

Introduction (Module 1)

As the field of Project Management grows, it becomes more important for the professionals in the field to increase their knowledge and expertise. Competency in the field requires continually improving skills to meet new and increased demands. The purpose of IMSI's Expert Series is to provide that knowledge.

This full-day course is the first in a series of eleven classes covering the knowledge area of project management offered by IMSI. It is intended for more experienced project planners or managers, already skilled in the basic project management tools and terminology, who are seeking a more in-depth understanding of one, or more, of the individual knowledge areas. This course is also appropriate for less experienced project planners and managers who can benefit by taking the entire series to gain insight into the full breadth of project management. Students who possess the requisite years of experience can use this course as part of a preparatory effort prior to taking the PMP® Certification examination.

Who should take this course?

- Experienced project management staff interested in furthering their own knowledge and expertise
- Individuals interested in going through the PMI® certification process to become a PMP®
- Experienced project managers assigned to guide and mentor new project engineers or managers

PDU's Awarded:

Each participant will be awarded **8** Professional Development Units (PDU) upon the successful completion of this course.

Course Description

This class will be a classroom lecture format supplemented by the use of a case study to effectively illustrate the concepts discussed. Students will be expected to actively participate to make the learning process more rewarding. Students will receive a copy of the PMBOK® in this class.

Lesson 1: Introduction

- Purpose of Course

Lesson 2: PMI® Certification Process

- Description of PMI® Certification
- Experience Required
- Exam Preparation
- Certification Exam

Lesson 3: Need for Project Management

- What is a Project?
- What is Project Management?
- Relationship to Other Management Disciplines

Lesson 4: Project Management Concepts

- Phases
- Life Cycle
- Stakeholders
- Skills

Lesson 5: Processes and Methodologies

- Processes
- Process Groups
- Process Interactions

Lesson 6: Pre-Test

- Sample PMI® certification exam

Lesson 7: Summary

Project Scope Management (Module 2)

Effective scope management is one of the cornerstone activities of project management. Determining how to set up a viable project scope statement and managing the scope content throughout the project are key skills in the Project Manager's toolkit. A key enabler of effective Project Scope Management is the development of a Work Breakdown Structure (WBS). Learn how to use proven methods to develop an effective project Work Breakdown structure.

This full-day course is the second in a series of eleven classes offered by IMSI covering the knowledge areas of project management. It is intended for more experienced project planners or managers, already skilled in the use of basic project management tools and terminology, who are seeking a more in-depth understanding of one, or more, of the individual knowledge areas. This course is also appropriate for less experienced project planners and managers who can benefit by taking the entire series to gain insight into the full breadth of project management. Students who possess the requisite years of experience can use this course as part of a preparatory effort prior to taking the PMP Certification examination.

Who should take this course?

- Experienced project managers who wish to gain Professional certification such as the Project Management Professional (PMP)
- Experienced project managers who want to expand their personal PM tool kits
- Personnel whose responsibilities include interfacing with or supporting project managers

PDU's Awarded:

Each participant will be awarded **8** Professional Development Units (PDU) upon the successful completion of this course.

Course Description

This class will be a classroom lecture format supplemented by the use of a case study to effectively illustrate the concepts discussed. Students will be expected to actively participate to make the learning process more rewarding. Students should have read the PMBOK prior to attending this class.

Lesson 1:

- Scope definition
- Product versus project scope
- Scope Management processes
- Defining project selection criteria
- Project selection methods

Lesson 2:

- Project charter
- Project constraints
- Project benefit costs analysis

Lesson 3:

- Work Breakdown Structure (WBS) development
- WBS techniques
- Task decomposition
- WBS templates
- WBS verification techniques

Lesson 4:

- Scope Management Plan
- Triple constraint
- Scope Change Control
- Performance measurement
- Baseline adjustment

Lesson 5:

- Scope change logs
- Change control tracking techniques & tools

Project Risk Management (Module 3)

Effective project risk management is one of the cornerstone activities of project management. Determining how to identify, quantify, and mitigate risks and then execute the overall risk management plan throughout the project is a key skill in the Project Manager's toolkit. Key enablers of effective Project Risk Management are the identification and quantification of project risks. Learn how to use proven methods to identify and quantify project risks, and then to use these as input to the development of an overall risk management plan for the project.

