

# Professional Training Programs

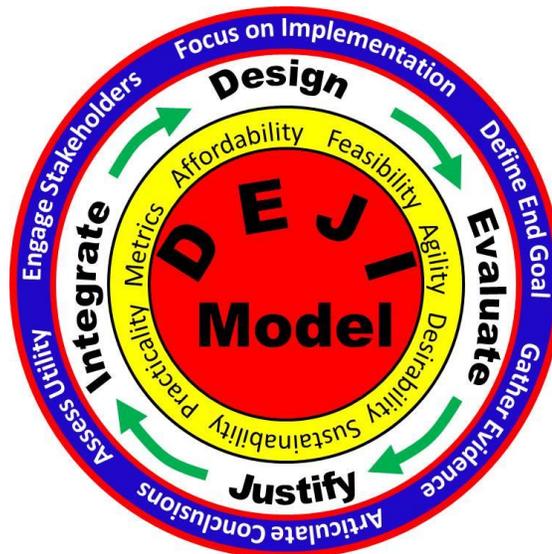
Offered By

AB International Consulting Services (ABICS)

**Using the DEJI Model**

Dayton, OH 45431, USA

[www.abicspublications.com](http://www.abicspublications.com)



2017 COURSE CATELOG

## **About ABICS**

Using the **DEJI** model for systems Design, Evaluation, Justification, and Integration, ABICS offers intensive and comprehensive training programs that cover topics designed to prepare managers and technical professionals to tackle organizational, operational, or production problems. Our courses combine fundamental theory and hands-on exercises to sharpen the skills of participants. Practical implementation is the primary goal of our training programs. Our specialized courses are customized to the needs of groups of participants from client organizations. This facilitates homogeneity of discussions relating to specific industries or the needs of an organization. Training programs can be offered in our rented facilities or at client locations.

Past clients of ABICS customized training workshops include ExxonMobil, Chevron, Agip, Total, Nigerian National Petroleum Corporation (NNPC), Sony, AT&T, Seagate Technology, U.S. Air Force, Oklahoma Gas & Electric, Oklahoma Asphalt Pavement Association, Hitachi, Russia Economic Institute, Mexico, China Productivity Center in Taiwan, and Ghana. ABICS uses in-house developed training materials and guides. Please visit [www.abicspublications.com](http://www.abicspublications.com) for further details.

### **AB International Consulting Services (ABICS)**

**Postal Address: PO Box 341441, Dayton, OH 45434**

**Office Address: 2781 Torrey Pines, Beavercreek, OH 45431**

**Website: [www.abicspublications.com](http://www.abicspublications.com)**

**For general information: [abadiru@abicsnet.com](mailto:abadiru@abicsnet.com); [deji@badiru.com](mailto:deji@badiru.com)**

**Point of Contact: Professor Adedeji Badiru**

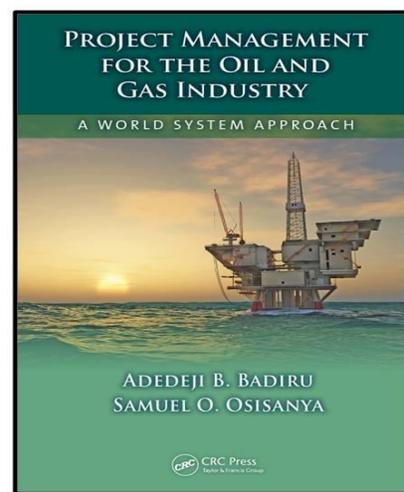
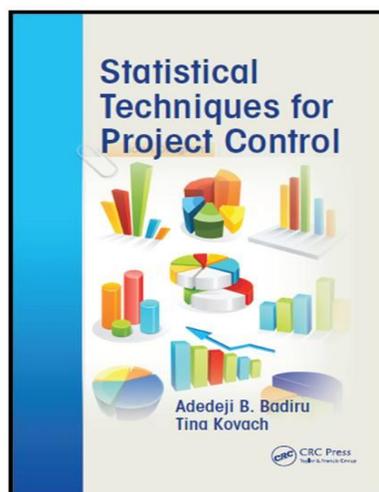
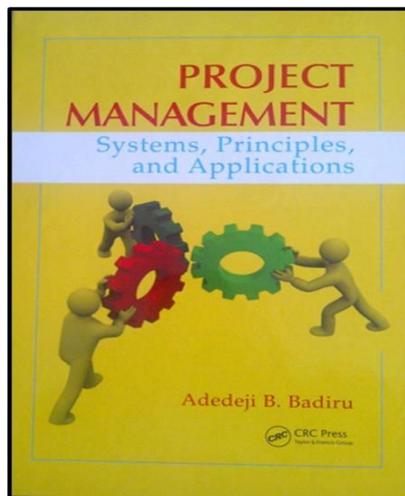
**Phone: +1 865-548-1952**



