

# COURSE OVERVIEW PM0171 Value Engineering for Project Managers

## Course Title

Value Engineering for Project Managers

#### **Course Date/Venue**

Session 1: January 19-23, 2025/Boardroom 1, Elite Byblos Hotel Al Barsha, Sheikh Zayed Road, Dubai, UAE

Session 2: July 06-10, 2025/Boardroom 1, Elite Byblos Hotel Al Barsha, Sheikh Zayed Road, Dubai, UAE



PM0171

**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.

This course is designed to provide participants with a detailed and up-to-date overview of Value Engineering for Project Managers. It covers the objectives and historical development of value engineering and its relevance in project management; the role of project management in VE and how project managers facilitate the VE process; identifying and analyzing functions in projects; the techniques for defining functions using the "active verb and measurable noun" methodology; the creativity in generating cost-effective solutions; the lateral and vertical thinking and overcoming barriers to creativity; the brainstorming techniques in project management; and the role of a project manager in facilitating creative sessions.

Further, the course will also discuss the evaluation of ideas based on cost, performance and risk; prioritizing alternatives using cost-benefit analysis and risk assessment; the cost-toworth ratio and its importance in decision-making; facilitating evaluation process and ensuring stakeholder the involvement and buy-in for selected alternatives; the tools and techniques for making informed decisions in VE; the multi-voting and team consensus methods in selecting alternatives; the life cycle costing (LCC) and its importance for long-term cost management; calculating LLC and the difference between initial costs versus recurring and nonrecurring costs; the tools for LCC analysis in projects; the role of a project manager in balancing initial costs and longterm savings; and developing action plans for implementing VE recommendations.



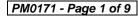




















During this interactive course, participants will learn the role of project manager in overseeing value engineering implementation; managing risks during implementation and ensuring project alignment; how to structure a value engineering report for a effective communication; the key components of value engineering covering executive summary, detailed report, cost analysis and recommendations; presenting value engineering findings to decision-makers; and gaining approval and support for value engineering recommendations.

#### **Course Objectives**

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

- Get a Certificate in Value Engineering from Haward Technology
- Discuss the objectives and historical development of value engineering and its relevance in project management
- Define the role of project management in VE and how project managers facilitate the VE process
- Identify and analyze functions in projects and apply techniques for defining functions using the "active verb and measurable noun" methodology
- Carryout creativity in generating cost-effective solutions as well as lateral and vertical thinking and overcoming barriers to creativity
- Implement brainstorming techniques in project management and discuss the role of a project manager in facilitating creative sessions
- Evaluate ideas based on cost, performance and risk, prioritize alternatives using costbenefit analysis and risk assessment and discuss cost-to-worth ratio and its importance in decision-making
- Facilitate the evaluation process and ensure stakeholder involvement and buy-in for selected alternatives
- Apply tools and techniques for making informed decisions in VE including multi-voting and team consensus methods in selecting alternatives
- Explain life cycle costing (LCC) and its importance for long-term cost management
- Calculate LLC, differentiate initial costs versus recurring and non-recurring costs and apply tools for LCC analysis in projects
- Define the role of a project manager in balancing initial costs and long-term savings and develop action plans for implementing VE recommendations
- Identify the role of project manager in overseeing value engineering implementation and manage risks during implementation and ensure project alignment
- Explain how to structure a value engineering report for a effective communication and discuss the key components of value engineering covering executive summary, detailed report, cost analysis and recommendations
- Present value engineering findings to decision-makers and gain approval and support for value engineering recommendations

#### 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.

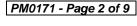






















#### Who Should Attend

This course provides an overview of all significant aspects and considerations of 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.

### **Course Certificate(s)**

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:-









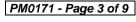
























(2) Official Transcript of Records will be provided to the successful delegates with the equivalent number of ANSI/IACET accredited Continuing Education Units (CEUs) earned during the course.





