

PM Training

Urban Training Institute

PROJECT MANAGEMENT *SUCCESSTRACK* TRAINING:

Integrated Skills for the Successful Engineering Manager









Winner of the International Association for Continuing Education and Training's (IACET) Exemplar Award for Internal Training, Urban Engineers is committed to providing learning, training, and professional development opportunities through the Training Institute.

Urban Engineers, Inc. is an Accredited Provider by IACET. In obtaining this approval, Urban has demonstrated that it complies with an ANSI/IACET Standard, which is widely recognized as the Standard of Good Practice internationally. As a result of their Accredited Provider status, Urban Engineers is accredited to offer IACET CEUs for the programs that qualify under the ANSI/IACET Standard.

Urban has met the standards and requirements of the Registered Continuing Education Program (RCEP). Credit earned on completion of this program will be reported to RCEP. A certificate of completion will be issued to each participant. As such, it does not include content that may be deemed or construed as approval or endorsement by RCEP. Urban Engineers is a National Provider with RCEP.





WELCOME!

CAROL MARTSOLF, PE, PMP, LEED AP VICE PRESIDENT, DIRECTOR OF TRAINING

Welcome to the Urban Training Institute
Project Management SuccessTrack
Training: Integrated Skills for the
Successful Engineering Manager!
Throughout the Program, you will be
learning the strong foundational skills of
successful project management, while
you earn professional development hours
(PDHs) and continuing education units
(CEUs).

Through a strong foundation, applicable class exercises, and group break-out sessions, you will learn how to be a successful manager! You are the cog in the wheel that makes the difference with cost, schedule, and budget. This program will help you make a difference!

You will have individualized attention from our instructors who have "walked the walk" and can provide you with insights into the various Project Manager categories.

If you ever have any questions, please feel free to send them to me at TrainingInstitute@urbanengineers.com.

Enjoy Project Management SuccessTrack training, and put yourself on the path to project management success!



PROJECT MANAGEMENT SUCCESSTRACK TRAINING

Integrated Skills for the Successful Engineering Manager

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PROJECT SCOPE MANAGEMENT

TIME: 2 Hours INSTRUCTOR: Matthew Marquardt, PE PDHS/CEUS: 2 PDHs, 0.2 CEUs





COURSE DESCRIPTION

One of the most important challenges you will encounter as a project manager is clearly defining and managing a project's scope.

This module will discuss how projects are defined, evaluated, and ultimately translated into manageable project requirements and concrete deliverables.

To define the project scope, it is important to first establish clearly-defined needs and objectives of the project. Once those are determined, a project manager can begin to define the scope. Without proper scope definition, you have little chance to manage scope effectively; a slight change in scope can have significant ripple effects on schedule and budget.

- Explain the Project Manager's role or responsibility in developing a scope of work
- Discuss the importance of scope definition and management in the life of a project
- Identify techniques and best practices to define and manage scope
- Describe best practices for avoiding and minimizing scope creep
- Identify techniques for proactively monitoring and dealing with requests for scope change throughout the project life cycle
- Discuss the importance of required progress documentation and communication
- Identify how to best develop and work within a Work Breakdown Structure (WBS)

PROJECT BUDGET/COST CONTROL

TIME: 2 Hours INSTRUCTOR: Matthew Marquardt, PE PDHS/CEUS: 2 PDHs, 0.2 CEUs







COURSE DESCRIPTION

How does the project manager ensure his/her project is running within budget, and what means are available to forecast the outcome if the project performs as it has so far? What should a project manager do to bring a project back on track?

- Discuss the Project Manager's role or responsibility in developing a cost of work
- Discuss how to determine project cost and the factors that go into determining budget
- Identify best practices for controlling project budget and cost
- Describe the importance between the scope and pricing relationship
- Identify signs or warnings of potential cost over-runs

PROJECT TIME / SCHEDULE DEVELOPMENT

TIME: 2 Hours INSTRUCTOR: Matthew Marquardt, PE, and Nicholas Orso, PE PDHS/CEUS: 2 PDHs, 0.2 CEUs







COURSE DESCRIPTION

Developing a project schedule after defining the project work scope and budget requires an understanding of the work being done, but it also requires an understanding of how all of the elements in the scope are related and depend on each other. In this module, you will learn how to focus on managing the constraints you face in any project, including: limits on time, human resources, materials, and budget. This project management training module introduces processes and techniques best practices for building a schedule and creating realistic estimates. Schedule management issues and applying sound judgment to effectively manage time constraints on a project will also be covered.

