



Engineering & Technology

# Project Management Certificate

UCLA Extension is a Project Management Institute Registered Education Provider (R.E.P.)

Project Management is increasingly growing in importance in recent years.

This 6 course (24-unit) certificate provides grounding in key aspects of PMI's *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)*—Fifth Edition, and prepares you to take the Project Management Professional (PMP)® exam and achieve the internationally recognized PMP certification.

The curriculum benefits for professionals in *all* industries and government services, including banking, construction, defense, entertainment, health, information technology, etc., and may be completed online or in-class.

# Project Management Certificate

This 6 course (24-unit) certificate consists of 5 required and 1 elective course.

## Core Courses (5 required courses)

Students must begin with the prerequisite X 443.1 Fundamentals of Project Management; remaining courses may be taken in any order.

|          |  |
|----------|--|
| X 443.1  | Fundamentals of Project Management                     |
| X 443.2  | Risk Analysis and Project Management                   |
| X 443.3  | Managing Project Quality                               |
| X 443.4  | Leadership and the Human Element in Project Management |
| X 443.17 | Project Earned Value, Procurement, and Cost Management |

## Elective (Choose 1 course)

|           |  |
|-----------|--|
| X 412.8   | Construction Project Management with Microsoft Project |
| X 418.26  | Information Technology Project Management              |
| X 418.31C | Agile Project Management I                             |
| X 443.14  | Program and Portfolio Management                       |
| X 443.5   | Managing Outsourced Projects                           |
| X 443.6   | Project Planning with Microsoft Project                |
| X 443.8   | Project Monitoring and Control                         |

Upon payment of the candidacy fee, the student will not be subject to subsequent changes in program/curriculum requirements.

A GPA of 2.0 or better is required for all core courses and electives. The program must be completed in 5 years.

## Approved for International Students

This certificate is approved for international students and meets the I-20/F1 visa requirements. A minimum of 12 units per quarter is required. Attend class on or near the UCLA campus and study alongside American students—many who are working professionals in the field. For more information visit UCLA Extension's International Student Office website at <http://international.uclaextension.edu/certs/>.

## Further Information

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For more information visit [engineering.uclaextension.edu/techmgt/](http://engineering.uclaextension.edu/techmgt/)

# Course Descriptions

## Core Courses

(5 required core courses)

### Fundamentals of Project Management

MGMT X 443.1 • 4 units

This course integrates project management theory with practical approaches to establish a fundamental knowledge base to use in a contemporary dynamic business environment. Topics include project management concepts from planning and selection through all aspects of the project life cycle. Students develop practical techniques to organize and control non-routine activities in order to properly manage and schedule quality, budget, and performance objectives.

### Risk Analysis and Project Management

MGMT X 443.2 • 4 units

Risk management is a key task for project managers in any project. This course benefits project managers and applies advanced tools and techniques for evaluating risk associated with various stages of the project life cycle. Students explore analytical methods for the evaluation on the selection of projects, the development of project cost estimates, analysis of the financial costs and benefits of projects, and the financial control of the project. Topics include project estimating, project financial analysis, project stimulation, project risk analysis and management, project budgeting, and cost/schedule integration. The course provides a methodology for a systematic approach to risk management and discusses project risk management in the context of the project management task as a whole. *Prerequisite:* X 443.1 Fundamentals of Project Management or consent of instructor.

### Managing Project Quality

MGMT X 443.3 • 4 units

Project managers and team members must manage project and product quality to meet customer requirements and project objectives. This course discusses when and how to use a variety of quantitative tools for planning, assuring, and controlling quality. The techniques align to international standards, Six Sigma methods, and the philosophies of Deming, Juran, Crosby, et al.

### Leadership and the Human Element in Project Management

MGMT X 443.4 • 4 units

Effective leadership skills are perhaps the greatest determinant of project success. Project managers must demonstrate effective leadership skills throughout each phase of the project life cycle. Students review specific leadership styles and use real-world examples. In addition, this course provides participative assignments to help project managers (or future managers) assess/enhance their own leadership effectiveness. Lectures cover project communication, motivation, conflict resolution, negotiation, stress management, and effective leadership in the project management context.