This full-day course is the third in a series of eleven classes covering the knowledge areas of project management offered by IMSI. It is intended for more experienced project planners or managers, already skilled in the use of basic project management tools and terminology, or those who are seeking a more in-depth understanding of one or more of the individual knowledge areas. This course is also appropriate for less experienced project planners and managers who can benefit by taking the entire series to gain insight into the full breadth of project management. Students who possess the requisite years of experience can use this course as part of a preparatory effort prior to taking the PMP Certification examination.

Who should take this course?

- Experienced project managers who wish to gain professional certification such as the Project Management Professional (PMP)
- Experienced project managers who want to expand their personal PM tool kits
- Personnel whose responsibilities include interfacing with or supporting project managers

PDU's Awarded:

Each participant will be awarded **8** Professional Development Units (PDU) upon the successful completion of this course.

Course Description

This class will be a classroom lecture format supplemented by the use of a case study to effectively illustrate the concepts discussed. Students will be expected to actively participate to make the learning process more rewarding. Students should have read the PMBOK prior to attending this class.

Lesson 1:

- Risk definition
- Risk management importance
- Risk management planning
- Internal and external risks
- Classes of project risk

Lesson 2:

- Risk identification techniques
- Qualitative risk analysis
- Quantitative risk analysis
- Expected Monetary Value

Lesson 3:

- Risk decision trees
- Risk response planning
- Risk response options
- Contingency planning

Lesson 4:

- Risk response control
- Risk response options
- Contingency planning

Lesson 5:

- Creating the risk response plan
- Tracking project risks
- Executing the Risk Management Plan
- Risk integration

Project Human Resources Management (Module 4)

Effective project human resources management is one of the success criteria for effective project management. Determining how to plan for an effective project organization, develop an effective staff management plan, and use effective team development methods to manage a project team are key components in the suite of techniques necessary for a project manager to be effective. Learn how to use proven methods to identify and quantify project risks and then use these as input to the development of an overall risk management plan for the project.

This full-day course is the fourth in a series of eleven classes covering the knowledge areas of project management offered by IMSI. It is intended for more experienced project planners or managers, already skilled in the use of basic project management tools and terminology, or those who are seeking a more in-depth understanding of one or more of the individual knowledge areas. This course is also appropriate for less experienced project planners and managers who can benefit by taking the entire series to gain insight into the full breadth of project management. Students who possess the requisite years of experience can use this course as part of a preparatory effort prior taking the PMP Certification examination.

Who should take this course?

- Experienced project managers who wish to gain professional certification such as the Project Management Professional (PMP)
- Experienced project managers who want to expand their personal PM tool kits
- Personnel whose responsibilities include interfacing with or supporting project managers

PDU's Awarded:

Each participant will be awarded **8** Professional Development Units (PDU) upon the successful completion of this course.

Course Description

This class will be a classroom lecture format supplemented by the use of a case study to effectively illustrate the concepts discussed. Students will be expected to actively participate to make the learning process more rewarding. Students should have read the PMBOK prior to attending this class.