# Project Management Training

Project management is a signature offering by ABICS. Project management is the process of managing, allocating, and timing resources to achieve a given goal in an efficient and expeditious manner. The objectives that constitute the specified goal may be in terms of time, cost, or technical results. A project can be simple or complex. In each case, proven project management processes must be followed with a world systems view of the project environment. While on-the-job training is possible for many of the project management requirements, periodic external training must be undertaken to keep abreast of the tools and techniques of project management. It has been shown again and again that project management is the foundation of success in many organizations. Project management facilitates the application of knowledge and willingness to actually accomplish tasks. Where there is knowledge, willingness often follows. But it is the execution of a project that actually gets things done. From the very basic tasks to the very complex endeavors, project management must be applied to accomplish organizational goals and objectives. It is, thus, essential that project management be a part of every training program in all organizations. Of course, project management encompasses all aspects of everything that an organization does, ranging from project selection, human resource management, technical design, resource allocation, budgeting, and quality control to economic analysis. The diversity of ABICS lineup of courses reflect the broad-based needs of business, government, and industry.

## Sample Publications



Please visit [www.ABICSPublications.com](http://www.ABICSPublications.com) for additional listings

## Sample of Training Programs



This 3-day course is designed for executives in several functional areas of different industries including the petroleum industry, the service industry, retail, and government. These executives can come from engineering, construction, manufacturing, research and development, production, maintenance, marketing, safety, and so on. Typical participants will be those who fund, approve, and supervise large and complex projects, particularly multi-national projects.

### LEARNING OBJECTIVES

- How to think strategically
- How to develop executive etiquette
- How to develop and execute organizational value streams
- How to leverage project teams for goals and objectives
- How to allocate budget to high-profile projects
- How to develop and execute entrepreneurship
- How to demonstrate creativity and innovation
- How to manage organizational efficiency and effectiveness

### DAY 1 TOPICS

- Understanding leadership styles for executives
- Using project management tools to plan, schedule, and control projects
- Organizing projects
- Evaluating quality and value of projects
- Applying systems approach to complex projects
- Achieving integrated project planning, monitoring, and control
- Implementing the Triple C (Communication, Cooperation, and Coordination)

### DAY 2 TOPICS

- Decision making tools and techniques for executives
- Allocating resources effectively
- Managing workers in a complex project environment
- Applying project management to quality and productivity improvement



- Making organizational transformation
- Developing policies and procedures

### **DAY 3 TOPICS**

- Setting and measuring performance standards
- Leadership case studies
- Management games and hands-on exercises
- Proactive versus reactive management
- Management by objective versus management by exception
- Executive presentations

### **Instructors**

- Prof. Adedeji Badiru, Ph.D., PE, PMP (ABICS Lead Consultant)
- Mr. Tony Mayfield, MS, PMP (ABICS Consultant)

### **Course Materials**

Each participant will receive a copy of the following reference materials:

1. Badiru, A. B. (2012), **Project Management: Systems, Principles, and Applications**, Taylor & Francis CRC Press, Boca Raton, FL.
2. Badiru, A. B. and S. O. Osisanya (2013), **Project Management for the Oil & Gas Industry: A World System Approach**, Taylor & Francis CRC Press, Boca Raton, FL.
3. Badiru, A. B. and Tina Kovach (2012), **Statistical Techniques for Project Control** (2012), Taylor & Francis CRC Press, Boca Raton, FL.

