



URBAN TRAINING INSTITUTE

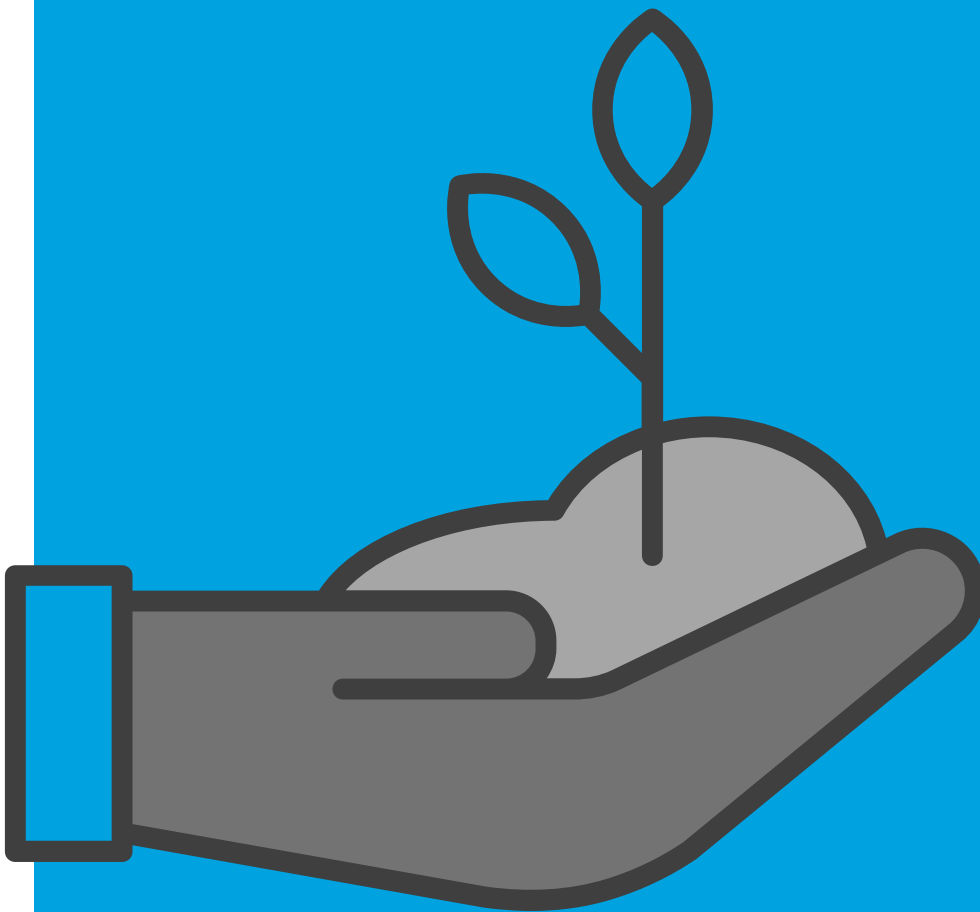
TRAINING COURSE BOOKLET

URBAN ENGINEERS
URBAN TRAINING INSTITUTE



CAROL MARTSOLF, Chief Learning Officer

"The courses in this program will help your team members reach their highest potential while earning professional development hours (PDHs) and continuing education units (CEUs). You will have individualized attention from our instructors who have "walked the walk" and can provide you with insights into various technical, project management and soft skill topics. Through the use of case studies, interactive class exercises, and role play, you will learn important skills to pave your way to success!"



Accreditations



Urban Engineers is accredited by the International Accreditors for Continuing Education and Training (IACET) and offers IACET CEUs for its learning events that comply with the ANSI/IACET Continuing Education and Training Standard. IACET is recognized internationally as a standard development organization and accrediting body that promotes quality of continuing education and training. This accreditation is widely accepted by engineering state boards for continuing education and license renewal.



Urban Training Institute 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 is a national provider with RCEP.



The International Code Council is the leading global source of model codes and standards and building safety solutions that include product evaluation, accreditation, technology, training, and certification. The Code Council's codes, standards, and solutions are used to ensure safe, affordable, and sustainable communities and buildings worldwide.

Uniform Construction Code

Courses taken can be counted for credit through the Uniform Construction Code (UCC). The UCC training and certification regulation provides a listing of organizations and types of organizations that the Department of Labor and Industry deems acceptable as providers of continuing education.

Course Categories

Communications

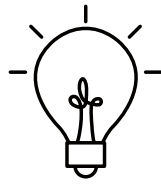
**Diversity, Equity
& Inclusion**

**Project
Management**

**Soft
Skills**

Technical

Facilitation



Communication Courses

Conflict Resolution: Creating the "Win-Win" Scenario

Facilitation of Effective Organizational
Communication

How to influence Others without the Positional Power

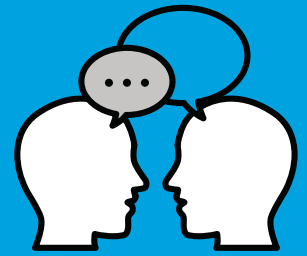
Interpersonal Skills Assessment:
How to Enhance Communication Within Your Team

Problem Solving Using Strategic Thinking

Time Management:
Tools & Techniques to Greater Efficiency

We talk a lot - email, phone calls, conference calls and meetings. Learn how to communicate so the message is impactful and the lessons will be remembered.