## Project Earned Value, Procurement, and Cost Management

MGMT X 443.17 • 4 units

The primary goals for any project are performance/quality, cost management, and schedule compliance—referred to as the triple constraint. This course introduces 3 essential project management core concepts to optimize the triple constraint: earned value management (EVM), cost management, and procurement (supplier relations). Students learn theory and real-world applications that increase their ability to plan and manage project performance and cost. Topics include EVM metrics, strategies to effectively involve suppliers in projects, and finance fundamentals to develop and comply with project budgets and assure project financial goals. Journal articles and text materials augment course goals and objectives. Prerequisite: X 443.1 Fundamentals of Project Management or consent of instructor. May be used as an elective for certificate candidates established prior to Spring 2012.

## Electives

(Choose any 1 course)

### Construction Project Management with Microsoft Project

ENGR X 412.8 • 4 units

This course presents the software programs used to manage and control construction projects. Instruction features hands-on training in the use of Microsoft Project 2007 Professional software to conduct multiple tasks such as preparing construction schedules which include definitions of detailed activities and assignments of logic relationships; defining and managing costs and resources (labor, equipment, and materials); sorting and categorizing information; preparing monthly updates of schedules; reviewing, analyzing, and troubleshooting schedules; developing, analyzing, and presenting delay issues; and producing reports and graphics.

### Information Technology Project Management

MGMT X 418.26 • 4 units

This course covers the four major aspects of information technology (IT) project management: technologies, people, organizations, and procedures. Topics include project justification; planning; scheduling; budgeting; identifying and managing risks; reporting, controlling, and closing projects; project management tools, such as work breakdown structure, critical path, and earned value analysis; and Gantt and PERT charts. IT-specific project management System Development Life Cycles (SDLC) are discussed. Students learn essential project management-related topics, such as scope creep, project communications, expectation management, team management, and defining and managing project resources. Discover portfolio management, business cases, and IT governance and an overview on the various project management software on the market, including Microsoft Project. The course includes hands-on individual and group projects, and covers the major project management processes outlined by PMI's *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)*—4th Edition. Prerequisite: Background in IT field or 2 years of management experience; familiarity with and access to Internet and some productivity software, including Word, Excel, and Powerpoint.



### Agile Project Management I

MGMT X 418.31C • 4 units

This is a management techniques course benefitting professionals who work or have worked on high-technology projects—especially those involving software/hardware and systems development and integration. In this course, learn skills and techniques for managing knowledge-based projects and programs using agile methods. You gain competence in fast iterative delivery, teamwork, collaboration, and in improving productivity. The course focuses on SCRUM and Kanban—2 cutting-edge agile methods in use today. You also learn how agile is different than traditional techniques. This course is invaluable for those who are transitioning from traditional to agile and lean development. Agile methods in management of projects and programs are gaining more and more momentum every day. The recent pilot launch of the Agile Certification by the PMI is a key testimony to the value of these methods. In addition to software development, this course is applicable to projects and programs involving high-technology, research, infrastructure, and media development.

### Program and Portfolio Management

MGMT X 443.14 • 4 units

This course is for individuals responsible for managing and implementing information initiatives at firms of all sizes. Senior leaders in management are expected to deliver a multitude of program and portfolio initiatives that are made up of cluster projects. As an integral part of an effective management curriculum, this course demonstrates the identification of multiple projects, linkage of projects that make up both programs and portfolios, managing C-level stakeholders as it relates to the programs and portfolios, managing the financial budget of medium-to-large programs and portfolios, techniques designed to help the individual take charge of projects/programs/portfolios, and orchestrating effective time management when dealing with projects/programs/portfolios while maintaining the individual's daily workload activities. Prerequisite: X 443.1 Fundamentals of Project Management or consent of instructor.



