COURSE OVERVIEW PM0436
Value Engineering

Course Title
Value Engineering

Course Date/Venue
Session 1: May 11-15, 2025/Crowne Meeting Room, Crowne Plaza Al Khobar, KSA
Session 2: November 23-27, 2025/Tamra Meeting Room, Al Bandar Rotana Creek, Dubai UAE

Course Reference
PM0436

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

Course Description

This practical and highly-interactive course includes various practical sessions and exercises. Theory learnt will be applied using "MS-Excel" applications.

Value Engineering is a structured, function-oriented approach to cost reduction which yields savings without compromising quality, performance or usefulness. In fact, the design alternatives developed through the value engineering process invariably result in significant cost savings with equal or improved functional value.

A knowledge and understanding of the value engineering methodology is becoming increasingly important to construction professionals. More industries and corporations than ever before using Value Engineering to realize the greatest value from limited financial resources. Within the worldwide construction industry numerous and other bodies involved in design or construction are including contractual requirements for VE studies on their projects.

The course has been designed to appeal to individuals in all areas of the construction industry. Owner representatives, planners, architects, suppliers and other decision-makers can all benefit by the learning process and techniques of Value Engineering.

As an integral part of this VE training course, you will participate in an actual value engineering team study working on a real *construction* project to help you gain an in-depth understanding of how and why Value Engineering gets results. During the intensive instruction and "hands-on" effort, you will be shown how value engineering can work for you, in your organization and on your particular projects.

This course is designed to provide participants with an overview of value engineering. It covers the value analysis, value engineering or value management; the value methodology and historical milestones; how value analysis methods spread globally and evolved; defining value as a basic concept; identifying who determines value; the various types of value; the value index; establishing, understanding sources and determining worth and possible reasons for poor value; the key data required (cost, process, risk); the potential value improvement opportunities based on available information; transforming data and organizing/diagramming key resources; the function analysis; the purpose of using function analysis; and the classification of functions.

During this interactive course, participants will learn the random list of functions, constructing a random function identification worksheet and the fast diagram; the common terms in the use of a financial analysis including the common terms on life cycle costing; the time value of money; the purpose and procedures of each phase of the VM job plan including how each phase builds on its previous phases; the different information gathering techniques, function analysis techniques, creative techniques and evaluation techniques; the different development techniques, recommendations, key features to sell value opportunities and path forward for implementation; the key value recommendations; and the information for effective delivery and visual aids and technologies to deliver a presentation.

Course Objectives

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

- Get a Certificate in Value Engineering from Haward Technology
- Explain value analysis, value engineering or value management as well as define the value methodology and historical milestones
- Discuss how value analysis methods spread globally and evolved
- Define value as a basic concept and identify who determines value including the various types of value
- Interpret the value index, establish, understand sources and determine worth and possible reasons for poor value
- Define key data required (cost, process, risk)
- Identify potential value improvement opportunities based on available information
- Transform data and organize/diagram key resources
- Define function analysis, explain the purpose of using function analysis and classify functions
- Discuss the random list of functions, construct a random function identification worksheet and illustrate fast diagram
- Recognize the common terms in the use of a financial analysis including the common terms on life cycle costing as well as interpret the time value of money
- Describe the purpose and procedures of each phase of the VM job plan including how each phase builds on its previous phases

- Carryout different information gathering techniques, function analysis techniques, creative techniques and evaluation techniques
- Employ different development techniques, develop recommendations, identify key features to sell value opportunities and suggest path forward for implementation
- Illustrate key value recommendations, organize information for effective delivery and apply leverage visual aids and technologies to deliver a presentation
- Anticipate and respond to questions, identify key features to sell value opportunities and illustrate path forward for implementation

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 conveniently saved in a **Tablet PC**.*

Who Should Attend

This course provides an overview of all significant aspects and considerations of value engineering for project managers, project engineers, project coordinators, estimation engineers, cost engineers, project accountants as well as those who are responsible for decision-making in projects, engineering, maintenance and contracts departments.

