

# INSTITUTE OF COST AND MANAGEMENT ACCOUNTANTS OF PAKISTAN

# M4 - DIGITAL ACCOUNTING & FINANCIAL MODELLING

(Managerial Level-2)

Practical Industry Knowledge (PIK) Stream

# **INTRODUCTION**

This outline provides a comprehensive coverage of financial modelling and digital accounting, with a focus on practical applications and case studies. The 54-hour financial modelling outline covers topics such as financial statement modelling, valuation modelling, risk modelling, and advanced financial modelling. The 36-hour digital accounting outline covers topics such as cloud accounting, automation in accounting, and data analytics in accounting

### **OBJECTIVE**

To provide learners with a practical understanding of modern digital accounting tools and cloud-based solutions.

To develop essential skills in automation, data analytics, and financial modelling using Excel and advanced tools.

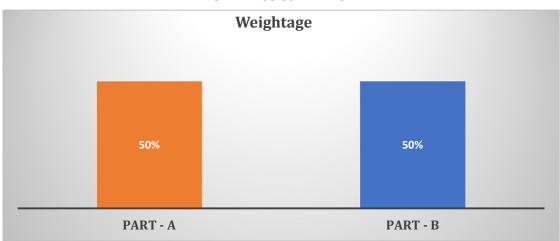
To enable the application of digital and analytical techniques for effective financial planning, reporting, valuation, and risk management.

### LEARNING OUTCOMES

By the end of this course, participants will be able to:

- Understand and apply digital accounting tools, including cloud platforms, automation, and data analytics.
- Implement cloud accounting and RPA solutions while addressing collaboration, integration, and security considerations.
- Use data visualization, analytics, and governance to support financial forecasting, auditing, and decision-making.
- Build financial models including income statements, cash flow, valuation, and risk models using Excel and scenario analysis.
- Develop advanced financial models for specific industries, mergers, and ESG compliance, incorporating automation and optimization techniques

#### SYLLABUS CONTENTS



# PART-A DIGITAL ACCOUNTING

# 1. Introduction to Digital Accounting

- Cloud accounting
- Automation in accounting
- Data analytics in accounting
- Case study: Digital accounting implementation

### 2. Cloud Accounting

Cloud accounting platforms

- Managing financial data in the cloud
- Case study: Cloud accounting implementation
- Cloud accounting for small businesses
- Integration with other systems

### 3. Automation in Accounting

- Automation tools in accounting
- Using RPA (Robotic Process Automation)
- Automating financial workflows
- Case study: Automation implementation



# INSTITUTE OF COST AND MANAGEMENT ACCOUNTANTS OF PAKISTAN

- Integration with other systems
- Future of automation in accounting
- Ethics and accountability

# 4. Data Analytics in Accounting

- Introduction to data analytics
- Data visualization tools
- Data mining and machine learning
- Case study: Data analytics implementation
- Using data analytics for financial forecasting
- Identifying trends and patterns
- Risk assessment and management

### **PART-B**

### FINANCIAL MODELLING

# 5. Introduction to Financial Modelling

- Basic Excel skills for financial modelling
- Case study: Building a simple financial model

### 6. Financial Statement Modelling

- Integrating financial statements
- Case study: Financial statement modelling
- Forecasting financial statements
- Sensitivity analysis
- Scenario planning

#### 7. Valuation Modelling

- Introduction to valuation
- Discounted cash flow (DCF) modelling
- Estimating cost of capital
- Forecasting cash flows
- Terminal value calculation
- Sensitivity analysis
- Case study: DCF valuation
- Model validation
- Reporting results
- AI-driven anomaly detection in audits

# 8. Risk Modelling

- Introduction to risk modelling
- Value-at-risk (VaR) modelling
- Expected shortfall (ES) modelling
- Stress testing
- Case study: Risk modelling
- Monte Carlo simulation
- Scenario analysis
- Sensitivity analysis

# 9. Advanced Financial Modelling

- Advanced Excel skills
- Using macros and VBA
- Building dynamic financial models
- Using add-ins and plugins
- Case study: Advanced financial modelling
- Financial modelling for specific industries
- Mergers and acquisitions modelling
- Leveraged buyout (LBO) modelling
- Project finance modelling
- Real estate finance modelling