Each one of our Project Management courses is 36 PDUs. For exact PDU course breakdown, please visit:

<https://ccrs.pmi.org/search/provider/1000003683>



## Managing Outsourced Projects

MGMT X 443.5 • 4 units

Outsourcing has become a way of life in the 21st century. Much of the project work that used to be proposed, planned, implemented, and controlled inside an organization is now being partially or completely performed at domestic and foreign suppliers. Firms are transitioning from being “doers” of projects to “buyers” of project work. How can you be sure things are being done as you desired? This course helps you increase your satisfaction levels with project outputs that you buy and enhances your effectiveness as a buyer and seller of products or services, especially for large contracts that include subcontractors and a supply chain of vendors. The course incorporates decisions regarding make vs. buy and the type of contract to use. Solicitation and source selection focuses on procurement and helps you understand the use of the statement of work, common solicitation documents, seller evaluation criteria, pricing, and contract law considerations. The contract administration process addresses seller performance and payment on external procurements. The closing process covers contract completion, termination, and disputes. *Prerequisite:* X 443.1 Fundamentals of Project Management or consent of instructor.

## Project Planning with Microsoft Project

MGMT X 443.6 • 4 units

Although it is one of the most widely used programs and rich in functionality, Microsoft Project can be difficult for many to learn and use efficiently. This course provides the tools and skills needed to use the program during the full project life cycle. Learn to set up key components of projects (tasks, schedules, resources, costs) and work with these components to achieve project goals (leveling resources, adjusting schedules, etc.). Students learn how to use the most essential components to keep the schedule realistic through the use of project updates, activity tracking, and workgroup tools. You also learn how to produce effective and high-impact reports in order to communicate project status and manage schedule and cost. *Prerequisite:* Proficiency in using computers with Windows operating system; working knowledge of Microsoft Office also is helpful.

## Project Monitoring and Control

MGMT X 443.8 • 4 units

This course focuses on the tools and techniques project managers must master in order to effectively bring in each project on time and within budget. The analysis of what parameters should (and should not) be monitored are presented, as well as the methodology for designing a performance measurement system. Various methods of schedule development, project planning, and status reporting are explored. Real-world examples of project schedules and monitoring systems also are developed. *Prerequisite:* X 443.1 Fundamentals of Project Management or consent of instructor.

PMI, Project Management Professional, PMP, *PMBOK Guide*, PGMP, CAPM, and PMI Registered Education Provider logo are registered marks of the Project Management Institute, Inc.

## Also of Interest

### Project Management Professional Exam (PMP/CAPM) Preparation

Considered the leading professional association for project managers, the Project Management Institute (PMI) administers a globally recognized and respected certification program. The Project Management Professional (PMP)<sup>®</sup> certification is the profession's most universally recognized and respected credential. To be eligible for PMP certification, you must first meet specific requirements of experience and education and agree to adhere to a code of professional conduct. The final step in becoming a PMP is passing a rigorous computer-based examination designed to objectively assess and measure your project management knowledge. Offered by UCLA Extension during the spring and fall quarters in both classroom and online formats, this course provides a structured review of the key areas of knowledge required to successfully pass the exam.

### Project Management Information Session (Online)

Interested in project management? Want to learn about career opportunities and how UCLA Extension's courses can prepare you to enter the field, or help you obtain or maintain certification? This free, online information session offered in spring and fall provides a comprehensive overview of project management. During the week, you log on at your own pace to review presentations by Extension's dedicated group of project management instructors. Topics include project management overview, careers in project management, UCLA Extension's Project Management Certificate, review of selected program courses, and Project Management Professional (PMP)<sup>®</sup> Certification and Examination. For details as they become available, visit <http://engineering.uclaextension.edu/techmgt/>

### Obtain an Online Master of Science in Project Management with UW–Platteville

In accordance with a transfer agreement with the University of Wisconsin–Platteville, completion of the UCLA Extension Project Management Certificate equates to 12 graduate credits that may be applied toward the UW–Platteville online Master of Science in Project Management. For more information visit their website at [uwplatt.edu/disted/project-management.html](http://uwplatt.edu/disted/project-management.html).

### Corporate Training

<http://shortcourses.uclaextension.edu/>

Discuss your corporate training needs, contact:

#### Short Courses

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