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 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

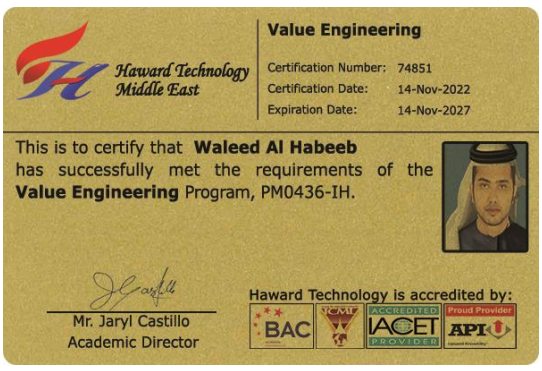
Accommodation is not included in the course fees. However, any accommodation required can be arranged at the time of booking.

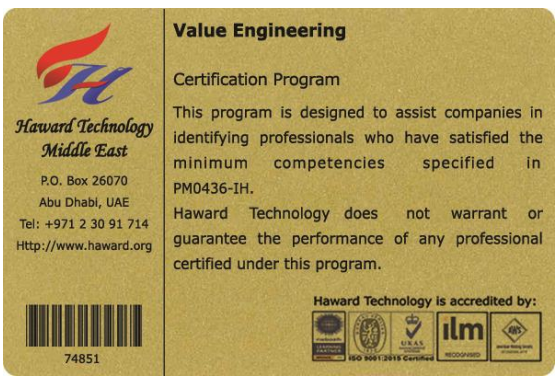
Course Certificate(s)

(1) Internationally recognized Competency Certificates and Plastic Wallet Cards 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. Certificates are valid for 5 years.

Sample 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
PM0436-IH	Value Engineering	November 10-14, 2022	32.5	3.25

Total No. of CEU's Earned as of TOR Issuance Date **3.25**

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

Certificates are accredited by the following international accreditation organizations:-

- 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.

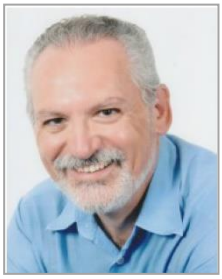
  Haward Technology Middle East will award **3.0 CEUs** (Continuing Education Units) or **30 PDHs** (Professional Development Hours) for participants who completed the total tuition hours of this program. One CEU is equivalent to ten Professional Development Hours (PDHs) or ten contact hours of the participation 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 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. Steve Magalios, CEng, PGDip (on-going), MSc, BSc, **Senior Project & Management Consultant** with over **30 years** of extensive experience in the areas of **Project Quality** Management, **Project** Planning & Scheduling, **Project** Management, **Project** Estimating & Budgeting, **Project & Construction** Engineering, Effective Quality Management System (**QMS**), **QMS** Framework, **Quality** Assurance Standards, **QA** Audit Process & Techniques, **Coaching** Skills, **Coaching** Plan, **Mentoring** Techniques, **Communication & Listening** Techniques, **Office** Administration, **Office** Management, **Invoice** Management, Administration Process, **Administration Work** Procedures, **Facilitation & Leadership** Skills, **Human Resource** Development, **Psychometric** Testing, **Career Development** & Competence, **Succession Planning**, **Self-Development & Empowerment**, **Personal Learning Needs** Identification, Critical Success Factors (**CSFs**), Key Performance Indicators (**KPIs**), Productivity **Creativity & Thinking** Modes, **Human Resource Scorecard** Management, **Career Laddering**, **Fast-Track Career Progression** Application, **Knowledge** Management, **Customer** Management, **Leadership** Skills, **Presentation** Skills, **Negotiation** Skills, **Communication** Skills, **Emotional Intelligence**, **Performance** Management, **Contract** Management, **Quality** Management, **Commercial Strategy**, **Project** Management, **Risk** Management, **Leadership & Business** Management, **Human Resource** Management, **Planning**, **Budgeting & Cost Control**, **Business Development**, Innovation, **Organization** Management & Business Consulting, **Stakeholder & Supplier** Evaluation, **Data Collection & Information Gathering**, **Value & Supply Chain** Management, **Intellectual Property & Innovation** Assessments, **Logistics & Supply Chain** Management, **Budgeting & Cost Control** and **Marketing** Management. Currently, he is the **Chartered Professional Surveyor Engineer & Urban-Regional Planner** wherein he is deeply involved in providing exact data, measurements and determining properly boundaries. He is also responsible in preparing and maintaining sketches, maps, reports and legal description of surveys.

