Haward Technology Middle East

**COURSE OVERVIEW PM0390(KJ1)**
**Certified Project Analyst**
*Tools & Techniques for Managing Project Risk & Uncertainty*

**Course Title**
Certified Project Analyst*: Tools & Techniques for Managing Project Risk & Uncertainty*
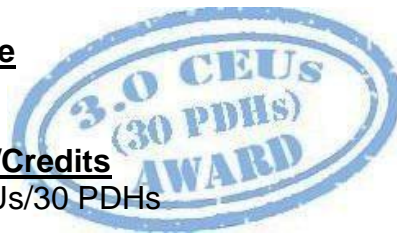
**Course Date/Venue**
August 04-08, 2024/Boardroom 1, Elite Byblos Hotel Al Barsha, Sheikh Zayed Road, Dubai, UAE

**Course Reference**
PM0390(KJ1)

**Course Duration/Credits**
Five days/3.0 CEUs/30 PDHs

3.0 CEUs (30 PDHs) AWARD

H-STK© INCLUDED

**Course Description**

*This practical and highly-interactive course includes various practical sessions and exercises. Theory learnt will be applied using our state-of-the-art simulators.*

This course is designed to provide participants with a detailed and up-to-date overview of Certified Project Analyst: Tools and Techniques for Managing Project Risk and Uncertainty. It covers the decision analysis and project profitability; the decision opportunities and alternatives, decision model and valuation model; the expected value for each alternative and best alternative decision; measuring project profitability, time value of money, rate of return and the cost of capital; and the time value of money concept, net present value and internal rate of return (IRR).

During this interactive course, participants will learn the incremental analysis and re-investment assumption in IRR; the cost of capital computations and expected return measurement of risk; the advantages and limitations of benefit-cost ratio; the cash-flow modeling and project decision analysis; the cash counts, financial modeling, project evaluation and decision analysis; the basic probability concepts, Venn diagrams, Boolean algebra and key probability theorems; the complement rule, addition rule, multiplication rule, independence, Bayes' rule and thinking logically; the decision analysis, sensitivity analysis, variable interactions, dynamic simulation models; and the three simple rules for solving a tree.

## Course Objectives

Upon the successful completion of this course, each participant will be able to:-

- Get certified as a *"Certified Project Analyst"*

- Discuss decision analysis and project profitability including ten steps toward better decisions

- Identify decision opportunities and alternatives as well as develop the decision model and valuation model

- Calculate expected value for each alternative, rethink the problem, implement the best alternative and apply post-analyze the decision

- Measure project profitability and explain time value of money, rate of return and the cost of capital

- Apply time value of money concept, net present value and internal rate of return (IRR)

- Carryout incremental analysis, use IRR to analyze options and re-investment assumption in IRR

- Recognize cost of capital computations and expected return measurement of risk

- Discuss the advantages and limitations of benefit-cost ratio as well as illustrate cash-flow modeling and project decision analysis

- Apply cash counts, financial modeling, project evaluation and decision analysis

- Calculate expected value and apply financial project risk through addressing uncertainty and assessing sensitivity

- Discuss the basic probability concepts, Venn diagrams, Boolean algebra and key probability theorems

- Explain complement rule, addition rule, multiplication rule, independence, Bayes' rule and thinking logically

- Apply decision analysis, sensitivity analysis, variable interactions, dynamic simulation models and the three simple rules for solving a tree

## Exclusive Smart Training Kit - H-STK®

*Participants of this course will receive the exclusive "Haward Smart Training Kit" (**H-STK®**). The **H-STK®** consists of a comprehensive set of technical content which includes **electronic version** of the course materials, sample video clips of the instructor's actual lectures & practical sessions during the course conveniently saved in a **Tablet PC**.*

## Who Should Attend

This course provides an overview of all significant aspects and considerations of project analysis for program and project professionals, project leaders, project engineers, cost engineers, and other senior project control and business services professionals who are responsible for or involved in evaluating projects and managing cash flow on projects.

## Course Certificate(s)

(1) Internationally recognized Wall Competency Certificates and Plastic Wallet Card Certificates will be issued to participants who completed a minimum of 80% of the total tuition hours and successfully passed the exam at the end of the course. Successful candidate will be certified as a "*Certified Project Analyst*". Certificates are valid for 5 years.