Lesson 1:

- Project Manager skill requirements
- Identifying, documenting, and assigning project roles
- Identification of responsibilities and reporting relationships
- Dealing with changing stakeholders

Lesson 2:

- Organizational theories
- Behavioral theories
- Functional organizations
- Formal & informal project relationships

Lesson 3:

- Change issues
- Sources of project conflict
- Conflict management techniques
- Sources of project power
- Team responses to power
- Organizational process theory

Lesson 4:

- Organizational systems model
- Organizational structures
- Matrix organizations
- Project expeditor organization
- Project coordinator organization
- Structure and authority

Lesson 5:

- Project manager's HR roles
- Responsibility Assignment Matrix
- Staff acquisition techniques
- Team development techniques
- Leadership styles
- Reward and recognition techniques
- General management techniques for project managers

Project Cost Management (Module 5)

Effective cost management is one of the cornerstone activities of project management. Determining how to set up a project budget based on the utilization of various estimating techniques, the Work Breakdown Structure (WBS), and resource requirements is fundamental to the successful implementation of the project. Learn how to use integrated methods to effectively track and control the project costs.

This full-day course is the fifth in a series of eleven classes covering the knowledge areas of project management offered by IMSI. It is intended for more experienced project planners or managers, already skilled in the use of basic project management tools and terminology, who are seeking a more in-depth understanding of one, or more, of the individual knowledge areas. This course is also appropriate for less experienced project planners and managers who can benefit by taking the entire series to gain insight into the full breadth of project management. Students who possess the requisite years of experience can use this course as part of a preparatory effort ahead of taking the PMP Certification examination.

Who should take this course?

- Experienced project managers who wish to gain professional certification such as the Project Management Professional (PMP)
- Experienced project managers who want to expand their personal PM tool kits
- Personnel whose responsibilities include interfacing with or supporting project managers

PDU's Awarded:

Each participant will be awarded **8** Professional Development Units (PDU) upon the successful completion of this course.

Course Description

This class will be a classroom lecture format supplemented by the use of a case study to effectively illustrate the concepts discussed. Students will be expected to participate to make the learning process more rewarding. Students should have read the PMBOK prior to attending this class.

Lesson 1:

- Develop and refine project cost
- Resource types and resource planning
- Differentiate between variable, fixed, direct/indirect, and sunk costs.
- Define cost estimating techniques
- Identify methods of project selection and the advantages and dis-advantages of each.

Lesson 2:

- Present value
- Net present value
- Internal rate of return (IRR)
- Payback period
- Benefit/Cost return

Lesson 3:

- Life-cycle costing
- Straight line and accelerated depreciation.
- Accuracy of estimating (order of magnitude, conceptual, preliminary, definitive, and control)

Lesson 4:

- Project budget development
- Reserves and contingencies
- Setting a cost baseline
- Developing periodic project performance inspections

Lesson 5:

- Earned Value Management Systems (EVMS) Overview
- Planned Value
- Earned Value
- Actual
- Schedule Performance Indicators
- Cost Performance Indicators
- Budget at completion, estimate at completion, and estimate to complete
- Variance at completion, schedule variance, and cost variance

Project Time Management (Module 6)

Effective time management is one of the cornerstone activities of project management. Determining how to set up a project schedule based on the utilization of the Work Breakdown Structure (WBS), various duration estimating techniques, task dependencies and critical path analysis is essential in managing any project. Learn how to use integrated methods to effectively track and control the project schedule.

This full-day course is the sixth in a series of eleven classes covering the knowledge areas of project management offered by IMSI. It is intended for more experienced project planners or managers, already skilled in the use of basic project management tools and terminology, who are seeking a more in-depth understanding of one, or more, of the individual knowledge areas. This course is also appropriate for less experienced project planners and managers who can benefit by taking the entire series to gain insight into the full breadth of project management. Students who possess the requisite years of experience can use this course as part of a preparatory effort prior taking the PMP Certification examination.

Who should take this course?

- Experienced project managers who wish to gain professional certification such as the Project Management Professional (PMP)
- Experienced project managers who want to expand their personal PM tool kits
- Personnel whose responsibilities include interfacing with or supporting project managers

PDU's Awarded:

Each participant will be awarded **8** Professional Development Units (PDU) upon the successful completion of this course.

Course Description

This class will be a classroom lecture format supplemented by the use of a case study to effectively illustrate the concepts discussed. Students will be expected to actively participate to make the learning process more rewarding. Students should have read the PMBOK prior to attending this class.

