

# **Master's Certificate In Program/Project Management**

This program provides knowledge of the organizational, human, business and technical processes for successfully managing projects and programs.

### **Program Objectives**

This Master's Certificate program provides you with a comprehensive, practical knowledge of the underpinnings of project and program management. While principles and theories are explained, the emphasis is on how to apply them in order to swiftly and efficiently plan, organize and marshal assets so that projects are completed timely, on-budget and result in a high-quality outcome. The program also concentrates on motivating and directing individuals and teams as well as monitoring their performance and progress according to timetables and work breakdown schedules.

#### **Requirements**

To earn your Master's Certificate in Project & Program Management you must accrue 18 credits. It's required that you take Building and Leading Project Teams (Course 671). You have the option of selecting one other required course from a list of three (Courses 625, 627 and 628), depending on your professional interest and whether you manage projects or programs. Apart from taking two required courses, you may choose any four of eight electives. You are required to pass a comprehensive final examination. (There are no exam fees.)

| Curriculum Path   |
|---|
| Start By Taking the Required Courses  |
| Program Management<br>Course 625  |
| or  |
| Managing Projects<br>Course 627   |
| and   |
| Building and Leading Project Teams<br>Course 671  |
| Then Take Any Four of the Following Courses   |
| Technical Program Management<br>Course 629  |
| Negotiation for Project Managers<br>Course 636  |
| Earned Value Management Systems<br>Course 647   |
| Risk Analysis and Management<br>Course 679  |
| Contracting and Procurement for Project Managers<br>Course 632  |
| Project Quality Management<br>Course 687  |
| Project Scope, Cost and Schedule Management<br>Training Class 589 (not available as a distance-learning course) |

Once you Complete . . . All Coursework and Examinations Receive Your Master's Certificate



# Program Management (625) Tuition: \$750 Credits: 3

This course provides a complete knowledge of program/project management. It is based on the program management procedures and processes used by the United States Government and its prime and subcontractors, however, the procedures are applicable in whole or in part to the management of any type or size of research, development, production or construction project. A program/project manager may deal with large projects or small, at high or low levels of an organization. In some instances, functional managers act as project managers. In other cases, projects are organized around product development teams. The scope is so wide that discussion of program management usually focuses upon limited aspects of the total. This course focuses upon the whole. It illustrates how the organizational structure and specific business and technical management systems are integrated into a total system of management to plan, organize, staff, direct, monitor, motivate and control. The principles and procedures enunciated are applicable to small and medium size projects as well as those requiring complete technical/cost/schedule/performance planning and control systems. The course is the most comprehensive and thoroughly documented course in program/project management available from any government, public or private source.

#### Subjects covered include:

Management; Introduction to Program Management; Program/Project Authority; Project Organization; Planning the Project; Work Breakdown Structure; Schedules; Financial Planning; Project Integration; Work Authorization; Earned Value Management Systems; Technical Management System; Introduction to System Engineering; Trade-Off Studies; Technical Performance Measurement; Risk Management; Specification Development; Configuration Management; Interface Management; Technical/Design Reviews and Audits; Life Cycle Cost; Logistics; Software Development Process; Test and Evaluation; Transitioning from Development to Production; Production Management; Managing Small Projects.

#### **Increase Your Understanding of**

- The program management process
- Steps in program planning
- Requirements determination
- Work definition
- Scheduling and budgeting
- Risk management techniques
- Objective performance measurement
- System engineering
- Technical management
- Program initiation & leadership
- TQM

#### **Improve Your Ability to**

- Measure technical performance
- Organize staff & allocate resources
- Create work breakdown structures
- Motivate and direct staff
- Conduct technical reviews and audits

This popular course has been presented in public forums to more than 50,000 industry and government personnel in the U.S., Canada and Europe. Now you can have it in your home.

Professor: Paul McDonald Text: The Program Manager's Handbook, AGU Press General Management Courses



# Managing Projects (627)

# Tuition: \$750 Credits: 3

Project Management involves a single manager responsible for planning, organizing, staffing, coordinating, directing, monitoring, motivating and controlling the combined efforts of all of the functional and staff groups within an organization, together with outside contractors and vendors. The goal is to meet the project's objectives on schedule, within budget, and to the customer's satisfaction. Course 627 addresses the reality of how complicated and diverse is the project manager's task. Project management is a recognized, special, professional skill, quite different from the technical skills that are so often associated with most projects. It is on these important non-technical areas that this course touches in great detail. From this course degree candidates receive in-depth knowledge of the various types of project-management organization and expertise to successfully manage any size project in the areas of information systems, research, product development, production, services and construction.