Communication



Conflict Resolution: Creating the Win-Win Scenario

The potential for conflict on a project team can be high because it involves individuals from different backgrounds and orientations working together. The cause of conflict in a team can be related to differences in values, attitudes, needs, expectations, perceptions, resources, and personalities. Proper skills in dealing with conflict can assist engineers and managers in handling and effectively resolving conflicts which can lead to a more productive organization as a whole. Conflict management within a team environment requires the ability to solve problems, set goals, compromise, settle personality differences, and resolve conflicts. Take this session to understand the nature of conflict; effective approaches to conflict resolution; and how to establish a process for problem solving, integrating, and collaborating.

Facilitation of Effective Organizational Communication

Communication is one of the most important elements of a team - whether the team is a Project Team, Department, or an entire organization. It's important to foster communication from the leadership, but also among all members of the team. Take this course to learn how to facilitate effective organizational communication including written and oral communication to create a stronger corporate culture.

How to Influence Others Without the Positional Power

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.

Communication



Interpersonal Skills Assessment: Enhance Communication In Your Team

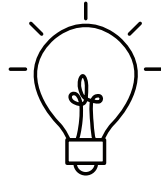
Project management cannot occur with a project manager alone. The project management team is important to a project's success. Take this session to learn about how to assess your interpersonal skills as a manager; how to assess the interpersonal skills of your team members; how to organize a project to be an effective team-builder.

Problem Solving Using Strategic Thinking

Engineers are familiar with solving engineering problems. However, some problems that we encounter outside of engineering problems often require "thinking outside the box." Strategic, larger-picture thinking is often required to solve some of the more complicated problems that do not have a "black or white" solution and that require thinking outside of traditional patterns.

Time Management: Tools & Techniques to Greater Efficiency

There are only 24 hours in a day, and how much we accomplish in those 24 hours depends on how we manage our time. Take this session to learn some tips and techniques for making the most of your time, thereby increasing your efficiency and productivity.



Diversity, Equity & Inclusion Courses (DEI)

An Introduction to Terms & Concepts

An Introduction to Bias & Microaggressions

A Better Me...A Better World: A Process for Periodic Reflections that Reinforce Inclusive Behaviors

Building Bridges: Utilizing Inclusive Language

Engineering Ethics Through the Lens of DEI

How to Effectively Handle Microaggressions in the Workplace

How We Got Here: A History Overview of Gender Bias - Breaking Ingrained Patterns by Understanding Their Root Causes

Removing Unconscious Bias in the Workplace

Raising All Boats - How Everyone Wins Through DEI (a Strategic Perspective)

Scanning the Horizon: How Driving Forces for DEI Will Impact Our Clients, Partners and the Way We Do Business

Strengthening Corporate Culture through Allyship
Work Site Safety for Women

Sessions will provide the framework to safely discuss DEI and implement strategies to turn lessons into actionable changes.

Diversity, Equity & Inclusion



An Introduction to Terms & Concepts

This session provides an overview of basic terms and defines Diversity, Equity, and Inclusion (DEI). It also explains some foundational concepts such as bias, microaggressions, gender, disability, race, intersectionality, and allyism. This session provides a strong foundation on the basic terms and definitions in DEI, that can then be used to have further and deeper conversations on this important topic.

An Introduction to Bias & Microaggressions

Bias is a natural phenomenon, a “short circuit” in the brain to help us quickly and efficiently make sense of our environment. Sometimes bias can be a conscious act, and at other times, it may be unconscious bias where the people having the bias don’t even realize they have them. Often bias can result in microaggressions, which are small (often subliminal) cues or signals that can cause others to feel devalued, excluded, or discouraged. Take this course to learn about bias and microaggressions, and how they are related to one another.

A Better Me...A Better World: Process for Periodic Reflections that Reinforce Inclusive Behaviors

We all want our employees and co-workers to feel included. We may even take training or read articles about how to create a more inclusive workplace. But having a process for ongoing reflection can help strengthen an inclusive workplace, and not just help with self-improvement but can help change the world, one person or organization at a time. Take this course to learn about how to create a process for periodic reflections that reinforce inclusive behaviors.

Diversity, Equity & Inclusion



Building Bridges: Utilizing Inclusive Language

Did you know that your organizational culture and how included your members and employees feel is directly related to the language that is used? From the internal corporate correspondence via e-mail/letters, to the presentations that are conducted, to the messaging from leaders.....it all fits into a puzzle that affects how inclusive the atmosphere is at your organization. Take this course to learn how to utilize inclusive language and how to build a more equitable environment through inclusive language.

Engineering Ethics Through the Lens of DEI

As engineers, we conduct our professional work through a strong foundation of ethics. An important aspect of this, is advocating for a diverse workforce and encouraging an inclusive work environment. Our profession not only should foster an inclusive culture that makes everyone feel welcome and valued, but we should make sure to engage diverse stakeholders with regard to our engineering projects. It's important that not only the engineering is well designed on our projects, but we balance that while mitigating the environmental and societal impacts of our work. Take this course to learn about the ethical foundation of our profession as engineers, and how diversity, equity, and inclusion are vital factors in that foundation.

