## **TETP Construction Training for External Partners**

Instructor-led and free online self-paced e-learning courses for consultants, contractors, and local agencies.

Instructor-led courses are offered between October and May each fiscal year. Click a course title to check for upcoming offerings in SOC Learns.

| Grouping                             | Class                                     | What you'll learn   | Format     | Length  | Cost |
|--------------------------------------|---|---|------------|---------|------|
| Engineering /<br>Technical<br>Design | Adobe Sign Training I for CDOT/Consultant | This curriculum explains how to electronically sign basic documents and electronically seal each page of a record set. If you are a conslutant and you are new to Adobe Sign, if you only need to e-sign basic documents, or if you need to e-seal project record sets and your project is using the old templates for e-sealing every record set page, then you should take Adobe Sign Training I.   | Curriculum | 2 hours | Free |
| Engineering /<br>Technical<br>Design | Adobe Sign Training I for Local Agency    | This curriculum explains how to electronically sign basic documents and electronically seal each page of a record set. If you are a Local Agency employee and you are new to Adobe Sign, if you only need to e-sign basic documents, or if you need to e-seal project record sets and your project is using the old templates for e-sealing every record set page, then you should take Adobe Sign Training I.  | Curriculum | 2 hours | Free |
| Engineering /<br>Technical<br>Design | Adobe Sign Training                       | Due to the significant reduction in the time required to set up plans for electronic sealing, in August 2020 the Architects, Professional Engineers, and Professional Land Surveyors (AES) Board approved a CDOT-requested rule change which allows an option to seal only the cover page(s) of a set of drawings. This training explains how to seal only the cover page(s) of a record set. Learners should take Adobe Sign Training II if their project is using the new cover page templates. | E-learning | 2 hours | Free |

| Project<br>Management | ATSER Training                                    | This training is held every other wednesday and allows learners to log into the ATSER test evironment and follow along with the intructor to learn how to navigate the system. Learners are also able to create samles and COC/CTR records. Students are also shown how to access job aids and where to gain access to the production environment. Register for the course by completing this <a href="Google Form">Google Form</a> and view the <a href="full course Agenda">full course Agenda</a> for more information.  | Virtual<br>Instructor-<br>Led | 3 Hours   | Free  |
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| Engineering           | Bridge Inspection Training                        | This course has been developed to increase knowledge and understanding of structural and bridge construction projects. The training discusses commonly identified quality assurance and quality control challenges on CDOT structural projects including high-risk construction elements, critical points where additional documentation or inspection may be needed, and how to anticipate, mitigate, and best manage these elements.  | Instructor-<br>led            | 2 days    | \$250 |
| Project<br>Management |   | This course introduces the requirements for the use of construction materials and manufactured products in federally-funded highway construction projects, as well as the requirements for the documentation of the processes performed on these materials. This course will also introduce learners to applicable funding limits, the small grants threshold, the De Minimis Waiver, and two CDOT forms — Form 1600 and Form 1610 — used by the Contractor to track the types, quantities, and cost of construction materials and to report on projects to which the Build America, Buy America Act is not applicable. | E-learning                    | 1.5 hours | Free  |
| Project<br>Management | Buy America<br>Requirements for<br>Iron and Steel | This course introduces the requirements for the use of iron and steel products in federally-funded highway construction projects and explains how to document the processes performed on these iron and steel products. Failure to comply with both the use and the documentation requirements can result in the need to take corrective action, reduction in payment to the Contractor, loss of federal funding, and criminal and civil liability.   | E-learning                    | 2 hours   | Free  |

| Project<br>Management | Construction Budget Mgmt for Project Managers & Engineers | In this online course, Project Managers and Engineers will gain a basic understanding of project construction budgets, resource allocation and the budget management process during each phase of Preconstruction. The course introduces the software programs used to manage different parts of the financial and planning process as well as the Statewide Transportation Improvement Program (STIP), key budget terms, overs and unders, and indirect costs.   | E-learning | 4 hours | Free |
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| Engineering           | Construction Change Orders                                | This course is for Project Engineers and Resident Engineers involved with Change Orders for construction projects. It explains the who, what, when, where, why and how of Change Orders, using simple and complex examples. It also explores how change orders and letters of explanation need to be written and processed to effectively modify the contract between CDOT and the construction contractor while adhering to federal and state regulations and requirements. There are no prerequisites, but construction project experience, familiarity with standards/specifications and familiarity with SiteManager software are strongly recommended. | E-learning | 2 hours | Free |
| Engineering           | Construction Force Accounts                               | This course is for Project Engineers and Resident Engineers who work with the force account method of payment on construction projects. The course uses simple and complex examples to explain the who, what, when, where, why and how of force account.  | E-learning | 2 hours | Free |
| Engineering           | Construction  Manual - Section  100                       | This course for CDOT Project Managers, Project Engineers, Construction Engineers and Inspectors introduces the key subsections in the Section 100 Standard Specification. It addresses the basic rules and regulations of project administration and issues where the majority of conflicts and disputes arise. This e-learing course is a prerequisite for the instructor-led Construction Project Administration course.  | E-learning | 2 hours | Free |