## Recertification is FOC for a Lifetime.

## Sample of Certificates

The following are samples of the certificates that will be awarded to course participants:-
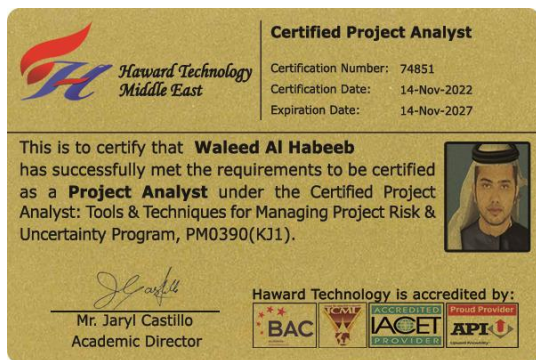
(2) Official Transcript of Records will be provided to the successful delegates with the equivalent number of ANSI/IACET accredited Continuing Education Units (CEUs) earned during the course

**Haward Technology Middle East**

Continuing Professional Development (HTME-CPD)

## CEU Official Transcript of Records

TOR Issuance Date:    14-Nov-22

HTME No.    74851

Participant Name:    Waleed Al Habeeb

| Program Ref. | Program Title | Program Date | No. of Contact Hours | CEU's |
|---|---|---|---|---|
| PM0390(KJ1) | Certified Project Analyst: Tools & Techniques for Managing Project Risk & Uncertainty | November 10-14, 2022 | 30 | 3.0 |

Total No. of CEU's Earned as of TOR Issuance Date    3.0

TRUE COPY

Jaryl Castillo
Academic Director

Haward Technology has been approved as an Authorized Provider by the International Association for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this approval, Haward Technology has demonstrated that it complies with the ANSI/IACET 1-2013 Standard which is widely recognized as the standard of good practice internationally. As a result of their Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for programs that qualify under the ANSI/IACET 1-2013 Standard.

Haward Technology's courses meet the professional certification and continuing education requirements for participants seeking Continuing Education Units (CEUs) in accordance with the rules & regulations of the International Association for Continuing Education & Training (IACET). IACET is an international authority that evaluates programs according to strict, research-based criteria and guidelines. The CEU is an internationally accepted uniform unit of measurement in qualified courses of continuing education.

Haward Technology is accredited by

P.O. Box 26070, Abu Dhabi, United Arab Emirates | Tel.: +971 2 3091 714 | E-mail: info@haward.org | Website: www.haward.org

## Certificate Accreditations

Internationally recognized certificates will be issued to all participants of the course who completed a minimum of 80% of the total tuition hours.

- **The International Accreditors for Continuing Education and Training (IACET - USA)**

  Haward Technology is an Authorized Training Provider by the International Accreditors for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this authority, Haward Technology has demonstrated that it complies with the **ANSI/IACET 2018-1 Standard** which is widely recognized as the standard of good practice internationally. As a result of our Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for its programs that qualify under the **ANSI/IACET 2018-1 Standard**.

  Haward Technology's courses meet the professional certification and continuing education requirements for participants seeking **Continuing Education Units** (CEUs) in accordance with the rules & regulations of the International Accreditors for Continuing Education & Training (IACET). IACET is an international authority that evaluates programs according to strict, research-based criteria and guidelines. The CEU is an internationally accepted uniform unit of measurement in qualified courses of continuing education.

  Haward Technology Middle East will award **3.0 CEUs** (Continuing Education Units) or **30 PDHs** (Professional Development Hours) for participants who completed the total tuition hours of this program. One CEU is equivalent to ten Professional Development Hours (PDHs) or ten contact hours of the participation in and completion of Haward Technology programs. A permanent record of a participant's involvement and awarding of CEU will be maintained by Haward Technology. Haward Technology will provide a copy of the participant's CEU and PDH Transcript of Records upon request.

- **British Accreditation Council (BAC)**

  Haward Technology is accredited by the **British Accreditation Council** for **Independent Further and Higher Education** as an **International Centre**. BAC is the British accrediting body responsible for setting standards within independent further and higher education sector in the UK and overseas. As a BAC-accredited international centre, Haward Technology meets all of the international higher education criteria and standards set by BAC.

## Course Fee

**US$ 5,500** per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

## Accommodation

Accommodation is not included in the course fees. However, any accommodation required can be arranged at the time of booking.