- Discuss the purpose of a project schedule and how to estimate work
- Discuss how to adjust schedule depending on changes to scope and budget
- Identify different scheduling estimation techniques
- Determine the level of accuracy required in the schedule at various phases of a project
- Discuss how to manage a schedule through a project's life cycle

PROJECT QUALITY AND QA/QC

TIME: 2 Hours INSTRUCTOR: Richard Simon, CMQ/OE, CQU

PDHS/CEUS: 2 PDHs, 0.2 CEUs



COURSE DESCRIPTION

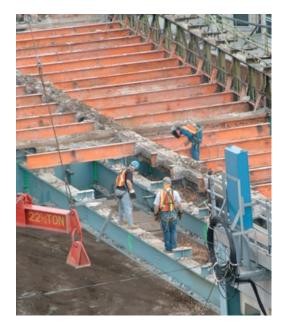
Quality is critical in design and construction since the facilities that are designed and constructed are used by the public. Quality in design is paramount because everything that follows in the life of a project is based on its design. Design services are a small percentage of a project's life-cycle cost, so quality in construction (a large percentage of life-cycle cost) is important not only in terms of public welfare, but cost and time (especially for rework and 'errors and omissions').

Attend this class to learn how to save time and money by increasing the quality on your design and construction projects.

- Differentiate between quality concepts and their definitions
- Discuss the importance of quality in design and construction
- Identify resources for controlling and improving quality in projects
- Apply lessons learned from case study scenarios involving project quality
- Discuss the roles and responsibilities of project staff in implementing quality

RISK MANAGEMENT

TIME: 2 Hours INSTRUCTOR: John Holak PDHS/CEUS: 2 PDHs, 0.2 CEUs





COURSE DESCRIPTION

There is no project that has zero risk. Every project has its risks and will not go as planned. The difference in successful project management is adequately assessing the risks and then executing a successful risk response. Risk management tactics should be in place in order to deliver projects within the schedule and budget targets, as well as the quality requirements. Proactive risk management allows a project manager to optimize project results by implementing proven best practices to plan for (and execute) risk mitigation strategies. This module covers tactics for incorporating risk management processes as integral elements of project management and to ensure quality.

- Discuss how to identify, assess, and quantify risk
- Identify approaches to monitor, control, and communicate risks to project stakeholders
- Discuss how to document risks and mitigate them to ensure project quality
- Perform qualitative risk analysis to prioritize risks for response and monitoring
- Perform quantitative risk analysis to assess risk to the overall project cost and schedule objectives

MANAGING/LEADING SUCCESSFUL PROJECT TEAMS

TIME: 2 Hours INSTRUCTOR: Matthew Marquardt, PE PDHS/CEUS: 2 PDHs, 0.2 CEUs





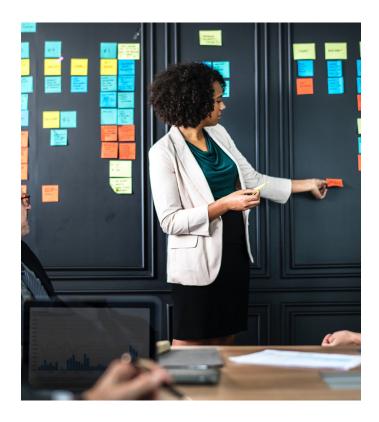
COURSE DESCRIPTION

Effective team building is the ability to get a collection of individuals to work together to create a strong and organized group working toward a common goal. The importance of team building is crucial in that the project team is the one to carry out the work of an effective project manager. An ability to develop and lead an effective team are two of the most important key competencies of a successful project manager.

- Discuss the characteristics of highperforming and effective project teams
- Identify how to create and manage a project team
- Discuss how do get the most out of every team member
- Identify how to set realistic team goals
- Outline best practices for motivating team members
- Describe how to gain team members' accountability and buy-in
- Discuss how to reward or recognize team members

CHANGE MANAGEMENT

TIME: 2 Hours INSTRUCTOR: Matthew Marquardt, PE PDHS/CEUS: 2 PDHs, 0.2 CEUs



COURSE DESCRIPTION

Change management is the process, tools, and techniques used to manage change particularly regarding the people side of change, to achieve desired business outcomes. Change in any project or organization is inevitable; but managing it effectively with a disciplined approach ultimately will produce positive results.

When change management is integrated into the project management steps, the change management can identify and mitigate risks in a proactive manner, address resistance, and build commitment for the change.

Take this course to learn about change management and how to address it in a proactive manner.

- Discuss the definition of change management
- Explain how managing change on projects has to be done while managing stakeholders' expectations around the change
- Discuss the tools a Project Manager can use to facilitate effective change management
- Outline ways Project Managers can engage stakeholders with regard to change

CONSTRUCTION MANAGEMENT

TIME: 2 Hours INSTRUCTOR: Nicholas Orso, PE PDHS/CEUS: 2 PDHs, 0.2 CEUs

COURSE DESCRIPTION

Despite the best efforts to have projects delivered without any delays or construction issues, they do occur; and some of them may result in claims. This course discusses the basics of claims arising under construction contracts. It addresses issues related to types of construction claims, the process of claims, and how to analyze claims.

Delay costs represent the most significant cost of construction claims. This course will provide participants with a fundamental knowledge and principles behind construction claims.

