

Core Competency Testing Objectives for VMA and CVS assume that the VMA Exam and CVS Exam are now separate tests, where a CVS examinee has previously passed the VMA exam. CVS examinees must receive approval to take the CVS exam and must be currently certified as a VMA. The Value Methodology Fundamentals I (VMF-I) course covers all information required to pass the VMA exam. The VMF-II course covers additional information required to pass the CVS exam.

NOTE: Assumes VMAs participate as value team members and CVSs facilitate.

Core Competency & Learning Objectives	Education Objectives and Testing Parameters	VMA VMF 1	CVS VMF 2
1. Value Methodology			
1.1 Explain the Value Methodology			
	A. Explain Value Analysis, Value Engineering, or Value Management	●	●
	B. Define the Value Methodology	●	●
	C. Define Historical Milestones	●	●
	D. Know How Value Analysis Methods Spread Globally and Evolved	●	●
	E. Certification within SAVE International	●	●
	F. Understand What Constitutes a Value Study	●	●
1.2 Explain the Concept of Value			
	A. Define Value as a Basic Concept (Functions Divided By Resources)	●	●
	B. Who Determines Value	●	●
	C. Types of Value	●	●
	D. Define the Value Index (Function Cost Divided By Function Worth)	●	●
	E. Establish, Understand Sources, and Determine Worth	●	●
	F. Possible Reasons for Poor Value	●	●
1.3 Explain the Code of Conduct			
	A. Explain the SAVE International Standards of Conduct	●	●

2. Transform Information			
2.1 Express Information			
	A. Define Key Data Required (Cost, Process, Risk)	●	●
	B. Collect Relevant Data		●
	C. Identify Potential Value Improvement Opportunities Based on Available Information	●	●
2.2 Apply Value Modeling in a Value Study			
	A. Transform Data (Pareto Diagram, Etc.)	●	●
	B. Organize/Diagram Key Resources (Space, Time, Energy, Labor or Staffing, Cost, Materials, Etc.)	●	●
	C. Identify Potential Value Improvement Opportunities Based on Stakeholders' Expectations and Available Information		●
3. Team Facilitation			
3.1 Demonstrate the Skills for Workshop Leadership			
	A. Manage Team Dynamics		●
	B. Motivate Team		●
	C. Express Communication Skills		●
	D. Demonstrate Time Management Skills		●
	E. Elicit Information		●
	F. Recall the Core Practices of Facilitation		●
	G. Keep the Team Focused on Accomplishing The Objectives		●
	H. Lead Team to Consensus		●
4. Function Analysis			
4.1 Explain Function Analysis			
	A. Define Function Analysis	●	●
	B. Explain Purpose of Using Function Analysis	●	●
4.2 Differentiate Functions			
	A. Define What Is a Function	●	●

	B. Contrast Activities From Functions	●	●
	C. Classify Functions	●	●
4.3 Organize Functions			
	A. Explain What Is a Random List of Functions	●	●
	B. Construct a Random Function Identification Worksheet	●	●
	C. Explain What Is a Fast Diagram	●	●
	D. Construct a Fast Diagram		●
	E. Allocate Resources to Accomplish Functions (Space, Time, Energy, Labor or Staffing, Cost, Materials, Etc.)		●
	F. Prioritize Functions for Potential Value Improvements		●
5. Cost Analysis			
5.1 Recognize Costs			
	A. Recognize the Current State Cost Estimate (Correct Point in Time)		●
5.2 Compute Financial Assessment			
	A. Know the Common Terms in The Use of a Financial Analysis (Net Present Value, Present Worth, ROI, Simple Payback)	●	●
	B. Calculate A Simple Payback, Breakeven, Or Return On Investment		●
5.3 Apply Life Cycle Costing			
	A. Know the Common Terms on Life Cycle Costing	●	●
	B. Calculate Life Cycle Costs of a Simple Project, Process, or Product (Initial, Cyclical or Reoccurring, Salvage, and Annual)	●	●
	C. Interpret the Time Value of Money	●	●
	D. Express the Economic Principles and Terminology of Capturing Total Life Cycle Costs and Apply Them in a Value Study		●
6. Pre-Workshop Stage			
6.1 Elicit Stakeholder Goals and Objectives for the Workshop			
	A. Appraise the Targeted Goals, Expectations, and Objectives the Client Wants Addressed		●