## Course Instructor(s)

This course will be conducted by the following instructor(s). However, we have the right to change the course instructor(s) prior to the course date and inform participants accordingly:

**Mr. Ahmad Radaideh**, BSc, PMI-PMP, PMI-SP, SFC, is a **Senior Project Management Consultant** with extensive years of teaching, training and practical experience in the areas of **Project** Management, **Planning** & **Scheduling**, **Project Risk** Management, **Feasibility** Studies, Governance, **Risk Identification** Tools & Techniques, **Project** Life Cycle, **Project Stakeholder & Governance**, **Project Management** Processes, **Project Integration** Management, **Project** Management Plan, **Project Work** Monitoring & Control, **Project Scope** Management, **Strategic** Management, **Conflict** Management, **Stakeholder** Management, **Project Time** Management, **Project Cost** Management, **Project Quality** Management, **Value Engineering**, **Quality** Assurance, **Project Human Resource** Management, **Project Communications** Management, **Contract** Management, **Knowledge** Management, **Materials** Management, **Asset** Management, **Procurement & Purchasing** Management, Quality Management System (**QMS**), **Quality Assurance**, **Quality Management Principles**, **Business** Management, **Time** Management, **Performance** Management, **Construction** Management, **Negotiation & Presentation** Skills, **Supervisory & Management** Skills, **Purchasing**, **Warehousing**, **Coaching & Mentoring** and **Strategic Decision Making**. Further, he is well-versed in **Primavera P6**, **FIDIC** Contracts, **Project** Planning, **Data** Analysis, **Claims** Management, **Design Development**, **Delay & Claims** Analysis and **Cost Control & Estimation.**

During his career life, Mr. Ahmad occupied several significant positions and dedication as the **Projects Manager**, **Senior Instructor**/**Trainer**, **PMO Manager** and **Planning & Control Engineer** of Jordan Engineers Association (JEA), Rawafed Al Totok Company, Dar Al Omran Architecture & Engineering and Collaboration, Management & Control Solutions.

Mr. Ahmad has a **Bachelor's** degree in **Civil Engineering**. Further, he is a **Certified Instructor/Trainer**, a **Certified Project Management Professional** (**PMI-PMP**), a **Certified PMI Scheduling Professional** (**PMI-SP**), a **Scrum Fundamentals Certified** (**SFC**), a **Certified Primavera P6 Professional Project Management**, a **Certified Associate** in **Project Management**, a **Certified Six Sigma Yellow Belt,** a **Certified ISO 9001 Internal Auditor** and a member of Jordan Engineers Association (**JEA**). He has further delivered numerous trainings, courses, seminars, conferences and workshops internationally.

## Training Methodology

All our Courses are including **Hands-on Practical Sessions** using equipment, State-of-the-Art Simulators, Drawings, Case Studies, Videos and Exercises. The courses include the following training methodologies as a percentage of the total tuition hours:-

30%   Lectures
20%   Practical Workshops & Work Presentations
30%   Hands-on Practical Exercises & Case Studies
20%   Simulators (Hardware & Software) & Videos

In an unlikely event, the course instructor may modify the above training methodology before or during the course for technical reasons.

## Course Program

The following program is planned for this course. However, the course instructor(s) may modify this program before or during the course for technical reasons with no prior notice to participants. Nevertheless, the course objectives will always be met:

**Day 1:**          **Sunday, 04th of August 2024**

| | |
|---|---|
| 0730 – 0800 | *Registration & Coffee* |
| 0800 – 0815 | *Welcome & Introduction* |
| 0815 – 0830 | **PRE-TEST** |
| 0830 – 0930 | **Decision Analysis & Project Profitability** *Decision Problems ● PM Decision Analysis ● Ten Steps Toward Better Decisions* |
| 0930 – 0945 | *Break* |
| 0945 – 1100 | **Decision Analysis & Project Profitability (cont'd)** *Proactively Identify Decision Opportunities ● Define the Problem ● Identify Alternatives ● Develop the Decision Model* |
| 1100 – 1230 | **Decision Analysis & Project Profitability (cont'd)** *Quantify Judgments about Uncertainty ● Develop the Valuation Model ● Calculate Expected Value for Each Alternative ● Rethink the Problem* |
| 1230 – 1245 | *Break* |
| 1245 - 1420 | **Decision Analysis & Project Profitability (cont'd)** *Implement the Best Alternative ● Post-Analyze the Decision ● Measures of Project Profitability ● Time Value of Money* |
| 1420 - 1430 | ***Recap*** |
| 1430 | *End of Day One* |