### Subjects covered include:

Management; Introduction to Project/Program; Project/Program Authority; Project Organization; Planning the Project; Work Breakdown Structure; Schedules; Financial Planning; Project Integration; Risk Management; Work Authorization; Earned Value Management Systems; Technical Performance Measurement; Quality Management; Managing Small Projects.

### **Increase Your Understanding of**

- Scope Definition
- Work Breakdown Structures
- Scheduling Techniques
- Time Management
- Cost Management

### **Improve Your Ability to**

- Organize a project team
- Plan a project
- Determine requirements and scope
- Use a WBS
- Estimate and budget a project
- Develop objective measures of performance
- Use risk analysis
- Build and maintain a project baseline
- Monitor and control project work
- Lead and manage project teams.

Professor: Paul McDonald, M.B.A Text: Project Manager's Handbook, AGU Press



# Building & Leading Project Teams (671) Tuition: \$750 Credits: 3

Project management takes place in a dynamic, complex and changing environment. Successful project management depends on the technical and interpersonal skills of the project manager, the project team, and the organization managers who support the project. These skills must be integrated with the business and technical skills necessary to lead any successful project or program and achieve the cost, schedule and quality objectives with maximum customer satisfaction. Course 671 deepens your understanding of management processes, leadership styles, organizational structures and how project management fits into an organizational culture. We also investigate the relationship between organizational formats, authority and power, how to construct teams and keep them going, techniques to motivate, coach and measure performance.

#### Subjects covered include:

Project/Program Organization and Organizational Structures; Project Authority; Management Principles and Stakeholders; Understanding the Differences Between People; Motivation; Leadership and Followship; Project Teams and Project Structure; Introduction to Interpersonal Skills and Relationships; Communication; Problem Solving and Managing Stress; Decision Making and Managing Change; Managing People and Risk; Conflict Management; Principles and Techniques of Negotiation; Enhancing Project Performance and Productivity; Productive Meeting Management; Introduction to Managing Change; Introduction to International Projects, People, and Cultural Diversity.

#### **Increase Your Understanding of**

- The dynamics of leadership
- Role of the project manager and project team
- Motivational techniques for individuals and groups
- Communication models
- The dynamics of "followership"
- Continuous improvement methods

#### **Improve Your Ability to**

- Define responsibility and authority in projects
- Understand people's behavior
- Create a motivated, high performance project team
- Develop leadership skills
- Solve problems and make decisions in the project environment
- Communicate effectively
- Negotiate and manage conflict

#### Professor: Earl Sprague

Texts: Building, Leading and Managing Project Teams, AGU Press Organizing Projects for Success, Vijay K. Verma Human Resource Skills for the Project Manager, Vijay K. Verma Managing the Project Team, Vijay K. Verma



# Technical Program Management (629) Tuition: \$750 Credits: 3

Course 629 integrates all the main aspects of technical management, including technical program planning and control, system engineering and concurrent engineering, software development, production management, test and evaluation, integrated logistics support, and program control. The procedures we impart to you are applicable to the technical management of any type or size of research, development, production or engineered construction program. The course's focus is on flexible, integrated, technical-program-management systems that can be scaled to each application, both government and commercial, and at the same time comply with specific program requirements. While it is recognized that no two programs or projects are identical, a uniform and identifiable process exists and that is what you will learn about. The course explains how to tailor both the entire system, and the various subsystems and procedures to the complexity of the task, and the life cycle phase of the system, from the requirements stage through operations and disposal.

#### Subjects covered include:

Product Development Process; Technical Management System; Introduction to System Engineering; Trade-Off Studies; Work Breakdown Structure; Technical Performance Measurement; Risk Management; Specification Development; Configuration Management; Interface Management; Technical/Design Reviews and Audits; Life Cycle Cost; Logistics; Software Development Process; Test and Evaluation; Transitioning From Development to Production; Production Management; Planning the Project.

#### **Increase Your Understanding of**

- Product Development Processes
- Technical Performance Planning and Measurement
- Software Development and Integration
- Configuration Management
- Specialty Engineering

### **Improve Your Ability to**

- Tailor specifications
- Test and evaluate
- Conduct technical reviews and audits

Professor: Earl Sprague Text: Technical Program Management, AGU Press



# Negotiation for Project Managers (636) Tuition: \$750 Credits: 3

Project managers exercise their negotiation skills every day. So this course provides you with the added skills needed to negotiate with functional and other project managers within your organization over time, scope, budget, schedules and change orders. It also covers negotiating with outside customers, vendors, suppliers and subcontractors. Course 636 spans negotiation at every phase of a project, from the start-up, during performance, and right through the close-out.