How to Effectively Handle Microaggressions in the Workplace

Microaggressions are small (often subliminal) cues or signals that can cause others to feel devalued, excluded, or discouraged. Microaggressions can undermine trust, morale, productivity, and relationships in an organization. They typically occur when people are perceived to be different in some way. But how do you address microaggressions in the workplace, when they oftentimes are carried out without one's knowledge, as a consequence of implicit bias?

Diversity, Equity & Inclusion



How We Got Here: Historical Overview of Gender Bias - Breaking Ingrained Patterns by Understanding Their Root Causes

Bias is a natural phenomenon.....there is so much information for our brains to process at any given time, that we are constantly forming automatic associations as a way to make sense of our world. But sometimes these biases can turn into negative and unwarranted stereotypes, and not based off of logical circumstances. Bias in gender is deeply rooted in history, and affects our current reality. Take this course to learn about the historic perspective of gender in the United States and how we can unlearn and break ingrained patterns so all genders can feel welcome and valued.

Removing Unconscious Bias in the Workplace

Bias is a natural phenomenon.....there is so much information for our brains to process at any given time, that we are constantly forming automatic associations as a way to make sense of our world. But sometimes these biases can turn into negative and unwarranted stereotypes. Often biases are not conscious decisions, but are rooted in our subconscious. Take this course to learn how to take steps to remove unconscious bias in the workplace.

Raising All Boats - How Everyone Wins Through DEI (a Strategic Perspective)

Diversity, equity, and inclusion practices can sometimes be very prescriptive and process-driven. There should be emphasis on strategy as well. Usually when diversity, equity, and inclusion is strategized and incorporated into a corporate culture, all people are positively affected, not just the marginalized groups. Take this course to learn how diversity, equity, and inclusion strategy helps everyone win!

Diversity, Equity & Inclusion



Scanning the Horizon: How Driving Forces for DEI Will Impact Our Clients, Partners and the Way We Do Business

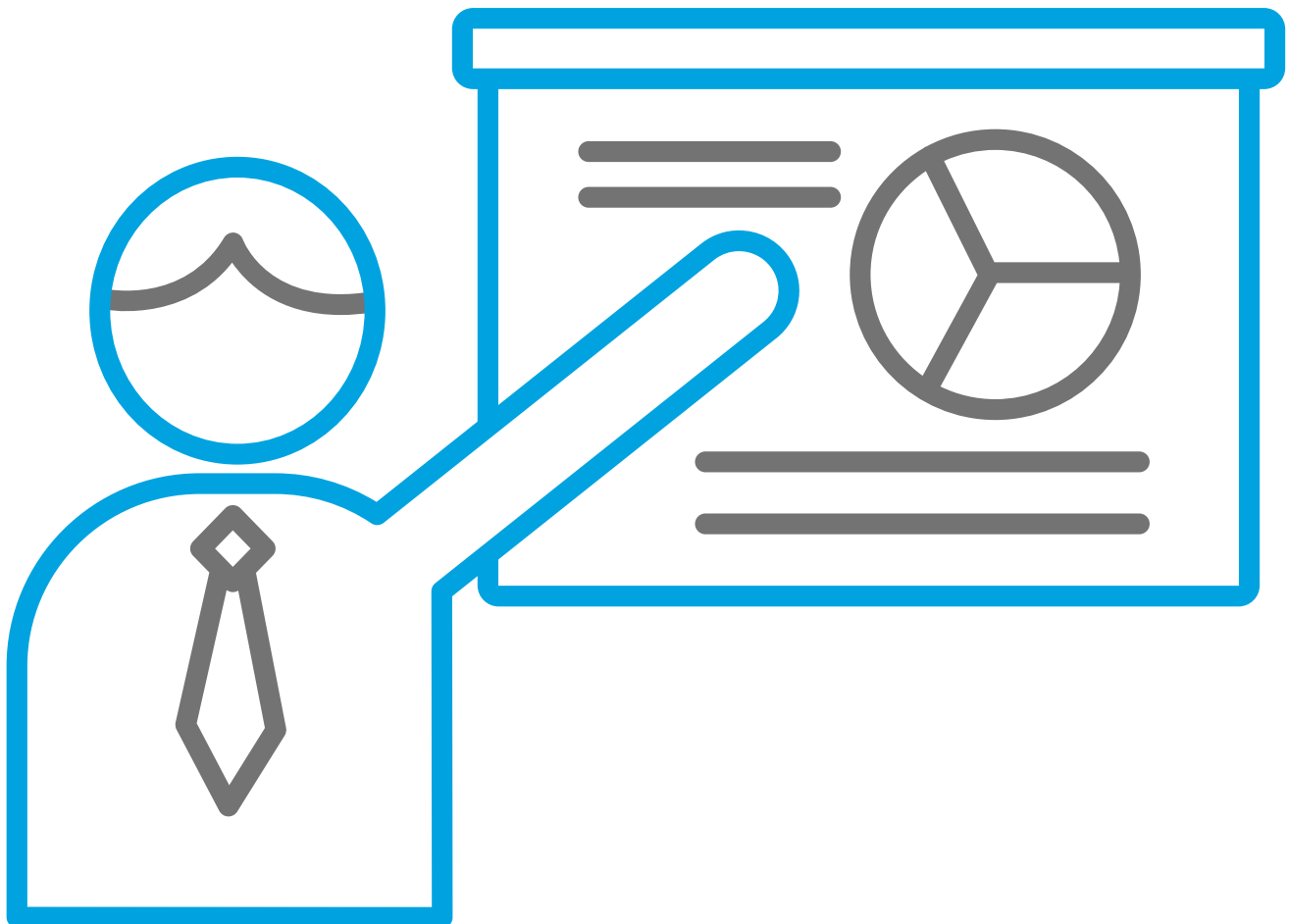
Diversity, equity, inclusion, and justice initiatives are not just a good thing to do, but a necessary initiative as the world is becoming more diverse. What are the driving forces for diversity, equity, and inclusion? Take this course to learn what the driving forces are, and how this will impact ourselves, our clients, and our partners in the business world.