| Engineering           | Construction Project Administration                  | This course introduces best practices in construction project administration for CDOT Project Managers, Project Engineers, Construction Engineers and Inspectors. It teaches learners about the contract and its implications, facilitating meetings, conducting field inspections, completing and reporting paperwork, and accessing and interpreting documentation. The Construction Manual: Section 100 E-learning course is a required prerequisite. The Construction Change Orders e-learning course is a recommended prerequisite. | Virtual<br>Instructor-<br>led | 2 days    | \$250 |
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| Engineering           | Construction Project Administration / Local Agencies | This course introduces Local Agency Project Managers to CDOT's best practices in project administration. Understanding the contract and its implications, meeting facilitation, field inspections, federally-required paperwork and reporting, and accessing and interpreting documentation will be presented.   | Instructor-<br>led            | 2 days    | \$150 |
| Engineering           | Construction Project Financials (Form 65)            | This online course identifies and explores the Project Financials Statement, more commonly known as Form 65, and how you can identify, interpret and understand the financial status of your project, focusing on Post-Award.  | E-learning                    | 2 hours   | Free  |
| Project<br>Management | Federal Buy America Requirements Curriculum          | This curriculum includes the Buy America Requirements for Iron and Steel and the Build America, Buy America E-learning courses. These self-paced elearning courses focus on the requirements of two domestic content laws aimed at protecting American manufacturing and manufacturing jobs: the Buy America Act (1978) and the Build America, Buy America Act (2021).   | Curriculum                    | 3.5 hours | Free  |
| Engineering           | Managing Contract Time                               | This course covers the basics of Managing Contract Time. This course teaches learners to recognize hwo to use the Form 859 to establist contrat time and identify when to use different types of contract time. It also discusses different types of delays and methods to add additional time to a contract. This e-learning course is a prerequisite to the instructor-led Managing Contract Time course.  | Virtual<br>Instructor-<br>led | 1 day     | \$150 |

| Engineering | Managing Contract Time E-learning                           | This course is a prerequisite for the one day Managing Contract Time instructor-led course. This e-learning course familiarizes learners with important information found in existing CDOT materials relating to managing contract time and addressing delays.   | E-learning | 2 hours  | Free |
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| Engineering | Materials Technician Certification                          | This online course is designed for materials testers who are new to working with CDOT, including consultants and new CDOT hires. The course provides information and simulated situations, so students can learn about and practice the CDOT approach to administering testing, documentation and communication on construction projects. By the end of the course, materials testers will understand their role on a CDOT project and be able to find and use available resources, follow best practices, communicate with team members, enter and verify data in the Laboratory Information Management System (LIMS), and follow appropriate documentation procedures. Prerequisites include successful completion of CDOT's SiteManager Materials (SMM)/LIMS for Samplers and Testers training and at least one current CDOT certification for asphalt, concrete and/or soil testing. | E-learning | 3 hours  | Free |
| Engineering | Municipal Separate Storm Sewer System (MS4) Permit Overview | This one-hour course covers the history of water quality in the United States, and the regulations and agencies that govern the MS4 permit. It describes CDOT's role in managing the water quality within its MS4 boundary and covers the seven programs that make up the permit.  | E-learning | 1 hour   | Free |
| Engineering | MS4 Overview for Engineering: Supplement                    | CDOT Engineers play a critical role in meeting CDOT's MS4 Permit compliance throughout the design and construction of projects. This 30-minute supplemental module provides additional information for the three MS4 programs that CDOT engineers interact the most with to maintain water quality - Industrial Facilities, Construction Sites, and Permanent Water Quality.   | E-learning | 1/2 hour | Free |