### **Course Dates**

Negotiable based on client's needs.

### **Course Location**

At client's location in Kuwait

### **Course Cost**

To be negotiated based on client's desired level and duration of training and number of participants.



# **Project Management Professional (PMP) Exam Preparation Training**

This 5-day workshop is designed to get participants prepared for taking the project management professional (PMP) examination offered by the Project Management Institute (PMI). The workshop is spread over consecutive weekends. The topics covered are based on the contents of the latest edition of the Project Management Body of Knowledge (PMBOK®).

## **LEARNING OBJECTIVES**

- Understand all the key elements covered in the PMP exam
- Explain the project management standard
- Define key project management terms and concepts
- Compare and contrast project management to
  - Program management
  - Portfolio management
  - Project Management Office (PMO)
  - Operations Management
- Explain the role of the project manager

## **DAY 1 TOPICS**

Ethics and Professional Conduct  
Project Life Cycle  
Project Management Processes

## **DAY 2 TOPICS**

Project Integration Management  
Project Scope Management

## **DAY 3 TOPICS**

Project Time Management  
Project Cost Management

## **DAY 4 TOPICS**

Project Quality Management  
Project Human Resources Management



## DAY 5 TOPICS

Project Communication Management

Project Risk Management

Project Procurement Management

The overlay table below shows how ABICS PMP exam preparation workshop links topics from the PMBOK knowledge areas to the project management process clusters.

Knowledge Areas	Project Management Process Clusters				
	Initiating	Planning	Executing	Monitoring and Controlling	Closing
Project Integration					
Scope					
Time		Topics			
Cost					
Quality					Topics
Human Resources					
Communication					
Risk					
Procurement					

### Instructors

- Prof. Adedeji Badiru, Ph.D., PE, PMP (ABICS Lead Consultant)
- Mr. Tony Mayfield, MS, PMP (ABICS Consultant)
- Ms. Abi Badiru, MBA, Black Belt (ABICS Consultant)

### Course Reference Materials:

1. Badiru, A. B. (2012), **Project Management: Systems, Principles, and Applications**, Taylor & Francis CRC Press, Boca Raton, FL.
2. Badiru, A. B. and S. O. Osisanya (2013), **Project Management for the Oil & Gas Industry: A World System Approach**, Taylor & Francis CRC Press, Boca Raton, FL.
3. Badiru, A. B. and Tina Kovach (2012), **Statistical Techniques for Project Control** (2012), Taylor & Francis CRC Press, Boca Raton, FL.
4. Badiru, A. B. (2009), **STEP Project Management: Guide for Science, Technology, and Engineering Projects**, Taylor & Francis CRC Press, Boca Raton, FL.

