive 5 day workshop starts with basics and progresses in a logical step by step manner to the more complex and rewarding tools needed to build more robust models that save time, reduce unnecessary human errors and customize applications that would be impossible to achieve with suboptimal models. Every section is followed by a direct application related to the financial markets and financial issues.

The course will emphasize some important financial concepts that will assist in building vigorous models. It is designed to give you the information you need without making you wade through cumbersome explanations and endless technical background.

Delegates will need some basic knowledge of Excel but not of professional modelling or programming.

# LEARNING OUTCOMES

Some of the topics that will be discussed include:
» The 40 Excel functions that financial modellers use the most
» Best practice in modelling forecasted financial statements (Balance Sheet, Income Statement and Cash Flow Statement)
» Monte Carlo Simulation modelling
» The powerful combination of arrays, the offset function, the match function and drop down menus
» The danger of using IRR in isolation and possible solutions
» Modelling and automating ratio analysis in Excel
» Various Optimization solutions using Excel Solver (cash and inventory management, capacity planning and capital budgeting)
» Pivot Tables and OLAP tables.
» From the basics of VBA to building a loan amortization table using a VBA macro
» Coding a User Form in VBA to update your database automatically.

# PROGRAM TIMINGS

Registration will begin at 08.00 on Day One.

The program will commence at 08.30 each day and continue until 17.30.

There will be two refreshment breaks and lunch at appropriate intervals.

# IN-HOUSE

If interested to run this course in-house please contact Goran Gakidev at +971 4 447 5711 or e-mail: goran.gakidev@leoron.com

# DISTANCE LEARNING PROG.

If interested to run this course with our distance learning program please contact Agron Kurtishi at +971 4 447 5711 or e-mail: agron.kurtishi@leoron.com

# GENERAL

It is essential to bring your Laptop that are macros-enabled with Excel 2010 or Excel Professional Plus 2013.

Apple laptops are not recommended.

# TESTIMONIAL

I attended LEORON CFM course because the subjects they offered to cover was interesting to me since the type of my work require preparing valuation models, budgets and analysis using excel. I felt the difference from day one when they communicated with me, the support and care they showed was very encouraging to travel to attend the course, and then I was totally impressed in the materials, the instructor and the techniques he used in presenting the course. By the end of the course the attendances including myself were able to write a code using VBA, heavily using macros and many other financial functions that was first time to know and to get the vision of how useful it can be for me on my work. Today I'm doing the same tasks which I used to do but faster and fully automated and encouraging my team to attend the same course showing them the benefits of what I learned in 5 days. It was, with no doubt, the best trainings I attended during my career and would highly recommend this course to anyone who wants to improve his skills and financial knowledge. Thanks again for the great course".

**FIRAS AL-SABBAGH** VP&CFO – National Aviation Ground Support (NAGS)

# DAY ONE

## Design principles for good model building
» Principle of Occam's razor
» Interrelationships within a model
» Logical arrangement of the parts
» Setting toggles
» Model design and structure
» Attributes of good Excel models

## Exploring Excel functions
» Financial
» Date and time
» Statistical
» Lookup & reference
» Database
» Text
» Logical
» Information

## Helpful starting hints
» Formula errors vs user errors
» Warning signs
» Using the F-Keys and combinations of F-Keys.
» Name ranges using Create Names
» Making range names more informative
» Editing name ranges
» Data validation
» The Analysis ToolPak
» Using formula auditing

## The 40 functions you will work with as a financial modeler
» Basic, intermediate and advanced functions
» Arguments in advanced functions
» Dealing with errors
» Boolean logic
» Change nested IF's to something powerful
» Array formulas
» Using array formulas with the offset function
» Calculating geometric return using arrays
» Annualizing geometric returns
» The power and manipulation of looking up data
» Powering the offset with the match function and drop down menus
» Combining the Index function with the match function
» Strengthening the If function with (Min, Max, Choose, Offset, And, Or functions)
» Conditional addition and counting functions
» Manipulating date functions in complex examples
» When to use DAYS360 in a model
» Solving problems with DAYS360
» Working with parts of numbers
» Working with numbers in a direction
» Using the IS-suit (isnumber, istext, isblank, iserror, iserr, islogical, isna, isnontext, isref) with logical formulas
» Going through a spreadsheet that contains worked examples of all 40 functions