**Day 2:**          **Monday, 05th of August 2024**

| | |
|---|---|
| 0730 – 0900 | **Internal Rate of Return (IRR)** *Rate of Return & the Cost of Capital ● Applying the Time Value of Money Concept ● Net Present Value* |
| 0900 – 0915 | *Break* |
| 0915 – 1100 | **Internal Rate of Return (IRR) (cont'd)** *Applying NPV ● Internal Rate of Return ● Rate of Return Computations (IRR) ● Rate of Return in the Single Period Case* |
| 1100 – 1230 | **Internal Rate of Return (IRR) (cont'd)** *Determining the Internal Rate of Return (IRR) ● IRR for a Single Project ● Incremental Analysis ● Non-Standard Cash Flows & Multiple IRRS* |

| 1230 – 1245 | Break |
|---|---|
| 1245 – 1420 | **Internal Rate of Return (IRR) (cont'd)**<br>*Using IRR to Analyze Options with Different Lives ● Re-Investment Assumption in IRR ● Cost of Capital Computations ● Risk, Cost of Capital & Expected Return Measurement of Risk* |
| 1420 - 1430 | **Recap** |
| 1430 | *End of Day Two* |

**Day 3:**          **Tuesday, 06th of August 2024**

| 0730 – 0900 | **Benefit-Cost Ratio (BCR)**<br>*Example of the Benefit-Cost Ratio ● Interpreting the Benefit-Cost Ratio* |
|---|---|
| 0900 – 0915 | Break |
| 0915 – 1100 | **Benefit-Cost Ratio (BCR) (cont'd)**<br>*Advantages of the Benefit-Cost Ratio ● Key advantages of the Benefit-Cost Ratio* |
| 1100 – 1230 | **Benefit-Cost Ratio (BCR) (cont'd)**<br>*Limitations of the Benefit-Cost Ratio* |
| 1230 – 1245 | Break |
| 1245 – 1420 | **Benefit-Cost Ratio (BCR) (cont'd)**<br>*Key Limitations of The Benefit-Cost Ratio* |
| 1420 - 1430 | **Recap** |
| 1430 | *End of Day Three* |

**Day 4:**          **Wednesday, 07th of August 2024**

| 0730 – 0900 | **Cash-Flow Modeling & Project Decision Analysis**<br>*Deterministic Cashflow Models ● Cash Counts ● Problem & Model Scope ● Financial Modeling & Project Evaluation ● Typical Components of a Financial Model ● Typical Inputs ● The Nine Standard Worksheets* |
|---|---|
| 0900 – 0915 | Break |
| 0915 – 1100 | **Cash-Flow Modeling & Project Decision Analysis (cont'd)**<br>*Arrangement of Standard/Other Worksheets ● Decision Analysis: Expected Value Concept ● Expected Value ● Converts to a Single Value ● Calculating Expected Value* |
| 1100 – 1230 | **Financial Project Risk**<br>*Addressing Uncertainty ● Assessing Sensitivity ● Basic Probability Concepts ● Venn Diagrams & Boolean Algebra ● Key Probability Theorems* |
| 1230 – 1245 | Break |
| 1245 – 1420 | **Financial Project Risk (cont'd)**<br>*Complement Rule ● Addition Rule ● Multiplication Rule ● Independence ● Bayes' Rule ● Thinking Logically* |
| 1420 - 1430 | **Recap** |
| 1430 | *End of Day Four* |