| Engineering                      | MS4 Overview for<br>Maintenance:<br>Supplement | CDOT Maintenance Staff play a critical role in meeting CDOT's MS4 Permit compliance. This 30-minute supplemental module provides additional information for the five MS4 programs that CDOT maintenance interacts the most with to maintain water quality, including Construction Sites, Permanent Water Quality, Illicit Discharges, Pollution Prevention and Good Housekeeping, and Wet Weather Monitoring programs.  | E-learning                    | 1/2 hour | Free  |
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| Professional/<br>Personal Skills | Negotiation<br>Fundamentals E-<br>learning     | This course explains what a negotiation is and why negotiation skills are important at CDOT. It also explores the differences between the distributive and integrative approaches to negotiation, the five steps in the CDOT negotiation process, and the importance of documentation in the negotiation process. Lastly, it introduces you to the DISC behavioral styles and the importance of using effective strategies for negotiating with each style.   | E-learning                    | 2 hours  | Free  |
| Project<br>Management            | PMWeb Instructor-<br>led Training              | This course is held every other wednesday and is intended for Construction Project Engineers and Project Managers who use PMWeb. The course covers how to navigate PMWeb and utilize functional workflows including Stockpiled Items, Daily Diaries, Time Counts, Spec Added Items, Change Orders, Pay Estimates, Projected Quantities, and Correction Reports. Register for the course by completing this Google Form.   | Virtual<br>Instructor-<br>led | 7 hours  | Free  |
| Project<br>Management            | Project First Program                          | This course prepares learners to successfully use the Project First Program on a construction project. Project First formalizes the partnering process to proactively identify and manage risks through collaboration with the goal of creating project wins while maintaining relationships. By completing this course, learners will understand: the requirements of the Project First standard special provision; how to facilitate Project First workshops; how to manage the Escalation Ladder; how to Manage the Project Risk Assessment Tool; how to differentiate when an issue should follow the Project First Escalation Ladder vs. the Disputes and Claims for Contract Adjustments process; and understand all Project First resources. | Virtual<br>Instructor-<br>led | 5 hours  | \$100 |

| Project<br>Management | Project Lifecycle Simulation                                | The Project Lifecycle Simulation places participants in an environment where they can experience tradeoffs that are often part of complex projects. During the activity, participants learn about important project lifecycle levers and drivers, and gain a deeper appreciation for how each CDOT functional area contributes to managing the complexities of a large-scale project.   | E-learning                    | 2 hours | Free  |
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| Project<br>Management | Reviewing Critical Path Method (CPM) Construction Schedules | This course addresses specific issues related to reviewing a Contractor's Critical Path Method (CPM) schedule per the requirements of the CDOT Standard Specifications subsection 108.03 Project Schedule. Using CDOT Standard Specification 108.03 as guide, participants will work in small groups to evaluate contractor schedules and reports to find potential issues within schedule submittals and take corrective action, if necessary. Upon completing this course, learners will have the skills to apply CDOT Standard Specifications subsection 108.03 Project Schedule to CPM Schedules submitted by the contractor. | Virtual<br>Instructor-<br>led | 1 day   | \$150 |
| Project<br>Management | SAP Project Portal  | The SAP Project Portal e-learning course provides a high-level overview of the SAP Project Portal. It also describes key fields used for project management during the Preconstruction and Construction phases and explains how the Project Portal interacts with other software programs.  | E-learning                    | 2 hours | Free  |
| Project<br>Management | Utility Engineering Project Management E- learning          | The Utility Engineering Project Management E-learning introduces CDOT's process and methodology for managing sub-surface utility investigation and relocation. CDOT's process emphasizes collaboration with utility owners and other stakeholders throughout a construction project. This course is a prerequisite for the one day instructor-led Utility Engineering Project Management Workshop.  | E-learning                    | 4 hours | Free  |