#### Subjects covered include:

The Nature of Negotiation; Effective Planning for Negotiation; Effective Strategizing for Negotiation; Strategy and Tactics of Distributive Bargaining; Strategy and Tactics of Integrative Negotiation; Communication, Perception, and Cognitive Biases; Finding and Using Negotiation Leverage; Ethics in Negotiation; Negotiating in a Complex and Dynamic Environment; The Agency Relationship in a Negotiation; Multiparty Negotiations; Individual Differences; Global Negotiation; Managing Difficult Negotiations: Individual Approaches; Managing Difficult Negotiations: Third-Party Approaches.

#### **Increase Your Understanding of**

- Planning and preparation for negotiation
- The dynamics of communication, and the roles of power and ethics
- The impact of the broader social context on the negotiation process
- The dynamics of negotiation that involves teams and groups
- Cultural factors that strongly shape negotiations

### **Improve Your Ability to**

- Negotiate schedules, change orders, estimates and contracts
- Negotiate multiparty agreements; and build better teams
- Use third-parties to resolve breakdowns in negotiation

#### Professor: Marie Sirney

Text: Negotiation, by Roy J. Lewicki, David M. Saunders and John W. Milton, Third Edition, McGraw-Hill Negotiation: Readings, Exercises, and Cases, Roy J. Lewicki, David M. Saunders, John W. Minton and Bruce Barry



# Earned Value Management Systems (647) Tuition: \$750 Credits: 3

All projects and programs require formal detailed planning and control systems. Without them, the work teams and functional managers have no baseline from which to manage their activities. Furthermore, organizational teams develop their own planning with little regard for other program/project participants and overall program objectives. Course 647, therefore, concentrates on how to avoid inefficient use of scarce resources, constant re-planning, cost overruns, schedule slippages and failure to achieve technical objectives. You learn about effective systems for comparing the actual work being accomplished with the planned increments of work, regardless of the time period in which the work is performed and regardless of whether there is a formal customer requirement. The emphasis is on practical day-to-day use of cost/schedule performance control, earned value and project-control systems to manage a program or project.

#### **Subjects covered include:**

Earned Value Management Systems; EVMS Findings; Project Work Definition and Organization; Work Breakdown Structures; Responsibility Assignment Matrixes; Control Account Formation; EVMS Project Scheduling; Budgeting and Work Authorization; Performance Measurement; Material and Subcontracts – Accounting and Indirect Costs; Monitoring and Measuring Program/Project Performance; Analysis and Forecasting; Changes, Revisions and Reengineering Earned Value for the Private Sector; Earned Value Reporting Requirements and Fiduciary Responsibilities; Earned Value in Software Projects; EVMS Implementation and Reviews.

### **Increase Your Understanding of**

- Planning, estimating and budgeting techniques
- Work Authorization Systems
- Developing and Using Performance Metrics
- Labor and Material Management and Accounting

#### **Improve Your Ability to**

- Develop and use the WBS as a framework
- Organize and define project work
- Plan and budget
- Form a project baseline
- Choose the proper measurement tools
- Objectively measure performance
- Use trend and variance analysis
- Incorporate changes
- Maintain a project baseline

Professor: Paul McDonald, M.B.A. Text: Earned Value Management Systems, AGU Press and Humphreys & Assoc.



# Risk Analysis & Management (679)

## Tuition: \$750 Credits: 3

All projects and programs pose the risk that they will not be completed according to cost, schedule, and performance objectives, and not achieve the anticipated rewards. So Course 679 teaches you how to predict the probability of undesirable events and weigh the consequences of their occurrence. All good risk management approaches have five characteristics and this course covers all of them in detail: (1) planning and documenting risk-management processes for the project or program; (2) prospective assessment of possible problems and opportunities; (3) periodic review of the initial assessment to validate original findings and to uncover new problems; (4) definition of evaluation criteria covering all facets of the program; and (5) documentation of on-going results of the risk-management process.