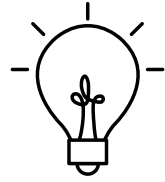
Strengthening Corporate Culture Through Allyship

Allies are people that support the struggles of a marginalized group and work to proactively ensure that the voices of the group are being heard but are not part of the group themselves. Allies use their own voices to elevate and support others. In the workplace, allies assist in creating a stronger, more positive work environment by helping others to know they are valued in the team, by allowing them to be open and the truest version of themselves and by doing so, create a culture of trust. Take this course to learn what Allyship is, and how you can be better ally to support a positive work environment and corporate culture.

Facilitation Courses

Urban Training Institute will work closely with management and employees to determine learning and development focus areas and needs.





Project Management Courses

Agile Project Management

Change Management

Communication & Stakeholder Management

Managing Multiple Projects Simultaneously

Managing/Leading Successful Project Teams

Project Budget/Cost Management

Project Management Fundamentals

Project Quality & QA/QC

Project Scope Management

Project Time/Schedule Development

Risk Management

Customized courses will cover the fundamentals of project management including: implementation, planning, execution, monitoring/controlling & closing.

Project Management



Agile Project Management

Today's world is very fast-paced; and at times, the traditional project management model may need to be altered or streamlined. Instead of having the project management be plan- or scope-driven, agile project management is change-driven, or driven by the schedule and cost. The foundational principles of project management still apply, but they are focused on a more fast-paced project delivery. Agile refers to the ability to move quickly and easily - why not develop and run a project team with a similar context? This session will discuss various factors that go into creating and running an agile team and the traits that agile team members should have. Once a team is created you will understand the process of running that team to complete projects faster and more efficiently.

Change Management

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 will produce positive results ultimately. 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.

Communication & Stakeholder Management

Communication is critical to the success of a project. Incorporating input from other people is key to delivering a project that exceeds expectations. Stakeholder management will provide you with ways to engage and incorporate other ideas and opinions. As a project manager you will constantly be working with people in various roles and organizations - all with the main goal of successfully delivering a project. This course will cover communication techniques and ways to manage stakeholders resulting in successful project outcomes.

Project Management



Managing Multiple Projects Simultaneously

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. 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.

Managing / Leading Successful Project Teams

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. There are many strategies and general advice on how to make your team effective.

Project Budget / Cost Management

How does the project manager ensure his/her project is running within budget and what means is 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?

Project Management



Project Management Fundamentals

According to the Project Management Institute (PMI), the leading organization for Project Management globally, Project Management is, “the application of knowledge, skills, tools, and techniques to project activities to meet project requirements.” Understanding the fundamentals of project management will help to build the foundation for applying the concepts into your projects and within your team. This course will introduce the concepts of project management.

Project Quality & QA/QC

Quality is critical in design and construction, especially in our industry, 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. Professional services (design) 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.

Project Scope Management

One of the most important challenges you will encounter as an owner’s project manager will be 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 and your consultant have little chance to manage scope effectively; a slight change in scope can have significant ripple effects on schedule and budget.

Project Management

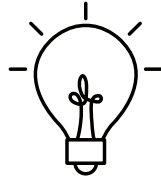


Project Time / Schedule Development

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: limits on time, human resources, materials, and budget. This project management training module introduces best practices for processes and techniques 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.

Risk Management

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 - and 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.



Soft Skills Courses

A Different Path Taken: A Leadership & Life Balance Conversation
Climbing the Corporate Ladder: Why it Isn't Really a Ladder at All
Coaching 101: How to Coach to Bring out the Best in Everyone
Coaching & Mentoring Workshop
Delegation: How to Spread the Work While Creating Future Leaders
Developing Your Personal Approach to Leadership
Emotional Intelligence: Communicate with Tact & Diplomacy
Employee Motivation: How to Inspire Others & Encourage Initiative
From Engineer to Engineering Leader
Growing Your Career Path Through Taking Initiative
Leadership & Influence Workshop
Leading High Performance Teams
Managing/Leading Successful Teams
Movin' On Up: Navigating the Transition from Worker to Manager
Team Building for Managers
Teamwork and Team Building Workshop
The Art of Negotiation
The Essentials of Succession Planning
The SMART Approach to Goal Setting

Courses can be customized to meet the specific needs of employees, departments, and positions.