**Course Dates:** Negotiable based on client's needs.

**Course Location:** To be arranged based on client's needs

**Course Cost:** Negotiable based on desired level, duration, and number of participants

## About the In-house Instructors

### Professor Adedeji Badiru

Prof. Adedeji Badiru is a Professor of Systems Engineering at the Air Force Institute of Technology. He was previously professor and department head of Industrial & Information Engineering at the University of Tennessee in Knoxville. Prior to that, he was professor of industrial engineering and Dean of University College at the University of Oklahoma. He is a registered professional engineer (PE), a certified Project Management Professional (PMP), a Fellow of the Institute of Industrial Engineers, and a Fellow of the Nigerian Academy of Engineering. He holds BS in Industrial Engineering, MS in Mathematics, and MS in Industrial Engineering from Tennessee Technological University, and Ph.D. in Industrial Engineering from the University of Central Florida. His areas of interest include mathematical modeling, project modeling and analysis, economic analysis, systems engineering, and efficiency/productivity analysis & improvement. He is the author of over 20 books, over 30 book chapters, over 70 technical journal articles, and over 100 conference proceedings and presentations. He also has over 40 magazine articles, editorials, and periodicals. He is a member of several professional associations several scholastic honor societies. Prof. Badiru has won several awards for his teaching, research, and professional accomplishments. He is the recipient of the 2009 Dayton Affiliate Society Council Award for Outstanding Scientists and Engineers in the Education category with a commendation from the 128<sup>th</sup> Senate of Ohio. He also won 2010 IIE/Joint Publishers Book-of-the-Year Award for co-editing The Handbook of Military Industrial Engineering. He also won 2010 ASEE John Imhoff Award for his global contributions to Industrial Engineering Education, the 2011 Federal Employee of the Year Award in the Managerial Category from the International Public Management Association, Wright Patterson Air Force Base, the 2012 Distinguished Engineering Alum Award from the University of Central Florida, and the 2012 Medallion Award from the Institute of Industrial Engineers for his global contributions in the advancement of the profession.

He has served as a consultant to several organizations around the world including Russia, Mexico, Taiwan, Nigeria, and Ghana. He has conducted customized training workshops for numerous organizations including Sony, AT&T, Seagate Technology, U.S. Air Force, Oklahoma Gas & Electric, Oklahoma Asphalt Pavement Association, Hitachi, Nigeria National Petroleum Corporation, and ExxonMobil. He has won several awards for his teaching, research, publications, administration, and professional accomplishments. He holds a leadership certificate from the University Tennessee Leadership Institute. Prof. Badiru has served as a Technical Project Reviewer, curriculum reviewer, and proposal reviewer for several organizations including The Third-World Network of Scientific Organizations, Italy, National Science Foundation, National Research Council, and the American Council on Education. He is on the editorial and review boards of several technical journals and book publishers. Prof. Badiru has also served as an Industrial Development Consultant to the United Nations Development Program. He is also a Program Evaluator for ABET. In 2011, Prof. Badiru led a research team to develop analytical models for Systems Engineering Research Efficiency (SEER) for the Air Force acquisitions integration office at the Pentagon.

## **Additional Instructors:**

In addition to in-house instructors, ABICS partners with local training organizations to deliver a variety of technical and managerial courses. Partnering organizations include DeVry University, Wright State University, University of Dayton, Clark State University, Xavier University and University of Cincinnati.

For other customized courses not listed in the catalog, please contact us at [abadiru@abicsnet.com](mailto:abadiru@abicsnet.com) for special arrangements.

# Additional Course Descriptions

## Project Performance Analysis

This course covers a complete analysis of a technical project from inception to completion. It looks at the various unique aspects of an engineering project using a systems analysis approach. Specific emphasis is placed on monitoring and control techniques.

### TOPICS

- Basics of systems engineering
- Analysis of project system
- Macro and micro levels of technical project planning
- Project risk analysis
- Engineering facility planning
- Engineering decision analysis
- Multi-objective planning
- Engineering sensitivity analysis
- Engineering reliability and fault-tree analyses
- Open and closed loop engineering systems

## Aviation Economics

The development and marketing in the travel industry are expected to be the next wave of the transportation industry. Now is the time to prepare for the skills needed to manage the various aspects of the expanding aviation industry. This course tailors proven economics analysis techniques to the management of aviation enterprises. Those who should attend include aviation economists, resource managers, aviation engineers, supervisors, planners, safety officers, managers, and aviation executives.