**Day 5:**          **Thursday, 08th of August 2024**

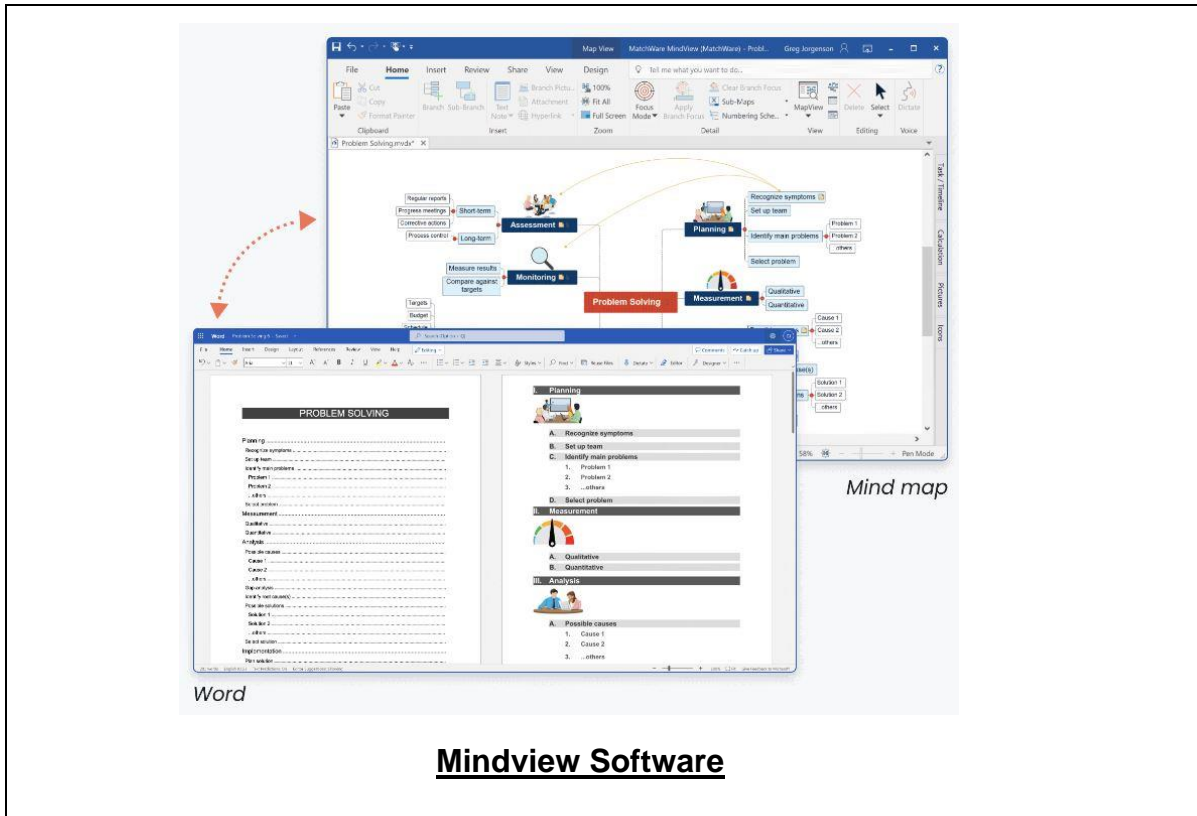| 0730 – 0900 | **Decision Analysis: Decision Trees, Sensitivity Analysis & Simulation Decision Trees**<br>*Sensitivity Analysis ● The Real Purposes of Sensitivity Analysis ● Sensitivity to Individual Inputs ● Variable Interactions* |
|---|---|
| 0900 – 0915 | Break |

| | |
|---|---|
| 0915 – 1030 | **Decision Analysis: Decision Trees, Sensitivity Analysis & Simulation** <br> **Decision Trees (cont'd)** <br> *Dynamic Simulation Models ● Decision Tree Analysis ● Node Types ● Three Types of Nodes in a Decision Tree* |
| 1030 – 1130 | **Decision Analysis: Decision Trees, Sensitivity Analysis & Simulation** <br> **Decision Trees (cont'd)** <br> *Tree Annotations ● Tree Calculations ● The Three Simple Rules for Solving a Tree* |
| 1130 – 1145 | *Break* |
| 1145 - 1300 | ***Case Study*** <br> *Wastewater Plant Example ● Data Assumptions ● Three Plant Alternatives are Being Considered ● Try Your Intuition ● Evaluating Options* |
| 1300 - 1315 | **Course Conclusion** |
| 1315 – 1415 | **COMPETENCY EXAM** |
| 1415 - 1430 | *Presentation of Course Certificates* |
| 1430 | *End of Course* |

## Simulator (Hands-on Practical Sessions)

Practical sessions will be organized during the course for delegates to practice the theory learnt. Delegates will be provided with an opportunity to carryout various exercises using "MS Project" and "Mindview Software".



Microsoft Office **Project**
Enterprise Project Management Solution

Word

Mind map

**Mindview Software**

**Course Coordinator**
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