**Exercise 1:** building a dynamic performance database from scratch using arrays, the offset function, the match function, the index function and drop down menus

# DAY TWO

## Financial functions
» Understanding net present value
» Understanding internal rate of return
» Going through a worked example of a project cash flow
» Problems with the IRR calculation
» Multiple IRR
» Shooting yourself in the foot with incorrect assumptions
» NPV
» XNPV
» IRR
» MIRR
» XIRR

**Exercise 1:** Modelling the IRR and MIRR of a construction project

## Modeling forecasted financial statements
» Forecasting guidelines
» Modelling the connection between the income statement and the Balance Sheet
» Assumptions margin
» Two ways to balance the balance sheet
» Using plugs to balance the balance sheet
» Surplus funds and the necessity to finance
» Modelling the provision for taxes
» Static vs dynamic analysis
» Effect of surplus income from surplus funds
» Flows in the Cash Flow Statement (Operations, Investment, Financing)
» Structuring a cash sweep
» Modelling payment of successive debt tranches
» Calculation of the post-sweep debt numbers
» Cash flow variation for cash sweep
» Reality checks
» Adding an error trapping formula
» Using conditional formatting
» Finding cells that have conditional formats
» Structuring the input sheet vs output sheets
» Modelling common size statements
» Smoothing techniques in forecasting
» Simple and multiple regression analysis
» Sensitivity analysis in forecasting

## Modeling Ratio Analysis and Key Performance Indicators
» Efficiency ratios
» Profitability ratios
» Leverage ratios
» Coverage ratios

**Exercise 3:** Forecasting the financial statements of a company with full ratio analysis for five years in future.

## DAY THREE

### Optimization Solutions with Excel Solver
» Installing the solver add-in
» Goal seek
» Solver parameters
» Decision variables and constraints
» Tolerance levels
» Solving problems with integer constraints
» Using Solver for a working capital management model
» Using Solver for a capital budgeting model
» Using Solver for an inventory policy model
» Using Solver for a cash management model
» Using Solver for a capacity planning model

**Exercise 4:** building a model from scratch for a product mix and pricing problem

### Pivot Tables
» Introduction to Pivot tables
» Creating a Pivot Table report
» Categorizing raw data
» The Pivot Table wizard
» Percentage of column, percentage of raw, and percentage of previous
» Top and bottom 10 feature
» Creating formulas in pivot tables
» Retrieving data from external sources including access and internet
» Linking Pivot Tables to MySQL
» Pivot charts manipulation
» Building one variable Data Tables
» Building two variables Data Tables

**Exercise 5:** building a Pivot Table for portfolio data

### Power Pivot Extensions:
» Combine data from different sources in one pivot table
» Combine huge amount of data in the most optimal way
» Connect to databases
» Private calculated members
» Calculations library
» Limitations
» View Pivot Table MDX
» Filtering Pivot Table to a list
» Changing Pivot Table Defaults
» Searching in OLAPS
» Distributing Pivot Tables
» Best practice

**Exercise 6:** creating Power Pivot applications for financial analysis

## DAY FOUR

### Monte Carlo Simulation using Crystal Ball:
» Introduction to Crystal Ball
» Introduction to probability distributions and their importance in decision making
» Stochastic vs static models

» Building a stochastic model
» Moving away from "Best, Worst and Normal forecasts" to more dynamic solutions
» Monte Carlo simulation versus "what if" scenarios
» Incorporating decision rules into Monte Carlo simulations
» Introducing assumptions
» Using the step functionality vs running the simulation for 1 million trials
» Using the Fit to automatically get the distribution of historical numbers
» Step by step application of Monte Carlo Simulation