| Project<br>Management | Utility Engineering Project Management Workshop                               | The Utility Engineering Project Management Workshop is an immersive learning experience that challenges participants to analyze and assess the needs for utility coordination throughout the project lifecycle from planning through design and construction. This course utilizes resources from past projects at CDOT to provide a learning experience that is grounded in the context of everyday practice in utility engineering.   | Instructor-<br>led | 1 day   | \$150 |
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| Project<br>Management | Work Zone Safety and Mobility - Development of Transportation Management Plan | The course focuses on the importance of the Work Zone Mobility Rule implementation (23 CFR Section 630 Subparts J & K) supporting required planning, design, positive protection for workers and reporting for creating safe work zones for roadway workers and the traveling public, by presenting in-depth information and providing practice in creating and utilizing effective Transportation Management Plans and Traffic Control Plans for various types of projects.  | Instructor-<br>led | 1 day   | \$150 |
| Project<br>Management | Work Zone Safety<br>and Mobility E-<br>learning                               | This course introduces the importance of the Work Zone Mobility Rule implementation (23 CFR Section 630 Subparts J & K) supporting required planning, design, positive protection for workers, and reporting for creating safe work zones for roadway workers and the traveling public. It will introduce basic work zone safety and mobility concepts, including: the rules and policies that govern work zone safety and mobility; the specific roles involved in developing and implementing a Transportation Management Plan (TMP); the components of a TMP, including the Traffic Control Plan, Traffic Operations, and Public; information and the strategies available for each of these components; implementing the TMP; and reporting and communicating TMP requirements. The Work Zone Safety and Mobility Elearning course is a prerequisite to the one-day workshop. |                    | 3 hours | Free  |

| Project<br>Management | Work Zone Safety in Action: Grand Avenue Bridge - CM/GC Bridge Replacement in a Mountain Urban Corridor Interface | Explore the remarkable story of the Grand Avenue Bridge replacement in Glenwood Springs. Join the Colorado Department of Transportation (CDOT) team—including Project Director Roland Wagner, Construction Project Engineer Josh Cullen, Communications Manager Tracy Trulove, Public Information Manager Kathleen Wanatowicz, and Assistant Project Engineer Graham Riddile—as they reveal the innovative strategies used to create project success. To complete the curriculum you'll need to pass a five question assessment with a score of 70% or better.   | Curriculum | 1 hour   | Free |
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| Project<br>Management | in Action: State<br>Highway 71 -  | Join CDOT Project Engineer, Drew Furnes, as he takes you behind the scenes of the State Highway 71 restoration project, a vital roadway south of Punkin Center and north of Ordway in rural Colorado. The curriculum explores the journey of transforming a failing asphalt road into a smooth, safe route for local farmers and ranchers. From the innovative use of Full Depth Reclamation (FDR) and hot mix asphalt overlays to the strategic timing around harvest season, Drew shares how the team tackled technical challenges while prioritizing community needs. To complete the curriculum you'll need to pass a five question assessment with a score of 70% or better.  |            | 1/2 hour | Free |
| Project<br>Management | Work Zone Safety in Action: State Highway 93 - Design-Bid-Build in an Urban Setting                               | Join Owen Kyte, a P.E. I with CDOT Region One West Program, as he walks through the planning, challenges, and real-time decision making behind the 2023 resurfacing project on State Highway 93 through Golden and Jefferson County. This curriculum explores how CDOT addressed traffic control, public concerns, stakeholder coordination, and work zone safety through detailed planning and on-the-ground adaptability. Learn how the Transportation Management Plan (TMP) evolved in response to weather delays, staffing shortages, and safety concerns - and why consistent communication and community engagement were critical to the project's success. To complete the curriculum you'll need to pass a five question assessment with a score of 70% or better. | Curriculum | 1/2 hour | Free |

| Writing for Engineering Professionals 1 | Writing for Engineering Professionals 1 is a one-day technical-writing workshop. It is the prerequisite course to the Writing for Engineering Professionals 2. All training materials have been customized for those in civil engineering, the environmental sciences, construction, and related fields. This workshop teaches writing as a science by using metrics and strategies to ensure clarity and conciseness. The target audience for this workshop includes engineers and support staff who must write engineering documents. | Virtual<br>Instructor-<br>led | 1 day | \$100 |
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| Writing for Engineering Professionals 2 | Writing for Engineering Professionals 2 reinforces and expands on the writing strategies and metrics delivered in the first workshop, Writing for Engineering Professionals 1. This course teaches learners how to adjust reader perception by applying six tone strategies and how to increase conciseness using six easy edits. It also explains how to organize documents using five logical patterns and how to use proofreading strategies to produce error-free documents.  | Virtual<br>Instructor-<br>led | 1 day | \$100 |
| Writing for Engineering Professionals 3 | Learners can enroll in Writing for Engineering Professionals 3 even if they have not completed Writing for Engineering Professionals 1 or 2. This course teaches learners how to ensure clarity of a message, how to create parallel structure at the word, phrase, and sentence level, as well as when to use active or passive voice when writing technical documents.  | Virtual<br>Instructor-<br>led | 1 day | \$100 |