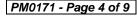
























#### **Certificate Accreditations**

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 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:



Dr. Chris Le Roux, PhD, MSc, BSc, PMI-PMP is a Senior Project & Management Consultant with over 45 years of teaching, training and industrial experience. His expertise lies extensively in the areas of Value Engineering, Project & Contracts Management Skills, Cost Reduction & Quality Improvement, Project & Construction Management, Project Planning, Scheduling & Control, Project Management, Project Delivery & Governance Framework, Project Management

Practices, **Project** Management Disciplines, **Project Risk** Management, **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, Project Time Management, Project Cost Management, Project Quality Management, Quality Assurance, Project Human Resource Management, Project Communications Management, Contract Management, Tender Development, Contract Standards & Laws, Dispute Resolution & Risk Identification, Myers-Briggs Type Indicator (MBTI), Organization Development Consultation, Advanced Debriefing of Emotional Trauma, Interpersonal Motivation, Model Based Interviewing, Leadership Orientation Programme, Coaching & Motivation, Creative Thinking & Problem-Solving Techniques, Emotional Intelligence, Presentation Skills, Communication & Interpersonal Skills, Effective Communication & Influencing Skills, Effective Business Writing Skills, Writing Business Documents, Business Writing (Memo & Report Writing), Leadership & Team Building, Psychology of Leadership, Interpersonal Skills & Teamwork, Coaching & Mentoring, Innovation & Creativity, Risk Analysis & Risk Management, Global Diverse & Virtual Teams Operation, Exceeding Customer Expectations, Corporate Governance Best Practice, Business Performance Management & Improvement, Building Environment of Trust & Commitment, Win-Win Negotiation Strategies, Quality Improvement & Resource Optimization, Neuro Linguistic Programming (NLP), Personal Resilience Developing, Effective Role Modelling & Development, Managing Dynamic Work Environments, Organizational Development, Career Management, Situation & Behaviour Analysis, Interpersonal Motivation Skills, Inventory Management and Financial Administration. Further, he is also well-versed in Water Supply System Security, Vulnerability & Terrorism, Integrated Security Systems, Incident Threat Characterization & Analysis, Physical Security Systems, Security Crisis, Security Emergency Plan, Command & Control System, Preventive Actions and Situation Analysis. He was the Psychologist & Project Manager wherein he was responsible in the project management and private psychology practices.

During his career life, Dr. Le Roux has gained his academic and field experience through his various significant positions and dedication as the Director, Medico Legal Assessor Psychologist, Training & Development General Manager, Project Manager, Account Manager, Commercial Sales Manager, Manager, Sales Engineer, Project Specialist, Psychology Practitioner, Senior HR Consultant, Senior Lecturer, Senior Consultant/Trainer, Business Consultant, Assistant Chief Education Specialist, ASI Coordinator, Part-time Lecturer/Trainer, PMP & Scrum Trainer, Assessor & Moderator, Team Leader, Departmental Head, Technical Instructor/Qualifying Technician, Apprentice Electrician: Signals and Part-Time Electrician from various companies and universities such as the South African Railway (SAR), Department of Education & Culture, ESKOM, Logistic Technologies (Pty. Ltd), Human Development: Consulting Psychologies (HDCP) & IFS, Mincon, Eagle Support Africa, Sprout Consulting, UKZN, Grey Campus, Classis Seminars, CBM Training, just to name a few.

Dr. Le Roux has a PhD in Commerce Major in Leadership in Performance & Change, a Master degree in Human Resource Management, a Bachelor degree (with Honours) in Industrial Psychology, a National Higher Diploma and a National Technical Diploma in Electrical & Mechanical Engineering. Further, he is a Certified Project Management Professional (PMI-PMP), a Certified Scrum Master **Certified Instructor/Trainer** and a Certified VMEdu, а Verifier/Assessor/Trainer by the Institute of Leadership & Management (ILM). Moreover, he is a Registered Industrial Psychologist by the Health Professions Council of South Africa (HPCSA), a Registered Educator by the South African Council for Educators (SACE) and a Registered Facilitator, Assessor & Moderator with Education, Training and Development Practices (ETDP) SETA. He has further delivered numerous trainings, courses, seminars, conferences and workshops globally.























## **Course Program**

The following program is planned for this course. However, the course instructor 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

Day 1	
0830 - 0900	Registration & Coffee
0900 - 0915	Welcome & Introduction
0915 - 0930	PRE-TEST
0930 – 1030	Introduction to Value Engineering
	Definition & Objectives of VE • Historical Development of VE & its Relevance in
	Project Management • Overview of the VE Job Plan & its Phases.
1030 - 1045	Break
1045 - 1130	Role of Project Management in VE
	How Project Managers Facilitate the VE Process • Aligning VE with Project
	Goals, Schedule & Budget
1130 – 1230	Functional Analysis in VE
	Importance of Identifying and Analyzing Functions in Projects
1230 - 1245	Break
1245 – 1420	Functional Analysis in VE (cont'd)
	Techniques for Defining Functions Using the "Active Verb & Measurable Noun"
	Methodology • Functional Cost Analysis and how it Fits into Project Evaluation
1420 - 1430	Recap
1430	Lunch & End of Day One