### TOPICS

- Aviation Industry Overview
- Ups and Downs of aviation enterprises
- Fundamentals of aviation economics
- Cost aspects and terminology in the aviation industry
- Basic economic analysis
- Aviation Cash flow analysis
- Fleet replacement analysis
- Economic value-added model
- World aviation standards
- Travel agreements
- Financing aviation projects
- Aviation industry and national economic development
- Safety assurance strategies

# Medical Service Management

The course is designed for medical practitioners in private, public, or government service. Those who should attend include doctors, senior nurses, hospital managers, and medical technicians.

## TOPICS

- Medical service performance factors
- Managing the medical office
- Medical work process analysis
- Business practice improvement strategies
- Measurement-evaluation-control cycles in financial management
- Medical service need forecasting
- Cash flow projection and monitoring
- Information technology for medical applications
- Medical change management
- Health care organizational improvement

# Cost and Investment Analysis

Result-oriented investment strategies have the greatest potential for profitability. Investment analysis sets the path for successful operations. Investment analysis and appraisal are essential to ensure that point-to-point performance measures are in place for large investments. This course combines various aspects of financing, budgeting, cash flow analysis, and investment planning into one integrative module that prepares managers for the challenges of managing investments across international boundaries. Those who should attend include financial managers, banking officers, auditors, accountants, controllers, business managers, engineers, supervisors, planners, plant managers, business executives, and project designers.

## TOPICS

- Measurable investment performance factors
- Investment process analysis
- Business process re-engineering and re-investment
- Measurement-evaluation-control cycles in investments
- Project revenue analysis and forecasting
- Cash flow projection and monitoring
- Investment information management for effectiveness
- Profit ratio analysis and breakeven analysis
- Organizational improvement
- Learning curve analysis for investment improvement

## Cost Engineering

This course presents comprehensive coverage of elements of cost engineering. It covers both the quantitative and qualitative aspects of cost engineering.

### TOPICS

- Basics of cost engineering
- Activity Based Costing
- Project Economic Analysis
- Cost estimation parameters
- Cost estimation ranges
- Forecasting models
- Payment Terms
- Inventory carrying cost analysis
- Pricing and marketing
- Cost monitoring and control
- Time-Cost-Performance Tradeoffs

## Executive Forum

This forum presents an interactive environment for selected upper management staff and key decision makers to examine processes and procedures for instituting and maintaining improvement strategies in an organization. This is a round-table discussion that uses both case examples and real scenarios to devise solutions to real problems from a management perspective.

### TOPICS

- Preparing an organization for change
- Identifying the change factors
- Role of upper management
- Organizational diagnostics
- Implementing business process re-engineering
- Developing and maintaining new organizational cultures
- Top-down and bottom-up implementation strategies
- Organizational learning
- Case studies and real examples from the corporate world

## Leadership Development

The objective of this course is to bring together policy and decision makers in an organization outside the normal and routine internal discussions. The purpose is not to teach the executives new skills, but rather to illustrate how their existing skills and expertise can be harnessed in a synergistic team approach using project management techniques. The course uses a situational project management case study approach. The course takes a systems view to show how units in an organization can interrelate in a symbiotic setting to maximize organizational

accomplishments. The fact that the session is externally moderated by an independent expert makes it a unique undertaking. The approaches to be discussed are applicable to the pursuit of any goal of the organization.

The course emphasizes an interactive team discussion approach and presents strategy for building cohesive teams throughout the organization. The course will address the eight elements of the Project Management Body of Knowledge as defined by the Project Management Institute: Scope, Quality, Time, Cost, Risk, Human Resources, Contract/Procurement, and Communications.

### **TOPICS**

- Cost Reduction
- Quality Improvement
- Productivity Improvement
- Resource Realignment
- Business Process Re-engineering
- Continuous Process Improvement
- Operations Management, Negotiations
- Lean and Six Sigma Processes
- Total Quality Management
- Project Control

## **Human Resource Development**

This training program is designed for HR Supervisors, Administrators, Training Coordinators, and other HR Professionals. Participants will be introduced to the basic tools of managing human resources. Case study discussions will present Best Practices of HR from different industries.