**Exercise 7:** Using Monte Carlo Simulation to calculate the NPV of a project

### Introduction to VBA
» What is a macro?
» Creating a simple macro
» Changing multiple properties at once
» Assigning a shortcut key to a macro
» Looking inside a macro
» Objects, properties and methods
» Navigating the Visual Basic Auditor
» Manipulating recorded properties
» Eliminating repeated objects in a recorded macro
» The Select…Selection structure
» The With Selection structure
» Making long statements more readable
» Designate a trusted location for macros
» Looping
» Branching
» Automating spreadsheets
» Retrieving data from non-Excel sources
» Recording a macro that runs other macros

### Case Study: Automating database update with new month data:
» Task one: automating transfer of data from a non-Excel source
» Task two: automating data filling
» Task three: automating column addition
» Task four: automating data base update
» Task five: recording a macro that runs other macros
» Handling pop up messages automatically
» Simplifying the subroutine statements
» Finding your ways in VBA even if you are not a programmer

**Exercise 8:** practical automatic update of a database with huge monthly data.

### Loops:
» Creating loops
» For Each Loop
» For Loop
» Do Loop
» Managing large loops
» Set a breakpoint
» Set a temporary breakpoint
» Show progress in a loop

**Exercise 9:** recording a macro in Excel and navigating through the Basic Editor

## DAY FIVE

### Building custom new functions in Excel using VBA

» Using a custom function from a worksheet
» Introduction to Project Explorer
» Adding arguments to a custom function
» Making a function volatile
» Making arguments optional
» Using a custom function from a macro
» Developing and storing a new add-in
» Making use of the hundreds of freely available custom functions in the Internet

**Exercise 10:** Building a new custom Function in Excel and storing it in an add-in to be available whenever Excel opens

### Case study: Building a loan amortization table using VBA

» Coding in VBA
» Best practice order structure
» Analyzing the problem and translating it into a macro
» Explaining the parameters of the table
» Setting the required calculations
» Designing the code
» Testing the code
» Analyzing potential errors
» Running the macro in different settings
» Creating a custom function for the loan amortization table

**Exercise 11:** Analyzing the loan amortization code in VBA using two different ways

## TESTIMONIALS

" The CFM course exceeded my expectations. The instructor, Mr. Hamed, utilized every minute in the course. He is a world-class trainer and made a complex subject very interesting and understandable. My learning curve in Macro & VBA accelerated sharply during the course. I would definitely recommend Mr. Hamed and LEORON for financial modeling courses. "

**MUAATH ALTUKHAIFI**

Financial Analyst, Saudi Venture Capital Investment Company, Kingdom of Saudi Arabia

" Without doubt this has been one of the most beneficial courses that I have ever attended, thanks for the very efficient and knowledgeable instructor as well as for the most fitting and impeccable arrangements by the team. Thank you again. "