#### Subjects covered include:

Introduction to Risk Analysis and Management; Using Risk Analysis in Projects; Cultural Attitudes Towards Risk Analysis; Traditional v. Risk Analysis; Simple Approaches to Risk Analysis; Making Decisions Under Uncertainty/System Failure Analysis; Full Probability Distribution Risk Analysis; Gathering Information for a Risk Analysis; Project Cost Risk Analysis; Project Schedule Risk Analysis; Technical/Performance Risk Analysis; Integrated Cost, Schedule and Technical Risk Analysis; Project Risk Analysis; Risk in Other Commercial Applications/Software Approaches to Risk Analysis; Implementing Risk Analysis Programs.

### **Increase Your Understanding of**

- Cultural attitudes about risk
- Qualitative and quantitative analytical methods
- Cost-Schedule-Technical-Risk analysis

### **Increase Your Ability to**

- Gather the relevant information for risk analysis
- Use software for risk analysis
- Managing and transferring risk

Professor: Edward Fern Text: Risk Management, by David Hulett, Ph.D., AGU Press



# **Contracting and Procurement for Project Managers (632)**

Tuition: \$750 Credits: 3

This course explains the contracting process, and the roles and responsibilities in this process, to program/project managers, engineering, technical and other functional personnel. It acquaints you with proven methods for meeting quality, cost and schedule requirements in the complex world of contracting and subcontracting. The course provides: (1) a broad appreciation of the contracting process; (2) familiarization with the management problems associated with various types of contracts; and (3) training in the various types of skills needed for the anticipation, identification and solution of contract problems, together with the use of effective communication and documentation techniques. The course treats both the customer's and contractor's viewpoint. Course 632 is based on the federal government's acquisition regulations, the administrative procedures used to implement them, and extensive research into the management practices in industry.

### Subjects covered include:

Contract Procedures; Laws and Regulations Governing Procurement; Uniform Commercial Code; Commercial Items Acquisition; Government Contract Law; Procurement by Sealed Bidding; Two-Step Sealed Bidding; Contracting by Negotiation/Competitive Proposals; Request for Proposal; Source Selection Procedures; Proposal Preparation; Estimating; Cost or Pricing Data; Cost, Price and Should Cost Analysis; Types of Contracts; Negotiation Techniques; Contract Terms and Conditions; Contract Administration; Contract Changes; Terminations for Default; Terminations for Convenience.

### **Improve Your Understanding of**

- Procurement laws, regulations
- Contracting methods
- Statements of work
- Estimating and Pricing Concepts
- Contract management techniques

### **Increase Your Ability to**

- Meet cost, quality and schedule requirements
- Participate in handling disputes

Professor: Howard Marks Text: Contracting and Procurement, AGU Press



# **Project Quality Management (687)** Tuition: \$750 Credits: 3

Quality management is the integration of technical and management quality principles, practices, processes and procedures to enable each person in an organization to provide quality products and services, deliver value and contribute to the organization's success. In a project or program, the responsibility and leadership for creating an effective quality design and delivery belongs to the project or program manager. The PM must demonstrate to the project team a commitment to quality by communicating goals, by making process-effectiveness a clear objective and by committing necessary resources. Course 687 provides you with a comprehensive approach to the tools, techniques, and leadership and management activities that affect, both directly and indirectly, quality throughout a project or program's life cycle.

#### **Subjects covered include:**

Insight Into the Relationship Between Quality and Design, and Planning Cost; Useful Tools and Techniques; Introduction to Quality; Quality in Production and Service Systems; Quality Management Philosophies; Managing for Quality and High Performance; Focusing on Customers; Leadership and Strategic Planning; Human Resource Development and Management; Process Management; Tools for Process Management; Management and Strategic Information Management; Building and Sustaining Total Quality Organizations; Quality Assurance and Control; Fundamentals of Statistical Process Control; Reliability.

#### **Increase Your Understanding of**

- The relationship between quality and design
- The HR dimension of quality management
- Quality definitions

#### **Improve Your Ability to**

- Establish total-quality objectives
- Sustaining a quality organization

#### Professor: Yvette Blake

Text: The Management and Control of Quality, by James R. Evans and William M. Lindsay, Fourth Edition, South-Western College Publishing; Principles of Management for Quality Projects, by Michael Carruthers, International Thomson Business Press



# **Integrating Scope, Cost & Schedule in Project Management (589)**

The skills to plan and control the project to meet/exceed expectations

### **Learning Objectives**

- Conquer the "underperforming", "behind schedule" and "over budget" syndrome
- Define requirements, customer expectations and project scope
- Build integrated schedules
- Turn credible estimates into credible budgets
- Baseline the project to maximize control and manage change

#### **Course Focus**

This course provides the skills and tool kit for the planning and controlling project finances, costs and schedules. Emphasis is on the skills to develop a project scope and statement of work, the financial fundamentals and accounting methods, along with scheduling and baselines. This course delivers the techniques to help project teams plan and work with realistic estimates, schedules and forecasts in accomplishing the project work while maintaining stakeholder awareness and support.

