# VALUE ANALYSIS/ VALUE ENGINEERING (VA/VE) METHODOLOGY & APPLICATION TO MANUFACTURING

Manufacturing Cesses Parts ures w/service Industi

Module I Training Workshop

This Module I course has been approved by the Certification Board of SAVE International



Location: To Be Determined Date: To Be Determined

## Workshop Leader: Stephen J. Kirk, PhD, FAIA, FSAVE, CVS

## WHY THIS COURSE?

The objective of this training workshop is to acquaint participants with the methodology of VA/VE and its decision-making process. The VA/VE methodology has been used worldwide for over 50 years to assist management reduce product or service costs and add customer value. In many VA/VE studies product and service savings range from 15 to 35%.

This Module I course teaches VA/VE in a hands-on, project-based manner. During the workshop managers of manufacturing, finance, guality control, marketing and engineers (product and manufacturing, processes) will engage in "real-time" decision-making using VA/VE tools and computer technology developed by Dr. Kirk to ensure quality while achieving the economic value for their products and services. Participants will apply the VA/VE methodology and decision-making skills to an actual product or service to gain practical experience using what they learn. Workshop participants should expect to develop proposals ready for implementation on any projects approved for the workshop. This will demonstrate the effectiveness of the VA/VE techniques in enhancing product or service value while controlling costs.

## WHO SHOULD ATTEND?

This course is designed for people responsible for making decisions concerning product, process or procedural activities in manufacturing and service industries. In the past, attendees have included corporate leadership, plant managers, industrial engineers, packaging engineers, process engineers, and marketing, finance, quality control and manufacturing specialists.

Since this seminar is approved by SAVE International, individuals planning to become Associate or Certified Value Specialists need to attend.

Upon completion, each participant will be awarded a certificate and those wishing to take the SAVE AVS exam may do so, **providing advance notice is given to the instructor**.

## Day 1

### VA/VE Approach to Projects

- VA/VE "job plan" overview
- History and evolution of VA/VE
- Value: The Success Criterion (video)

### VA/VE Concepts and Principles

- What is value?
- Project selection techniques
- Team members and team building

### Day 2

### Information Phase

- Project objective and scope "charter"
- Information gathering, value modeling
- Principles of Value Analysis (video)

### **Function Analysis Phase**

- Identifying product or service functions
- Creating a function logic diagram (FAST)
- Develop cost function relationships
- Function-cost-worth analysis

### Day 3

#### **Creative Phase**

- The creativity process; team dynamics
- Creativity techniques: brainstorming, Delphi
- Idea generation for function

#### **Evaluation Phase**

- Eliminate nonsense
- Categorize and rank ideas
- Learn and use T-charting
- Idea selection matrix

#### Day 4

#### **Development Phase**

- Weighted evaluation and decision analysis
- Prepare design sketches
- Develop proposal narrative description

### Life Cycle Costing

- Present worth (NPV) analysis
- Annualized method, IRR, payback period
- Calculate benefit to cost ratio, ranking
- Sensitivity analysis

#### Day 5

#### Presentation and Follow-up Phases

- Team study presentations
- VA/VE report preparation
- Resistance to change
- Implementation and follow-up plan

#### Check the appropriate boxes:

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Individual: \$1200

Location: TBD

Send more information about value management for manufacturing

Send this form with your check to: KIRK Associates, LLC 1177 Berkshire Road, Suite 100 Grosse Pointe Park, MI 48230

Tel. 313.823.7330 Fax 313.823.7332 E-mail: <u>kirkassociates@aol.com</u>

The Instructor

**Stephen J. Kirk**, PhD, FSAVE, CVS, has a diversified background in value analysis / engineering, economics, administration of VA/VE programs and evaluation of business and technological projects. He is the president of Kirk Associates that specializes in value analysis, value engineering studies for manufacturing and service industries.

Dr. Kirk, a life certified value specialist, a Fellow of SAVE International (the value society), and a past president of SAVE International. He received his doctorate from the University of Michigan specializing in value based decisionmaking.

Author of 7 books on VA/VE, including the text for this course, Dr. Kirk has also taught courses at Harvard University, Catholic University, University of Michigan, Lawrence Technological University, King Saud University in Saudi Arabia and Yarmouk University as a Senior Fulbright Scholar in Jordan.

He has personally led over 400 VA/VE studies of manufacturing, industry and facility projects.

Examples of Dr. Kirk's manufacturing experience:

- VM study: Ingersall Rand, Products
- VM program: United Technologies Corporation
- VM program: General Motors Corporation
- VM study: TRW Shoulder Restraints Systems
- VM study: Delphi Corp., Lean Manufacturing
- VM study: Savola Corp., Dairy Products and Sugar Manufacturing
- VM study: Metaldyne, Auto Parts Manufacturing
- VM study: Alternate Solids Project, Louisville, KY
- VM study: Philips Corporation, CRT Assembly
- Life Cycle Cost analysis studies: GM Corporation

Preferred Name (Will be used on certificate)

Name of Company, Agency or Institution

Preferred Mailing Address

City / State / Zip

Phone (during office hours) Fax Number

#### E-mail

#### Registration

Advance registration is required and must be accompanied with payment. Fee includes text (\$50 value), VM software, refreshment breaks, lunch and certificate.

#### **Cancellation Policy**

Full refund is notice is received more than 15 business days before classes; \$50 fee if received 5-15 business days before classes, and no refund if received any closer to the beginning of the seminar.

**Workbook**: *VA/VE for Manufacturing,* by Dr. Stephen Kirk, CVS

**KIRK Associates**, LLC, is a leader in value management project applications and training and specializes in:

- Establishing Value Management Programs
- Strategic Value Planning / PRECiSE
- Life Cycle Cost Analysis
- Value Management Workshops
- Budget Cost Modeling and Cost Management
- Risk Modeling and Mitigation Analysis
- Post Occupancy Evaluations
- Environmental Sustainability/ LEED Workshops

Participants are encouraged to bring their own project to the workshop. Those that do MUST communicate with the instructor prior to the workshop to insure that the required, detailed information is available.

Note: Limit one project per 5 – 7 person team.