**SHAHUL HAMEED AYUB**

Finance Manager, Sahara Petrochemicals Company

" Trainer has extensive knowledge. He conducts the training with passion. He is able to draw attention & participation from the crowd. The course is conducted in a structured manner. "
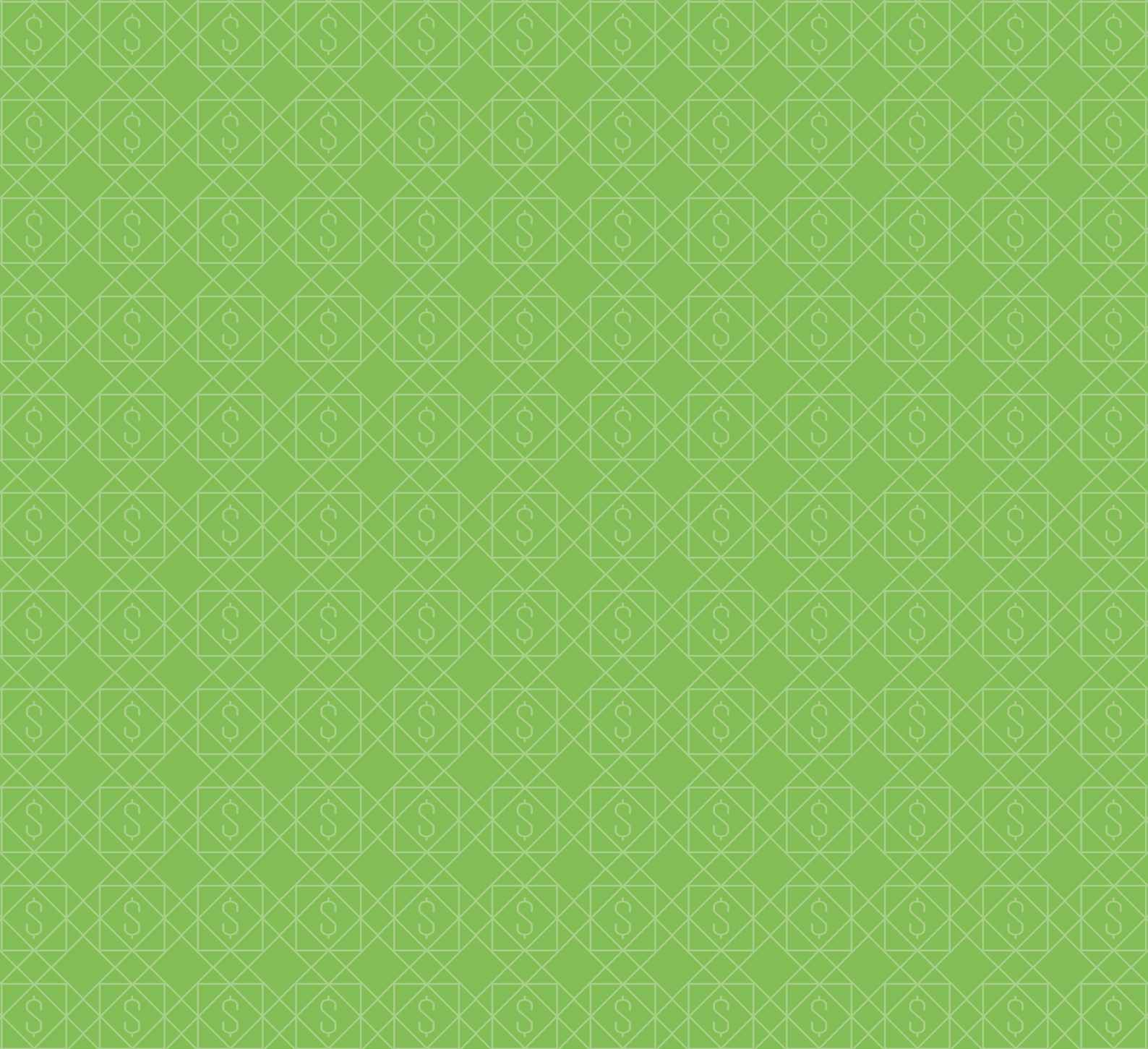
**SEW YIN**
Astro Media, Malaysia

" If I did not learn anything, I saw an excellent example of presentation skills! Luckily I learned both "

**ULRICKE MEINTJES**
Muncih Reinsurance, South Africa



| Delivery Type | Group Live |
|---|---|
| Pre-requisites | None |
| Level | Advanced Training |
| This Program is worth | 35 NASBA CPE credits |

# REGISTRATION FORM

## COURSE DETAILS

### CERTIFIED FINANCIAL MODELLER – ADVANCED FINANCIAL MODELLING USING EXCEL AND VBA

| Date: April 09-13, 2017 | Location: Riyadh, KSA |
|---|---|

## DELEGATE DETAILS

**1**
- Name:
- Job Title: | Tel:
- E-mail: | Mob:

**2**
- Name:
- Job Title: | Tel:
- E-mail: | Mob:

**3**
- Name:
- Job Title: | Tel:
- E-mail: | Mob:

## COMPANY DETAILS

Company:

Address:

| Post Code: | Country: |
|---|---|
| Tel: | Fax: |

## SAVINGS & DISCOUNTS

**BOOK EARLY SAVE US$400**

### EARLY BIRD DISCOUNTS

| Register 2 months before | US$3790 |
|---|---|
| Register 1 month before | US$3990 |
| **Final Price** | **US$4190** |