### **TOPICS**

- How to Use IT tools and techniques in HR
- Human Resource Development
- Development of HR Policies & Procedures
- How to allocate HR resources effectively
- Managing HR Training Programs
- Train-the-Trainer
- HR Performance Appraisal Systems
- Productivity Improvement Strategies
- HR Recruitment and Retention Programs
- HR Project Management

## **Environmental Management**

Environmental concerns pervade all businesses and industries of today. Learn to turn environmental management into a win-win analysis. This course offers skills training from

planning, organizing, and resource allocation to control measures for environmental issues. Those who should attend include managers, production supervisors, planners, safety officers, and plant managers

### **TOPICS**

- Identification of environmental hazards
- Environmental remediation strategies
- Managing an environmental compliance program
- Managing people issues related to the environment
- Strategic linkages with local communities
- Partnering with local communities to protect the environment
- Incorporating environmental safeguards into industrial design
- Auditing organizational preparedness
- Workplace of the future
- Blueprint for environmental health
- Scheduling of environmental projects

## **Strategic Planning**

Result-oriented strategies have the greatest potential for success. Strategic planning sets the path for operations. Business planning and budgeting for results ensure that point-to-point performance measures are in place to control operations. This course combines various aspects of financing, budgeting, and business planning into one integrative module that prepares managers for challenges of managing in dynamic and volatile market environments. Those who should attend include financial managers, banking officers, auditors, accountants, controllers, business managers, engineers, supervisors, planners, plant managers, business executives, and designers.

### **TOPICS**

- Measurable performance factors
- Work process analysis
- Business process re-engineering
- Measurement-evaluation-control cycles in financial management
- Business forecasting
- Cash flow projection and monitoring
- Information management for business effectiveness
- Change management
- Organizational improvement
- Learning curve analysis for operational improvements

## **Engineering Statistical Process Control**

This course presents basic statistical techniques for process analysis and control. The techniques are generally applicable throughout industry for improving process quality, effectiveness, and operational efficiency.

## TOPICS

- On-line and off-line process controls
- Statistical inferences
- Data collection and analysis
- Process simulation and process variation
- Analysis and interpretation of process data
- Process control charts
- Process capability analysis
- Design and analysis of experiments
- Process measurement scales

## Engineers Transitioning to Management

This course covers professional development and career growth of engineers in transition to management positions. It teaches participants how to be effective leaders both in technical and management functions.

## TOPICS

- Leadership styles for managers
- Making the transition
- Administrative tools and processes
- Developing policies and procedures
- Using Triple C model of Communication, Cooperation, Coordination
- Managing multiple objectives
- Setting and measuring performance standards
- Leadership case studies
- Management games and hands-on exercises
- Proactive versus reactive management
- Management by objective
- Management by exception
- Adapting technical tools for management applications

## Lean Production Systems

This course introduces the new concepts of *lean production* systems. It shows how organizations fit into lean manufacturing. It presents both the technical and people aspects of lean production approaches.

## TOPICS

- What is lean?
- Selling and motivating employees about lean
- Lean and green manufacturing
- Environmental impacts of lean production
- Creating organization culture to support lean

- Proving lean infrastructure
- Fostering cooperation among lean production groups
- Monitoring metrics for lean manufacturing
- Lean and the supply chain system
- Continuous flow processes in lean
- Flow of information and products between lean production cells
- Production cell flexibility and versatility

## Supply Chain Management

This course presents key definitions and the strategic role of supply chain in a production environment. It addresses the major drivers of supply chain performance. It presents the analytical tools and techniques for supply chain analysis.

### TOPICS

- Introduction and definitions
- Supply chain framework
- Planning demand and supply
- Communication, cooperation, and coordination in a supply chain
- Managing inventories
- Economies of scale in a supply chain
- Managing uncertainty in the supply chain
- Transportation and logistics in supply chain
- Information technology for supply chain
- Aggregate planning within a supply chain
- Financial factors affecting supply chains