Soft Skills



A Different Path Taken: A Leadership & Life Balance

Take this class to learn about the various options for creating balance between your personal and professional lives. This class is a discussion of ideas to pursue balance, but also includes a panel discussion offering differing points of view.

Climbing the Corporate Ladder: Why it Isn't Really a Ladder at All

Climbing the corporate ladder is often seen as just that - a "ladder." But in many ways, navigating one's career path involves turns and using tools for navigation that are not so linear and obvious. What is success and does it have to be tied to climbing the so-called corporate ladder? Take this class to answer this question and explore the options for your career track and direction.

Coaching 101: How to Coach to Bring Out the Best in Everyone

When you think of a coach, you may be thinking of someone out in a field blowing a whistle and telling the athletes to hustle. Although there are some similarities between athletic coaches and coaches in the professional world, there are many differences. This course will dive into the important elements of being a successful coach, the impact of coaching on employee performance, and discuss the differences between coaching and mentoring.

Soft Skills



Coaching & Mentoring Workshop

This coaching and mentoring workshop focuses on how to better coach your employees to higher performance. Coaching is a process of relationship building and setting goals. How well you coach is related directly to how well you are able to foster a great working relationship with your employees through understanding them and strategic goal setting.

Delegation: How to Spread the Work While Creating Future Leaders

Delegating work is not just an effective means of making sure all of the work is not performed by one person who then becomes overburdened; it is an excellent means for developing future leadership and succession planning. This session will arm you with tips and strategies for successful delegation, ways to address any delegation obstacles, and how to use delegation as one of the strongest tools for developing your staff.

Developing Your Personal Approach to Leadership

Leadership skills are vital for professional success. One can have the technical and managerial skills; but without being able to lead - the best results are left unachieved. But there is no "one size fits all." How you develop your leadership, first starts with knowing oneself. Each persons' approach to developing their leadership will be different, as all of us are unique, and have different personalities. Take this class to learn the steps and insights involved in developing your leadership approach from a personal perspective.

Soft Skills



Emotional Intelligence: Communicate with Tact & Diplomacy

There are multiple intelligences (most notably intellectual) that exist. Another important one is emotional intelligence. Emotional intelligence is the ability to understand, use, and manage your emotions in relation to self-management, self-awareness, social awareness, and relationship management. It involves having a high degree of empathy, so you can understand emotions, needs, concerns of other people, and detect emotional cues. It is vital when communicating, to ensure your messages are delivered and received by the listener. Communicating (with tact and diplomacy) is a key leadership skill.

Employee Motivation: How to Inspire Others & Encourage Initiative

An efficient, successful team is an inspired and motivated team. Motivated employees are productive. However, creating a work environment that fosters motivation will most likely take deliberate effort. This session will discuss the basics of motivation; some methods of fostering motivation; and identify challenges to workplace motivation.

From Engineer to Engineering Leader

In school, engineers are taught the technical knowledge and skills to be successful engineers, but the skills and knowledge to propel to higher levels of leadership in an organization are not the same. This course will cover the skills and abilities needed to be a growing leader and how to enhance leadership skills.

Soft Skills



Growing Your Career Path Through Taking Initiative

Have you ever thought, “I want to get more out of my career” or “I want to increase my value to the organization but I’m not sure how?” One of the ways to move ahead and increase your value is by taking initiative. Think outside your responsibilities. See opportunities to improve before you’re told to improve them. Look for opportunities. As Mark Twain said: “The secret to getting ahead is getting started.” Take this class to learn how increasing your participation in activities and taking initiative in your career can lead to increased career satisfaction and contributions.

Leadership & Influence Workshop

They say that leaders are born, not made. While it is true that some people are born leaders, some leaders are born in the midst of adversity. Often, simple people who have never had a leadership role will stand up and take the lead when a situation they care about requires it. Once you learn the techniques of true leadership and Influence, you will be able to build the confidence it takes to take the lead. The more experience you have acting as a genuine leader, the easier it will be for you. It is never easy to take the lead, as you will need to make decisions and face challenges, but it can become natural and rewarding.

Leading High Performance Teams

A high performance team is a group of individuals who work interdependently to accomplish a common goal. Whether on a temporary project or within an operating unit, self-directed team members collaborate, challenge and hold each other accountable as the group pursues its goal. With our Leading High Performance Teams workshop, your participants will discover how to influence a collection of individuals to achieve improved results for the organization. By understanding team development and performance management, you will foster mutual trust and respect and empower your team for success.

Soft Skills



Managing / Leading Successful Teams

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.

Movin' On Up: Navigating the Transition from Worker to Manager

You graduate from college, and you get your first job. It's a great feeling learning more and having responsibility for getting tasks completed and feeling a sense of accomplishment! Over the years, you become very proficient in what you do, and then... it's time to learn to delegate and manage what other people do. It's a huge leap - and it takes some adjustment and some new skills. Take this course to learn about how to navigate the transition from worker to manager.