Lesson 1:

- Develop and refine project activity definitions
- Duration estimating techniques
- Task relationships
- Activity sequencing methods
- Activity sequencing applications
- Resource assignments

Lesson 2:

- Mandatory dependencies
- Discretionary dependencies
- External dependencies
- Milestones

Lesson 3:

- Develop and refine project schedule
- The forward pass and backward pass
- Schedule float
- Critical path calculation
- Schedule diagramming techniques
- Schedule baselines

Lesson 4:

- Schedule "Crashing" techniques
- Schedule "Fast Tracking" techniques
- Leveling techniques
- Adjusting resources allocations to tasks
- Controlling the project schedule
- Schedule reserves and contingencies
- Developing periodic project schedule performance inspection techniques

Lesson 5:

- Schedule update techniques and practices
- Using Earned Value Management techniques for schedule control
- Schedule Performance Indicators
- Schedule performance progress reporting

Project Communication Management (Module 7)

Effective communications management is a vital skill for a project manager. Determining how to use, identify and select the most effective techniques to effectively manage project communications is a critical enabler for project team success. Learn how to use integrated communication techniques to effectively identify the appropriate communication needs for various project stakeholders.

This full-day course is the seventh in a series of eleven classes covering the knowledge areas of project management offered by IMSI. It is intended for more experienced project planners or managers, already skilled in the use of basic project management tools and terminology, who are seeking a more in-depth understanding of one, or more, of the individual knowledge areas. This course is also appropriate for less experienced project planners and managers who can benefit by taking the entire series to gain insight into the full breadth of project management. Students who possess the requisite years of experience can use this course as part of a preparatory effort prior taking the PMP Certification examination.

Who should take this course?

- Experienced project managers who wish to gain professional certification such as the Project Management Professional (PMP)
- Experienced project managers who want to expand their personal PM tool kits
- Personnel whose responsibilities include interfacing with or supporting project managers

PDU's Awarded:

Each participant will be awarded 8 Professional Development Units (PDU) upon the successful completion of this course.

Course Description

This class will be a classroom lecture format supplemented by the use of a case study to effectively illustrate the concepts discussed. Students will be expected to actively participate to make the learning process more rewarding. Students should have read the PMBOK prior to attending this class.

Lesson 1:

- Communication management
- Project communication management
- Identifying communication needs
- Identifying information requirements
- Communications technologies

Lesson 2:

- Communications constraints
- Stakeholder analysis
- The communications management plan
- Communications methods
- Channels for communication

Lesson 3:

- Project performance reporting
- Communications blockers
- Communicating project performance
- Communicating project variance

Lesson 4:

- Change request communication
- Information distribution techniques
- Communicating project schedule updates
- Designing performance reports

Lesson 5:

- Administrative closure
- Designing the project archives
- Documenting project results
- Documenting lessons learned

Project Quality Management (Module 8)

Awareness and knowledge of project quality management techniques is an important component of the overall skill set for a project manager. The effective project manager must be familiar with the quality management processes required to ensure that the project will satisfy the needs for which it was undertaken. In addition, the project manager must be able to address both the quality management of the project and the product of the project.

This full-day course is the eighth in a series of eleven classes covering the knowledge areas of project management offered by IMSI. It is intended for more experienced project planners or managers, already skilled in the use of basic project management tools and terminology, who are seeking a more in-depth understanding of one, or more, of the individual knowledge areas. This course is also appropriate for less experienced project planners and managers who can benefit by taking the entire series to gain insight into the full breadth of project management. Students who possess the requisite years of experience can use this course as part of a preparatory effort prior taking the PMP Certification examination.

Who should take this course?

- Experienced project managers who wish to gain professional certification such as the Project Management Professional (PMP)
- Experienced project managers who want to expand their personal PM tool kits
- Personnel whose responsibilities include interfacing with or supporting project managers

PDU's Awarded:

Each participant will be awarded 8 Professional Development Units (PDU) upon the successful completion of this course.