During his career, Mr. Magalios has gained his expertise and thorough practical experience through challenging positions such as a **Project Site Construction Manager**, **Construction Site Manager**, **Project Manager**, **Deputy PMS Manager**, **Head of the Public Project Inspection Field Team**, **Technical Consultant**, **Senior Consultant**, **Consultant/Lecturer**, **Construction Team Leader**, **Lead Pipeline Engineer**, **Project Construction Lead Supervising Engineer**, **Lead Site Engineer**, **Senior Site Engineer Lead Engineer**, **Senior Site Engineer**, **R.O.W. Coordinator**, **Site Representative**, **Supervision Head** and **Contractor** for international Companies such as the Penspen International Limited, Eptista Servicios de Ingeneria S.I., J/V ILF Pantec TH. Papaioannou & Co. – Emenergy Engineering, J/V Karaylannis S.A. – Intracom Constructions S.A., Ergaz Ltd., Alkyonis 7, Palaeo Faliro, Piraeus, Elpet Valkaniki S.A., Asprofos S.A., J/V Depa S.A. just to name a few.

Mr. Magalios is a **Registered Chartered Engineer** and has **Master** and **Bachelor** degrees in **Surveying Engineering** from the **University of New Brunswick**, **Canada** and the **National Technical University of Athens**, **Greece**, respectively. Further, he is currently enrolled for **Post-graduate** in **Quality Assurance** from the **Hellenic Open University**, **Greece**. He has further obtained a Level 4B Certificates in Project Management from the National & Kapodistrian University of Athens, Greece and Environmental Auditing from the Environmental Auditors Registration Association (EARA). Moreover, he is a **Certified Instructor/Trainer**, a **Chartered Engineer** of Technical Chamber of Greece and has delivered numerous trainings, workshops, seminars, courses and conferences internationally.

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

0730 – 0800	*Registration & Coffee*
0800 – 0815	*Welcome & Introduction*
0815 – 0830	***PRE-TEST***
0830 – 0930	***Value Methodology*** *Explain Value Analysis, Value Engineering or Value Management • Define the Value Methodology • Define Historical Milestones • Know How Value Analysis Methods Spread Globally and Evolved • Understand What Constitutes a Value Study*
0930 – 0945	*Break*
0945 – 1100	***Value Methodology: The Concept of Value*** *Define Value as a Basic Concept (Functions Divided by Resources) • Who Determines Value • Types of Value*
1100 – 1230	***Value Methodology: The Concept of Value (cont'd)*** *Define the Value Index (Function Cost Divided by Function Worth) • Establish, Understand Sources, and Determine Worth • Possible Reasons for Poor Value*
1230 - 1245	*Break*
1245 – 1420	***Value Methodology: The Code of Conduct***
1420 – 1430	***Recap***
1430	*Lunch & End of Day One*

Day 2

0730 – 0930	***Transform Information: Express Information*** *Define Key Data Required (Cost, Process, Risk) • Identify Potential Value Improvement Opportunities Based on Available Information*
0930 – 0945	*Break*
0945 – 1100	***Transform Information: Apply Value Modeling in a Value Study*** *Transform Data (Pareto Diagram, etc.) • Organize/Diagram Key Resources (Space, Time, Energy, Labor or Staffing, Cost, Materials, etc.)*
1100 – 1230	***Function Analysis*** *Define Function Analysis • Explain Purpose of Using Function Analysis*
1230 - 1245	*Break*
1245 – 1420	***Function Analysis: Differentiate Functions*** *Define What is a Function • Classify Functions*
1420 – 1430	***Recap***
1430	*Lunch & End of Day Two*

Day 3

0730 – 0930	***Function Analysis: Organize Functions*** *Explain What is a Random List of Functions • Construct a Random Function Identification Worksheet • Explain What is a Fast Diagram*
0930 – 0945	*Break*
0945 – 1100	***Cost Analysis: Compute Financial Assessment*** *Know the Common Terms in the Use of a Financial Analysis (Net Present Value, Present Worth, ROI, Simple Payback)*

1100 – 1230	***Cost Analysis: Apply Life Cycle Costing*** *Know the Common Terms on Life Cycle Costing • Interpret the Time Value of Money*
1230 - 1245	*Break*
1245 – 1420	***Workshop Stage (Six-Phase VM Job Plan): Manage the Six Phases of the VM Job Plan*** *Express the Purpose and Procedures of Each Phase of the VM Job Plan • Express How Each Phase Builds on Its Previous Phases*
1420 – 1430	***Recap***
1430	*End of Day Three*