Team Building for Managers

Team building is an important part of the work experience. It is not only applicable to your work life, but also transfers over to your personal and social life. When working with a team, it is important to fully engage yourself. One should take the time and proper steps to become the best team member they can be. With our Team Building for Managers workshop, your participants will learn how important team building is and how beneficial it can be. Through this workshop, your participants will gain a new perspective on teamwork, and become a valuable member to any team they are placed in. Follow the information in this workshop and create a positive atmosphere within your company with the use of teams.

Soft Skills



Teamwork & Team Building Workshop

For most of us, teamwork is a part of everyday life. Whether it's at home, in the community, or at work, we are often expected to be a functional part of a performing team. Having a strong team will benefit any organization and will lead to more successes than not. The Teamwork and Team Building workshop will encourage participants to explore the different aspects of a team, as well as ways that they can become a top-notch team performer. Your participants will be given the details and concepts of what makes up a team, and what factors into being a successful team and team member.

The Art of Negotiation

Just like conflict resolution, negotiation requires tact and diplomacy, which may be difficult given the varied interests involved in any given situation. Negotiation is important in working with teams and in the workplace in general. Take this course to learn what effective negotiation is, how to accomplish it, and some everyday negotiation challenges and how to solve them.

The Essentials of Succession Planning

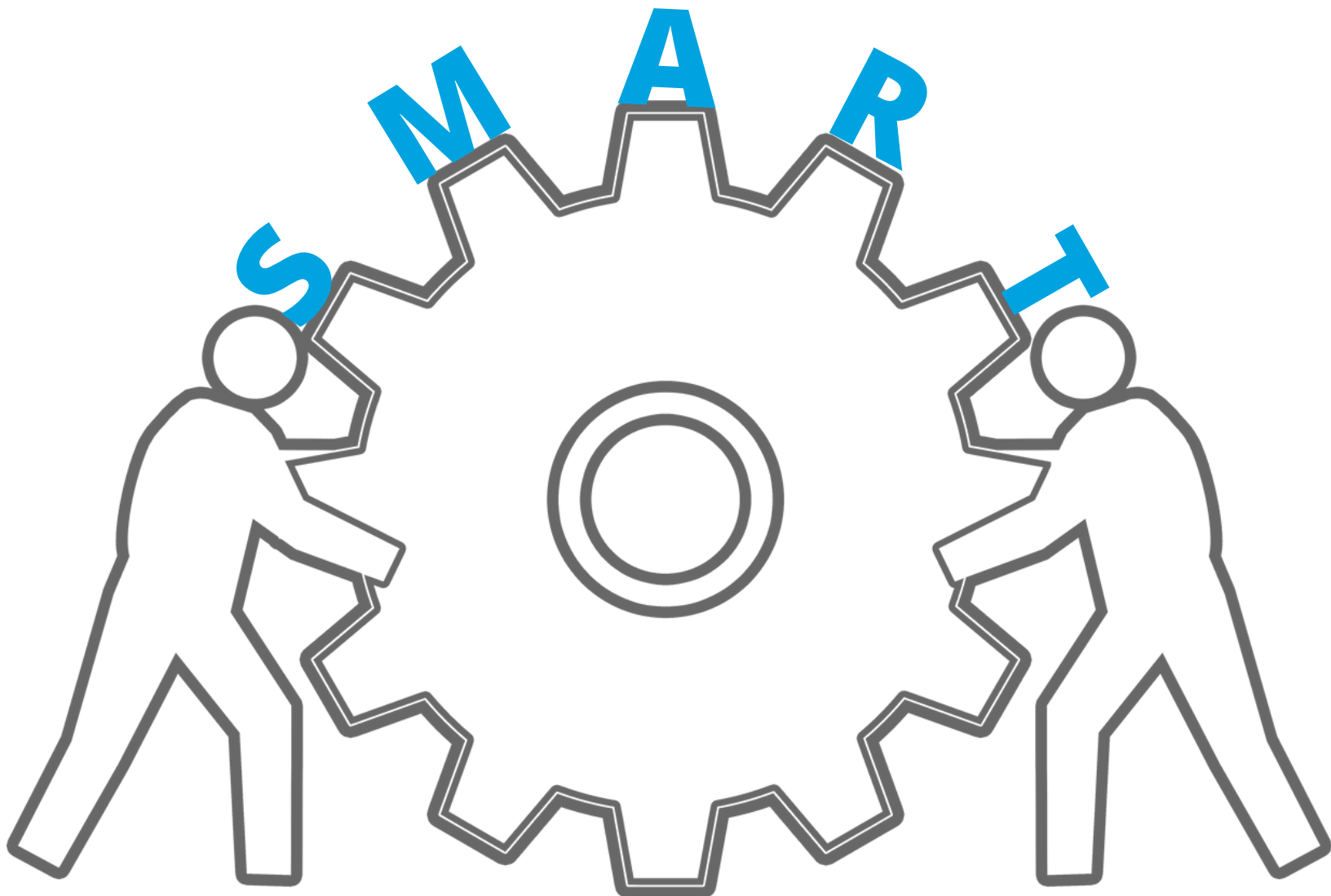
Take this course to learn about the five pillars of effective succession planning: First, creating an environment that fosters growth for future leaders; second, developing an actionable and forward-thinking plan; third, determine what skills and attributes are required of future leaders; fourth, creating training and development plans for future leaders; and fifth, monitoring/adjusting the plan and measuring progress. This course will explore the reasons why having a succession plan is critical to organization success, and how to create an effective and actionable plan.