Course Description

This class will be a classroom lecture format supplemented by the use of a case study to effectively illustrate the concepts discussed. Students will be expected to actively participate to make the learning process more rewarding. Students should have read the PMBOK prior to attending this class.

Lesson 1:

- Developing the quality policy
- Creating the quality planning team
- Incorporating the scope statement into the quality plan
- Quantifying the benefits of the quality plan

Lesson 2:

- Cause and effect diagrams
- Process flowcharts
- Design of experiments
- Quality costs
- Quality management plan

Lesson 3:

- Quality planning success factors
- Quality influences
- Quality assurance techniques
- Quality audits

Lesson 4:

- Quality control techniques
- Control charts
- Pareto diagrams
- Statistical sampling
- Flowcharting
- Ishikawa diagrams
- Trend analysis

Lesson 5:

- Kaizan techniques
- TQM techniques
- Six Sigma techniques

Project Procurement Management (Module 9)

Effective Procurement management is a key factor in the success of a project. Awareness and knowledge of the various aspects of procurement management is an important component of the overall skill set for a project manager. The effective project manager must be familiar with the procurement management processes in order to ensure that the project is executed in a fiscally responsible manner and also to ensure that the project stakeholders' needs are met.

This full-day course is the ninth in a series of eleven classes covering the knowledge areas of project management offered by IMSI. It is intended for more experienced project planners or managers, already skilled in the use of basic project management tools and terminology, who are seeking a more in-depth understanding of one, or more, of the individual knowledge areas. This course is also appropriate for less experienced project planners and managers who can benefit by taking the entire series to gain insight into the full breadth of project management. Students who possess the requisite years of experience can use this course as part of a preparatory effort prior taking the PMP Certification examination.

Who should take this course?

- Experienced project managers who wish to gain professional certification such as the Project Management Professional (PMP)
- Experienced project managers who want to expand their personal PM tool kits
- Personnel whose responsibilities include interfacing with or supporting project managers

PDU's Awarded:

Each participant will be awarded **8** Professional Development Units (PDU) upon the successful completion of this course.

Course Description

This class will be a classroom lecture format supplemented by the use of a case study to effectively illustrate the concepts discussed. Students will be expected to actively participate to make the learning process more rewarding. Students should have read the PMBOK prior to attending this class.

Lesson 1:

- Procurement terminology
- Contracts defined
- Identification of procurement resources
- Make-buy decision analysis
- Contract types
- Statements of work

Lesson 2:

- Reasons for contracting
- Fixed Price contracts
- Cost Plus Percentage of Costs contracts
- Cost plus Fixed Fee contracts
- Cost plus Incentive Fee
- Contract Risks

Lesson 3:

- Procurement Management plans
- Statement of Work
- Procurement documents
- Evaluation criteria

Lesson 4:

- Contract bonds
- Performance bonds
- Payment bonds
- Liability Insurance
- Builders' Risk Insurance

Lesson 5:

- Solicitation planning
- Bidder's events
- Evaluation criteria
- Weighting & screening systems
- Source selection
- Negotiation Tactics Contract elements
- Vendor relations

Lesson 6:

- Contract close-out
- Contract documentation
- Procurement audits
- Lessons learned

Project Integration Management (Module 10)

Understanding how all the components of the project management function in a organization is a key requirement to be an effective project manager. Project Integration Management supplies project leaders with the skills necessary to effectively deal with the inter-relationships of the various aspects of project management activities and functions within an organization. Integration Management activities will be examined in the context of the Project Management Body of Knowledge (PMBOK®) which is used as the basis for the Project Management Professional (PMP®) Certification through the Project Management Institute.