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0830 - 0930	Creative Problem Solving in VE
	Importance of Creativity in Generating Cost-Effective Solutions • Lateral and
	Vertical Thinking
0930 - 0945	Break
0945 – 1100	Creative Problem Solving in VE (cont'd)
	Overcoming Barriers to Creativity
1100 – 1230	Idea Generation Techniques
	Brainstorming Techniques in Project Management • The Role of a Project Manager
	in Facilitating Creative Sessions
1230 - 1245	Break
1245 – 1420	Group Exercise
	Conduct a Brainstorming Session for Project Solutions • Generate Alternative
	Solutions Based on Functional Analysis
1420 - 1430	Recap
1430	Lunch & End of Day Two

Dav 3

Day 3	
0830 - 0930	Evaluation of VE Alternatives
	Techniques for Evaluating Ideas Based on Cost, Performance and Risk •
	Prioritizing Alternatives Using Cost-Benefit Analysis and Risk Assessment
0930 - 0945	Break
0945 – 1100	Evaluation of VE Alternatives (cont'd)
	The Cost-to-Worth Ratio and its Importance in Decision-Making
1100 – 1230	Project Manager's Role in Evaluation
	Facilitating the Evaluation Process • Ensuring Stakeholder Involvement and Buy-
	in for Selected Alternatives























1230 - 1245	Break
	Decision-Making in VE
1245 - 1420	Tools and Techniques for Making Informed Decisions in VE • Multi-Voting and
	Team Consensus Methods in Selecting Alternatives
1420 - 1430	Recap
1430	Lunch & End of Day Three

Day 4

Life Cycle Costing (LCC)
Overview of LCC in Projects and its Importance for Long-Term Cost Management
How to Calculate LCC and Apply it in Project Decisions
Break
Life Cycle Costing (LCC) (cont'd)
Initial Costs versus Recurring and Non-Recurring Costs • Tools for LCC Analysis
in Projects
LCC in Project Management
The Role of a Project Manager in Balancing Initial Costs and Long-Term Savings •
Case Study on the Use of LCC in Project Decision-Making
Break
Implementation Strategies for VE
Developing Action Plans for Implementing VE Recommendations • The Project
Manager's Role in Overseeing VE Implementation • Managing Risks During
Implementation and Ensuring Project Alignment
Recap
Lunch & End of Day Four

Day 5

Day 5	
0830 - 0900	Reporting in VE
	How to Structure a VE Report for Effective Communication • Key Components of
	the VE Report: Executive Summary, Detailed Report, Cost Analysis and
	Recommendations
0900 - 0930	Presentation Skills for VE
	Techniques for Presenting VE Findings to Decision-Makers • How to Gain
	Approval and Support for VE Recommendations • Use of Data Visualization and
	Storytelling in Presentations
0930 - 0945	Break
0945 - 1015	Post-Study Activities
	The Project Manager's Role in Ensuring the Implementation of Approved VE
	Recommendations • Monitoring and Follow-Up to Track VE Impact
1015 - 1100	Post-Study Activities (cont'd)
	Introduction to Value Engineering Change Proposals (VECP)
1100 - 1115	Course Conclusion
1115 - 1215	COMPETENCY EXAM
1215 - 1230	Presentation of Course Certificates
1230	Lunch & End of Course

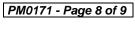
















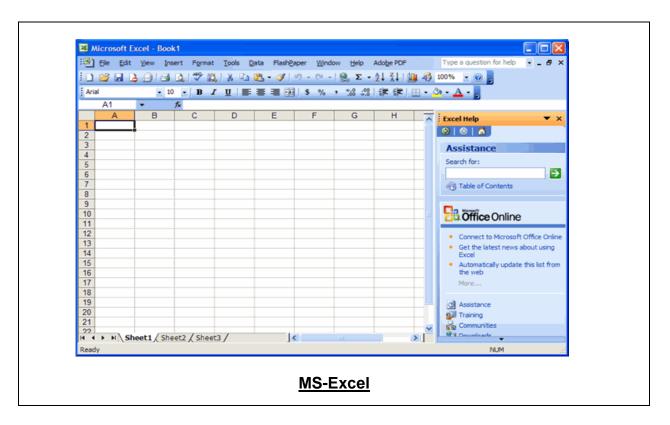






# Simulator (Hands-on Practical Sessions)

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.



#### **Course Coordinator**

Mari Nakintu, Tel: +971 2 30 91 714, Email: mari1@haward.org



