- Discuss design-related and delay-related claims
- Identify the process of claims, including change order requests, notices of claims, settlement, arbitration/mediation, and trials
- Describe how to analyze claims







MANAGING MULTIPLE PROJECTS SIMULTANEOUSLY

TIME: 2 Hours INSTRUCTOR: Matthew Marquardt, PE PDHS/CEUS: 2 PDHs, 0.2 CEUs

COURSE DESCRIPTION

Project Managers have more expected of them and have more pressure every day. In today's fast-paced environment, project activities happen quickly and most likely every Project Manager has to manage multiple projects concurrently. Some Project Managers can have many more than one - sometimes even ten or more, depending on the complexity. More than likely, every project a Project Manager has to manage may be different in a variety of ways. The ability to manage multiple related and unrelated projects and prioritize competing demands is critical to the success of today's multitasking project manager. Monitoring and controlling multiple projects presents additional challenges. This course focuses on these challenges and emphasizes the tools and techniques for project success.



In this course, participants will learn best practices in planning and scheduling multiple projects; gain insight into multitasking strategies; learn how to prioritize project work; practice effective delegation; and discuss specific strategies for monitoring and controlling multiple projects.

- Discuss important concepts related to Multiple Project Management, including addressing competing demands on multiple projects
- Discuss techniques for prioritizing and delegating project work
- Identify effective multitasking strategies
- Outline how to plan and schedule multiple projects
- Discuss how to perform an assessment of multiple project schedules
- Monitor, control, and report on multiple projects

PROFESSIONAL RESPONSIBILITY AND ETHICS

TIME: 2 Hours INSTRUCTOR: Matthew Marquardt, PE PDHS/CEUS: 2 PDHs, 0.2 CEUs

COURSE DESCRIPTION

This course presents an introduction to professional responsibility engineering ethics. The course will discuss the rules of ethics, how to adhere to them along with specific guidelines to follow, and the consequences of noncompliance. The lessons will be reinforced with several case studies and discussion of real world ethical issues that engineers face.

- Discuss the role that ethics and professional responsibility play in the responsibilities of engineers
- Identify the major ethical issues that may arise when practicing engineering
- Describe strategies for adhering to the ethics rules of your professional engineering licenses
- Determine the ramifications of noncompliance through interactive case studies



HOW TO INFLUENCE OTHERS WITHOUT THE POSITIONAL POWER

TIME: 2 Hours INSTRUCTOR: Carol Martsolf, PE, PMP PDHS/CEUS: 2 PDHs, 0.2 CEUs



COURSE DESCRIPTION

When you have staff and direct reports, they have to do what you ask. Good supervisors lead by not using their authoritarian power to get things done (most of the time), but by building consensus and fostering a team spirit – and in most cases, they are being persuasive with their staff and influencing them to act willingly. But there are some cases, especially when you need anything from someone higher than you or your peer in an organization, the only way to do it is by persuasion and influence.

This course will explain what the different types of persuasion and influence techniques are and how to adopt them to your particular professional situations.

- Describe what influence is; in particular, what influence is when not combined with positional power
- Identify some influencing techniques
- Describe why influence is important in your career and profession
- Describe some strategies for increasing your influence

BEST WRITING PRACTICES FOR ENGINEERS: TIPS FOR COMMUNICATING MORE EFFECTIVELY

TIME: 2 Hours INSTRUCTOR: Matthew Marquardt, PE, and Corey Fenwick, CPSM PDHS/CEUS: 2 PDHs, 0.2 CEUs





COURSE DESCRIPTION

Are you an engineer who is confident technically but would like to communicate technical knowledge more clearly and effectively? This course will help engineers learn some basic skills and techniques to write for any audience, including the public and lay people. Each student will send the instructors a current example of their writing, and get feedback. Following the course, there will be a post-test to see how each student improved their writing and communication skills.

- Identify the importance of effective written communication
- Discuss the basics of effective writing
- Identify tips and strategies when writing emails, letters, technical reports, and memos to both internal and external customers
- Outline tips for proper grammar, spelling, and proofreading
- Identify how to frame project descriptions using narrative

MEET THE INSTRUCTORS

Matthew Marquardt Carol Martsolf Nicholas Orso Corey Fenwick John Holak Richard Simon



MATTHEW MARQUARDT, PE

Senior Vice President, COO, Vertical Services, Urban Engineers



NICHOLAS ORSO, PE

Project Manager, **Urban Engineers**



JOHN HOLAK



CAROL MARTSOLF, PE, PMP, LEED AP

Vice President, Director of Training **Urban Engineers**



COREY FENWICK, CPSM

Communications Manager, **Urban Engineers**



RICHARD SIMON, CMQ/OE, CQA

PROJECT MANAGEMENT COURSES

- Project Scope Management
- Project Budget/ Cost Control
- Project Time/ Schedule Development
- Project Quality and QA/QC

- Risk Management
- Managing/Leading Successful Project Teams
- Change Management
- Construction Claims
- Managing Multiple
 Projects Simultaneously
- Professional Responsibility and Ethics
- How to Influence Others Without the Positional Power
- Best Writing Practices for Engineers: Tips for Communicating More Effectively

WE HOPE YOU ENJOY THE CLASSES!

CONTACT US AT

traininginstitute@urbanengineers.com