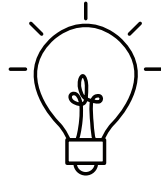
Soft Skills



The SMART Approach to Goal Setting

Tony Robbins said, "Setting goals is the first step in turning the invisible to the visible." In order to achieve the outcomes you desire, it is important to set goals and milestones. Setting specific and measurable goals will help you reach those milestones. This course will help you set realistic goals and determine the steps you can take to stick with the goals and reach your desired destination in your life or career.



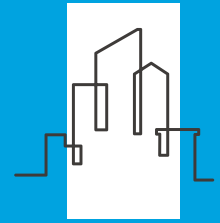


Technical Courses

Bike Trail Engineering Design
Bridge Rehabilitation & Inspection
Civil/Site Design
Constructability Reviews: Save Time, Money & Resources
Construction Cost Estimating
Construction Specifications
Cost Estimating: An Introduction to Concepts & Applications
Curb Ramp Implementation & Design
Developing & Implementing a Project Construction Safety Program
Engineering Design of Pedestrian Facilities for ADA Accessibility
Engineering Ethics
Environmental Technical Series
Marine Pier Inspection: An Introduction
Navigating the Environmental Process for Federally Funded Transportation Projects
NEPA 101
OSHA Construction Safety Review
Porous Pavement & Raingarden Engineering Design
QA/QC in Design & Construction
Scheduling
Stormwater Management: Staying Dry while Managing Stormwater
The Role of the Resident Engineer in Construction Management

Courses can be customized to meet the specific needs of employees, departments, and positions.

Technical



Bike Trail Engineering Design

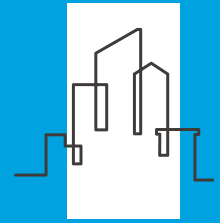
Today, the Philadelphia area boasts one of the nation's premiere networks of bicycle paths. Take this course to learn more about the growing interest in bike paths; some basic concepts of planning; and important technical design considerations when designing bicycle paths.

Bridge Rehabilitation & Inspection

Take this course to learn the importance of bridge inspection and the coordination, scheduling, cost, context sensitive design and traffic control/sequence of work issues related to bridge rehabilitation projects.

Civil/Site Design

This course provides an overview of the civil/site design process. Topics include site survey, field visits, construction drawings, grading, earthwork analysis and balancing, drainage, stormwater management, erosion and sediment control, and permitting. This course includes a case study, instruction, and practical exercises to reinforce the concepts learned.



Constructability Reviews: Save Time, Money & Resources

Constructability reviews can significantly reduce the costs, delays, and claims associated with construction projects. This course is an introduction to the basics of Constructability Reviews, and presents some key issues to consider when developing an effective Constructability Review process.

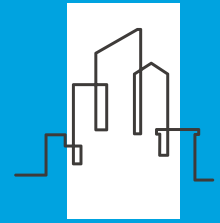
Construction Cost estimating

Cost Estimating is the predictive process used to quantify, cost, and price the resources required by the scope of a project. This course will focus on the components of cost estimating for major infrastructure projects. Students will learn about the many elements that must be considered in order to establish a project budget, as well as some basic estimating techniques used to establish costs and deal with uncertainties. At the end of the class, students will understand the methods used in development of a project budget. The class includes instruction and practical exercises to reinforce the concepts learned.

Construction Specifications

Construction specifications are important documents during the construction phase of a project. Take this course to learn the principles of specification development and organization; the role of specifications as legal and technical documents and its relation to other important construction documents (plans, contract, etc.); the various formats of specifications, and the use and need for specifications by the design and construction teams (designers, contractors, construction manager, owner).

Technical



Cost Estimating: An Introduction to Concepts & Applications

This course presents an introduction to cost estimating from quantity take-offs to unit pricing. Students will explore real-world estimating exercises: labor costs, equipment costs, materials costs, crew composition, crew productivities, site logistics and staging, mobilization costs, contractor overhead and indirect costs, and contractor home office costs and profit. Estimate exercises in class will include development of costs and bid prices for earthwork, concrete, and structural steel.

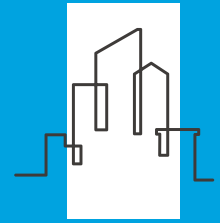
Curb Ramp Implementation & Design

This course presents an overview and preliminary design considerations for curb ramps, including design criteria, design standards, ADA requirements, and minimum and maximum slopes and widths. At the end of this class, participants will be able to: discuss the basic principles, design constraints, and applications of curb ramps; define the design criteria for curb ramps; discuss technically infeasible situations with curb ramps; identify the relationship between curb ramps and other roadway facilities and features; and explain common design examples.