Day 4

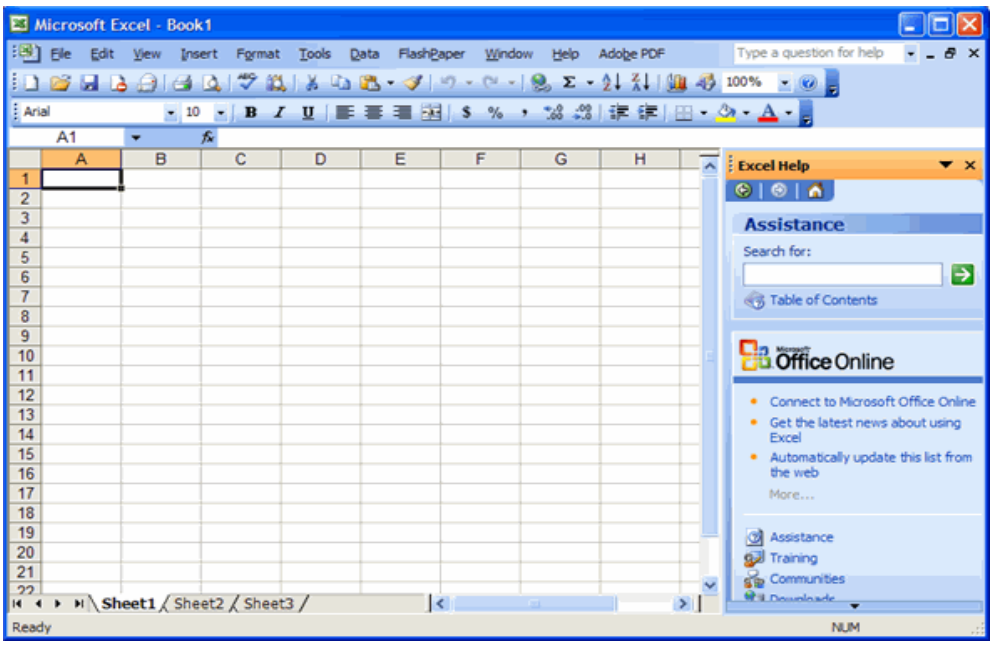
0730 – 0930	***Workshop Stage (Six-Phase VM Job Plan): Complete Information Phase*** *Express Different Information Gathering Techniques*
0930 – 0945	*Break*
0945 – 1100	***Workshop Stage (Six-Phase VM Job Plan): Complete Function Analysis Phase*** *Express Different Function Analysis Techniques*
1100 – 1230	***Workshop Stage (Six-Phase VM Job Plan): Complete Creative Phase*** *Express Different Creative Techniques*
1230 - 1245	*Break*
1245 – 1420	***Workshop Stage (Six-Phase VM Job Plan): Complete Evaluation Phase*** *Express Different Evaluation Techniques*
1420 – 1430	***Recap***
1430	*Lunch & End of Day Four*

Day 5

0730 - 0930	***Workshop Stage (Six-Phase VM Job Plan): Complete Development Phase*** *Express Different Development Techniques • Develop Recommendations*
0930 - 0945	*Break*
0945 – 1100	***Workshop Stage (Six-Phase VM Job Plan): Complete Development Phase (cont'd)*** *Identify Key Features to Sell Value Opportunities • Suggest Path Forward for Implementation*
1100 - 1230	***Workshop Stage (Six-Phase VM Job Plan): Complete Presentation Phase*** *Illustrate Key Value Recommendations • Organize Information for Effective Delivery • Leverage Visual Aids and Technologies to Deliver a Presentation*
1230 - 1245	*Break*
1245 - 1300	***Workshop Stage (Six-Phase VM Job Plan): Complete Presentation Phase (cont'd)*** *Anticipate and Respond to Questions • Express Key Features to Sell Value Opportunities • Illustrate Path Forward for Implementation*
1300 - 1315	***Course Conclusion***
1315 - 1415	***COMPETENCY EXAM***
1415 – 1430	*Presentation of Course Certificates*
1430	*Lunch & 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-Excel" application.



MS-Excel

Course Coordinator

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