	B. Establish the Study Parameters Needed to Address Client Objectives: Scope of Study, Constraints, Duration, Appropriate SMEs, Stakeholder Involvement, Logistics		●
	C. Verify How Value Improvement Will Be Measured, e.g., Changes to Time, Cost, and Performance; ROI; Quality; Etc.		●
6.2 Assemble Appropriate Team Members			
	A. Identify the Correct Team Size Needed		●
	B. Identify Subject Matter Experts (SMEs) Needed		●
	C. Know When to Use More Than One Facilitator Based on Team Size		●
	D. Request Appropriate Stakeholder Participation (Right Stakeholder at the Right Time In the Study)		●
6.3 Develop an Agenda			
	A. Identify Activities and Milestones That Address the Six-Phase VM Job Plan		●
	B. Scale the Agenda to Address the Scope and Objectives		●
6.4 Acquire Information			
	A. Identify Information Needed		●
	B. Manage Information		●
	C. Distribute Information		●
6.5 Arrange Workshop Logistics			
	A. Identify and Coordinate the Workshop Venue Requirements: Room Location, Size, Safety and Security, Need for Breakout Rooms for Sub-Teams, Lodging, Transportation, Etc.		●
	B. Identify Equipment and Material Needs, e.g., Projectors, Flip Charts, Copy Equipment, Computer and Internet Interfaces, Etc.		●
	C. Identify and Coordinate Any Food and Beverage Requirements		●
	D. Arrange a Pre-Meeting With the Project Team and the Study Sponsor		●
7. Workshop Stage (Six-Phase VM Job Plan)			
7.1 Manage the Six Phases of the VM Job Plan			
	A. Express the Purpose and Procedures of Each Phase of the VM Job Plan	●	●

	B. Apply the Proper Technique to Achieve the Expected Outcome of Each Phase		●
	C. Express How Each Phase Builds on Each Other-Its <u>Previous Phases</u>	●	●
	D. Express Potential Advantages and Disadvantages of Using Different Tools		●
	E. Tailor the Phases to Match the Needs of the Project Goals and Objectives		●
7.2 Complete Information Phase			
	A. Express Different Information Gathering Techniques	●	●
	B. Express Potential Advantages and Disadvantages of Using Different Techniques		●
	C. Apply the Appropriate Technique to Achieve the Expected Outcome		●
7.3 Complete Function Analysis Phase			
	A. Express Different Function Analysis Techniques	●	●
	B. Express Potential Advantages and Disadvantages of Using Different Techniques		●
	C. Apply the Appropriate Technique to Achieve the Expected Outcome		●
7.4 Complete Creative Phase			
	A. Express Different Creative Techniques	●	●
	B. Express Potential Advantages and Disadvantages of Using Different Tools		●
	C. Apply the Appropriate Technique to Achieve The Expected Outcome		●
	D. Foster a Creative Environment to Generate Ideas From the Team		●
7.5 Complete Evaluation Phase			
	A. Express Different Evaluation Techniques	●	●
	B. Express Potential Advantages and Disadvantages of Using Different Techniques		●
	C. Apply the Appropriate Technique to Achieve the Expected Outcome		●
7.6 Complete Development Phase			
	A. Express Different Development Techniques	●	●
	B. Express Potential Advantages and Disadvantages of Using Different Techniques		●
	C. Apply the Appropriate Technique to Achieve the Expected Outcome		●
	D. Develop Recommendations	●	●
	E. Identify Key Features to Sell Value Opportunities	●	●
	F. Suggest Path Forward for Implementation	●	●

7.7 Complete Presentation Phase			
	A. Manage the Audience		●
	B. Illustrate Key Value Recommendations	●	●
	C. Organize Information for Effective Delivery	●	●
	D. Leverage Visual Aids and Technologies to Deliver a Presentation	●	●
	E. Anticipate and Respond to Questions	●	●
	F. Express Key Features to Sell Value Opportunities	●	●
	G. Illustrate Path Forward for Implementation	●	●
8. Post-Workshop Stage			
8.1 Document Results			
	A. Document Value Study Results		●
	B. Elicit Comments		●
	C. Support Implementation		●
	D. Capture Status of Recommendations (If Possible)		●
9. Value Program			
9.1 Discuss a Value Program			
	A. Identify the value champion		●
	B. Restate key elements of a successful Value Program (OMB Circular)		●
	C. Identify how to select a project		●
	D. Recognize the need to train managers, team members and decision makers in VM		●