Developing & Implementing a Project Construction Safety Program

Construction safety issues are a number one priority on a construction site, for which the entire construction team must be on board (owner, architect/engineer, general contractor, construction manager, subcontractors and suppliers). Whether you are creating a new construction safety program, or are considering revising a current plan, this course will offer you some valuable guidance and practical advice in reducing construction site injuries and fatalities.

Technical



Engineering Design of Pedestrian Facilities for ADA Accessibility

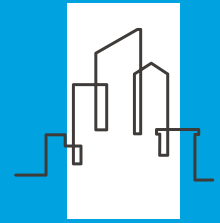
Pedestrian facilities are growing in use and popularity, and it is the law to design new facilities with accessibility to people with disabilities. This course will cover various pedestrian design elements, such as crosswalks, pedestrian bridges, sidewalk design, roadway intersections, curb cut ramps, pedestrian signals, temporary and permanent traffic control, and regulatory and legal issues. It covers the engineering design as well as construction and maintenance.

Engineering Ethics

Engineers, responsible for the welfare of the public, have to uphold high ethical standards. Professional Engineers have to obey a code of ethics. But do you know what would constitute a violation of the Code of Ethics? Are there gray areas, or are the issues black and white? Take this course to learn the basics of the Code of Ethics for Engineers and some gray areas you need to know as a practicing engineer.

Environmental Technical Series

This course is a series of topics, including: Phase I environmental site assessments, pre-demolition building surveys, and soil management. At the end of this class, participants will be able to: discuss the four components of a Phase I ESA; discuss the importance of performing a Phase I ESA and pre-demolition building surveys; discuss what pre-demolition building surveys are and why they are needed; explain the elements of effective soil management; describe when soil management reports and/or specifications are recommended; and discuss the benefits associated with preparing a soil management plan.



Marine Pier Inspection: An introduction

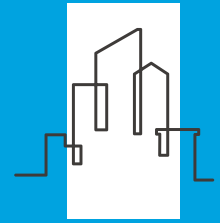
This course presents an overview of marine pier inspections, including a brief history of inspections, the benefits and processes for pier inspections, the criteria for inspections, and the processes for correcting any deficient piers. At the end of this class, participants will be able to: explain the history of pier inspections; identify the constraints that are critical in effective and accurate pier inspections; describe the elements of a detailed pier inspection and what to analyze; identify the important factors and issues that affect correcting deficient piers; and discuss how coordination affects pier inspections.

Navigating the Environmental Process for Federally Funded Transportation Projects

All projects are impacted by the environmental process. This course will describe the environmental process for federally-funded transportation projects, through instruction and case studies.

NEPA 101

Take this training for an introduction to the National Environmental Policy Act of 1969 that takes into account the potential impacts of projects on the human and natural environment. We will discuss regulations and guidance for NEPA implementation and project decision-making, the NEPA requirements as implemented by the Council on Environmental Quality, purpose and need, alternatives development and analysis, impact analysis, public involvement, interagency coordination, mitigation, and documentation.



OSHA Construction Safety Review

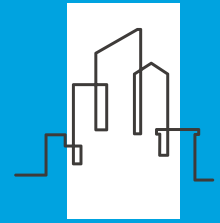
The construction phase of a project is different than any of the other previous phases (including planning and design). Working on construction sites can sometimes be dangerous and specific safety precautions must be exercised. This course will give students a general overview of the Occupational Safety and Health Administration (OSHA) and how this organization specifically pertains to construction safety in our industry.

Porous Pavement & Raingarden Engineering Design

Porous pavements and raingardens are very effective means of managing stormwater runoff, an increasingly important part of project development. Take this course to learn more about these two important methods of stormwater management and how they can be incorporated into your projects.

QA/QC in Design & Construction

Quality is critical in design and construction, especially in our industry, 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. Professional services (design) 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.



Scheduling

This course will be helpful for those who have little experience with scheduling as well as those who have some practical experience. Students will learn the background of scheduling goals, commonly used scheduling approaches, terms and properties commonly used with Critical Path Method (CPM) scheduling, and the steps that are performed during the development of a CPM schedule. At the end of the class, students will be able to develop a CPM schedule and logic diagrams and employ good schedule preparation techniques. The class includes instruction and practical exercises to reinforce the concepts learned.

Stormwater Management: Staying Dry while Managing Stormwater

Stormwater management is of critical importance as development (and impervious area) increases and climate changes occur. Flooding and stormwater quality are issues for which design remedies need to be implemented. Take this course to learn about various challenges, techniques, BMPs, and governing laws associated with stormwater management.

The Role of the Resident Engineer in Construction Management

The Resident Engineer (RE) for any construction project plays a critical role in a project's success. Responsibilities of an RE include a myriad of diverse tasks, from administering the contract, to managing field staff, to monitoring the construction schedule, to closing out the project. Take this course to learn why an RE plays one of the most important roles in a construction project, and what kinds of tasks the RE has to complete to make a construction project successful.



WE HOPE YOU ENJOY THE CLASSES!

**LET THE LEARNING
BEGIN**

FOR MORE INFORMATION, CONTACT US AT:
TRAININGINSTITUTE@URBANENGINEERS.COM