**You'll take away** techniques that can be immediately applied in improving project management processes and outcomes. You'll get practical guidance to combat the three problems most common to project management — "under-performing" — "behind schedule" and "over budget."

Take home case studies, exercises, and group activities led by experienced and dynamic instructors provide a solid foundation in both principles and practical applications.

### **Training Highlights**

This class uses a mix of learning approaches including practical experience from classroom, exercises, case studies and discussion from these subjects:

#### I. Setting and Developing the Project Focus

- Project Life Cycles
- Planning and Control Tools
- Requirements Determination and Documention
- The Quadruple Constraints

#### II. Defining and Scoping the Project

- The Business Case
- Developing the Project Scope
- Building the Work Breakdown Structure
- Relating the Project Scope to the Work Based Structure and Specs

#### III. Scheduling & Resource Leveling

- Steps in Scheduling
- Scheduling Techniques
- Critical Path or Chain Scheduling
- Resource Loading & Leveling
- Methods for Managing Schedules

#### **IV. Finance Fundamentals**

- Financial vs. Cost Accounting
- Financial Analysis Techniques
- Project Selection Methods
- Pricing vs. Costing

#### V. Estimating

- Types of Estimates
- Steps in Estimating
- Point vs. Range Estimating
- Cost Risk Analysis
- Validating and Presenting the Estimate

#### VI. The Project Baseline & Control Systems

- Budgeting the Project
  - Defining a Time-Phased Cost and Schedule Baseline
  - Collecting and Allocating Costs
  - Forecasting the Future

#### VII. Using Earned Value Management Systems (EVMS)

- EVMS Components
- Measuring Accomplishments under Earned Value
- Performance Measurement Calculations
- Developing Performance Indices

#### VIII. Managing Changes & Closeout

- Change Sources
- Determining Cost and Schedule Impacts
- Negotiating the Adjustments & Revising the Baseline
- Closeout Steps
- Documenting the Results

#### **Schedule & Fees**

4 days First Three days 8 am–5:30 pm Fourth day 8 am–2:00 pm \$1595

April 26–30, 2004 Vashington, DC

Oct. 18–22, 2004 Vashington, DC

#### **100% Money Back Guarantee**

The Institute of Professional Training at American Graduate University guarantees the quality of our training classes. If you are not completely satisfied with a training class you attended and paid for, you can request and receive a 100% refund.

#### **Who Should Participate**

This course is designed for any staff involved in aspect of the management of programs and projects. Participant titles may include but are not limited to:

- General and Operations Managers
- Budget and Financial Managers
- VP Business development
- Logistics Managers
- Project Team Leaders
- Engineers
- Contract Managers and Administrators
- Software/IT Managers

#### **Earn Continuing Education Credits**

Completion of **Integrating Scope, Cost & Schedule in Project Management** is one step toward getting credit for a Master's Certificate in Program & Project Management issued by American Graduate University. It also qualifies as credentials required by the Project Management Institute.

If you are interested in getting information about how to apply this class toward a Master's Certificate or PMI Credentials please contact American Graduate University at:

#### Toll free: 1-866-273-1756.

The American Graduate University is accredited by the Accrediting Commission of the Distance Education and Training Council (DETC). The Accrediting Commission of DETC is listed by the U.S. Department of Education as a nationally recognized accrediting agency and is a recognized member of the Council for Higher Education and Accreditation. AGU has full institutional approval from the California Bureau for Private Postsecondary and Vocational Education to grant Master's degrees and Master's Certificates. AGU is also a Charter Member of the National Contract Management Association's Contract Management Learning Center.

#### Save with In-house Training

American Graduate University offers Integrating Scope, Cost & Schedule in Project Management as an in-house training course. This course can be presented "as is" or tailored to your requirements. If desired, our instructor will emphasize course topics with your organization's unique points and examples and, de-emphasize the course topics that are not as relevant to your organization.

An on-site presentation can provide a cost effective solution while ensuring quality training. Hundreds of organizations have maximized their training and travel budgets by hosting in-house training for their staff. In addition, in-house classes give an organization a boost in performance since staff will be working from the same material at the same time.

Call 1-866-273-1756 today to discuss how American Graduate University can tailor Integrating Scope, Cost & Schedule in Project Management for your organization.