### GROUP DISCOUNTS*

| 3-4 Delegates | 20% |
|---|---|
| 5 Delegates | 25% |

*please note that all group discounts are given on the final price*

## 4 EASY WAYS TO REGISTER

**T:** +971 4 447 5711

**F:** +971 4 447 5710

**E:** register@leoron.com

**W:** www.leoron.com

Pay by **CREDIT CARD**

BANK NAME

1234  4567  8901  2345

Pay by **INVOICE**

BANK NAME
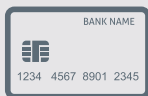
Signature: _____

## TERMS & CONDITIONS

**1. Payment Terms for LEORON Professional Development Institute (hereafter LEORON PDI)**
a. 100% payment of the amount in maximum 15 days upon the receipt of the invoice.
b. The payment shall be conducted either in cash, credit/debit card, cheque or bank transfer.
c. The stated amount is exclusive of Withholding Tax and other duties, taxes and transfer related charges which if applicable are payable by the client in addition to the stated amount.

**2. Cancelation and Postponement Policy**
a. All cancelations and postponements shall be done in written form.
b. In case of client cancelation:
   i. No cancelation fee if the cancelation takes place not less than 14 days prior to the beginning of the course,
   ii. 50% cancelation fee if the cancelation takes place between 7 days and 14 days prior to the beginning of the course,
   iii. 100% cancelation fee if the cancelation takes place less than 7 days prior to the beginning of the course,
c. In case of client postponement, LEORON PDI issues a credit note which states that the paid amount can be used for participation in any of the company's courses which are scheduled in a period of 12 months from the date of the credit note.
d. In case of LEORON PDI cancelation:
   i. A 100% refund shall be applicable if LEORON PDI decides to cancel the event - the client has an option to receive a credit note which can be used for any course for a period of 12 months.
   ii. In case of LEORON PDI postponement – the client may choose to participate on the same course at the later date or to be issued a credit note which states that the paid amount can be used for participation of any of the company's courses which are scheduled in a period of 12 months from the date of the credit note.

**3. Selection of Trainer and Location**
Selection of the trainer and training location shall be at the discretion of LEORON PDI. Every effort shall be made to maintain continuity, but, if necessary, LEORON PDI can change the trainer and training location any time prior to commencement of the course.

**4. Intellectual Property**
The copyright, intellectual property and design rights of the learning materials are property of LEORON PDI and its expert trainers. It cannot be copied, shared or reproduced without prior written consent of LEORON PDI.

**5. Health and Safety**
The clients must conform to and comply with the Health and Safety Policy and Procedures as laid down by LEORON PDI or its partner organizations when the course is delivered in leased premises. Breaches of these policies and procedures may result with the client being suspended or excluded from the course and premises.

**6. Complaints and Refunds Procedure**
a. LEORON PDI shall deem relevant the following types of complaints:
   i. If the contents of a course or the training materials are incorrect or inappropriate.
   ii. If the duration of the course is significantly different to that invoiced.
   iii. If the conduct or actions by the LEORON PDI trainer are inappropriate or offensive.
   iv. If the training delivery is not on a satisfactory level
b. Enquiries and complaints shall be made in written form and have to contain sufficient detail to allow LEORON PDI to compile an official written response.
c. All official enquiries and complaints shall be submitted electronically to Val Jusufi, Managing Director of LEORON PDI, at val@leoron.com
d. LEORON PDI shall officially respond to the complaint no later than 7 days from the date of its reception.

**7. Force Majeure**
LEORON PDI shall not be liable to the clients or be deemed to be in breach of any agreement it has concluded with them for any delay in performing or failure to perform any of the LEORON PDI's obligations in respect of the services if the delay or failure was due to any cause such as war, warlike activities, fire, storm, explosion, national emergency, labor dispute, strike, lock-out, civil disturbance, actual or threatened violence by any terrorist group, newly enacted law or regulation or any other cause not within the control of LEORON PDI.

**8. Governing Law**
This contract shall be governed by and construed in accordance with the Laws and Regulations of the Authority in the Kingdom of Saudi Arabia.

I have read and agreed to the following terms and conditions!

*Note: If your PDF reader is not able to submit this registration form, please save a local copy, attach it, and send it via Email to: register@leoron.com