This full-day course is the tenth in a series of eleven classes covering the knowledge areas of project management offered by IMSI. It is intended for more experienced project planners or managers, already skilled in the use of basic project management tools and terminology, who are seeking a more in-depth understanding of one, or more, of the individual knowledge areas. This course is also appropriate for less experienced project planners and managers who can benefit by taking the entire series to gain insight into the full breadth of project management. Students who possess the requisite years of experience can use this course as part of a preparatory effort ahead of taking the PMP® Certification examination.

Who should take this course?

- Experienced project managers who wish to gain professional certification such as the Project Management Professional (PMP®)
- Experienced project managers who want to expand their personal PM tool kits
- Personnel whose responsibilities include interfacing with or supporting project managers

PDU's Awarded:

Each participant will be awarded **8** Professional Development Units (PDU) upon the successful completion of this course.

Course Description

This class will be a classroom lecture format supplemented by the use of a case study to effectively illustrate the concepts discussed. Students will be expected to participate to make the learning process more rewarding. Students should have read the PMBOK® prior to attending this class. **Prior to attending this class, students should have completed the following Project Experts Series sessions - Scope, Risk, Human Resources, Cost, Time, Communication, Quality and Procurement.**

Lesson 1:

- Define the necessary project requirements, assumptions, and constraints to baseline the scope of work for the project plan.
- Define project integration management, its processes and its purpose.
- Identify the role of stakeholders and their involvement in the planning, executing, and control processes.
- List the items that comprise a project plan and show their relationship to each other.

Lesson 2:

- Develop a project plan, which integrates deliverables, acceptance criteria, processes, procedures, risks, and tasks that facilitate project execution, control, and closing processes.
- Identify types of historical information and the purpose of each for the development of the project plan.
- Discuss the integrative purpose of an Earned Value Management System (EVMS).
- Define a project management information system and its integrative purpose.

Lesson 3:

- Describe how the commitment of project resources, the communication process, and the quality assurance procedures are integrated to meet project objectives.
- Explain the role of communication management
- Explain the role of human resources management

Lesson 4:

- Identify controls needed to manage project change to ensure compliance with the project plan.
- Effect of the change control process on scope, time, cost, quality, and project success factors.
- Identify change factors with which the project manager must be concerned.
- Processes affected when change occurs in a project.
- Examine approval processes for change.
- Use of configuration management and performance measurement in the integrated change control process.

PMP® Certification Preparation (Module 11)

This eleventh and final module in the Expert Series provides a comprehensive review of the Knowledge Areas discussed throughout the courses, with an emphasis on applying the lessons learned to solving and answering problems. The class will review the process for applying for PMP® Certification, as well as effective studying and test-taking strategies. This session also provides the opportunity for students to ask questions about any of the Knowledge Areas' content, as well as the certification and examination process.

This full-day session includes a sample exam to help students prepare for the certification process, with review and explanation of the test questions and answers.

Who should take this course?

- Experienced project managers who wish to gain professional certification such as the Project Management Professional (PMP®)
- Experienced project managers who want to expand their personal PM tool kits
- Personnel whose responsibilities include interfacing with or supporting project managers

PDU's Awarded:

Each participant will be awarded **8** Professional Development Units (PDU) upon the successful completion of this course.

Course Description

This class will be a classroom review and question & answer session, supplemented by the use of sample test questions and an exam to prepare students for the certification process. Students will be expected to actively participate to make the learning process more rewarding. Students should have read the PMBOK® prior to attending this class.

Section 1:

- Review of PMP® Certification process
- How to apply for the exam

Section 2:

- Study plan and study groups
- Test-taking strategies
- Study references

Section 3:

- Review of the 5 project management process areas and the professional responsibility domain
- Review the 9 knowledge areas
- Review formulas
- Building a network diagram
- Calculating Critical Path
- Questions and Answers

Section 4:

- Review of sample certification exam
- Sample Test Questions for Each Area
- Overall Final Exam
- Study and Test Taking Tips
- Sample Exam review

Section 5:

- Next Steps
- Closure