# **Budget Management for Proj. Mgrs. & Engineers (E-learning)**

This course is designed to provide a basic understanding of project construction budgets and our overview of Resource Allocation. It introduces the software programs used to manage the financial and planning process. The course also covers the budget management process of projects including the STIP, key terms, the different project phases, overs/unders and indirect costs.

# **Design Project Administration (E-learning)**

This on-line course presents design project administration for project designers and managers. It serves as a resource tool, providing convenient access to the information and resources needed to effectively perform design project administration. It also provides information and items supporting the primary steps in the design process: Scoping, FIR, FOR and Ad.

# Plan Checking (E-learning)

A quality set of contract documents creates competitive bids and results in fewer disputes or claims. This course is designed to provide a basic understanding of how to improve plan quality by using an appropriate plan checking process. Participants will have the opportunity to review a set of plans that are ready for advertisement and to cross check them with the specifications and engineer's estimate. Students will make use of the PS&E checklist and compare the advantages of different methods of checking plans. The course is segmented into 6 modules: Introduction to Plan Checking, Your Plan Checking Process, Checking the Plan Sheets, Pay Items, Special Provisions and Additional Plan Documents.

# 7/28/2015 Survey Basics for Engineers (E-learning)

The course is designed to introduce the fundamentals of surveying as it relates to highway construction projects. The course is segmented into the following modules: Measuring the Earth, Applying Earth Measurements, Land Ownership and Right-of-Way and Measurements Technologies. Topics include coordinate systems, survey plan sheets and survey data, verifying project location and how to request a survey, and the tools and technologies of surveying. It also provides concepts of selecting the best method, time needed, accuracy, LIDAR, and total station, among others.

\* To register for E-learning courses use the following link: <a href="http://cdot-elearning.regislearning.com">http://cdot-elearning.regislearning.com</a>

Construction Inspector Qualification Testing \$25.00 ea. test • R6 N. Holly, Materials Lab

Basic Math, Surveying and Plan Reading tests.



Transportation Engineering Training Program (TETP)

# **Contact Us:**

Allison Wilson, Training Manager 303.757.9298 Allison.Wilson@state.co.us

### Seating Availability

Seating availability depends on CDOT's internal training needs and demands.

### Enrollment

To enroll in a TETP course, please send an email to the contact listed above and include the following information:

- Employee's Name Company Name
- Phone Number Company Address
- Email Name of Course

Participants will receive a confirmation email at least 4 weeks prior to the class.

### **Payment**

Payment must be made by check or money order and received prior to the first day of training. Registration fees are fully refundable up to 5 business days before class.

Make checks or money orders payable to Colorado Department of Transportation:

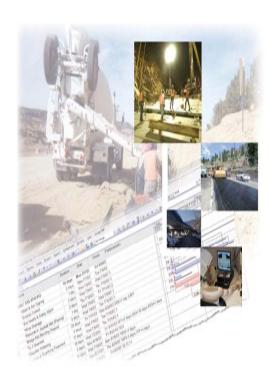
Colorado Department of Transportation Division of Administrative Services 4201 E. Arkansas Ave, 4th Floor Denver, Colorado 80222 Attn: Allison Wilson

### Disclaimer

These educational courses are intended as guidance regarding design, construction and management of transportation projects and do not constitute official rules or regulations of CDOT.

# Transportation Engineering Training Program

The Colorado Department of Transportation Engineering Training classes are available to our partners in the transportation community.



# 2016 TETP Classes

# **Applied Roadway Design**

4-day course • \$1050

This class focuses on applying the principals described in the CDOT "Road Design Guide", AASHTO's "Greenbook" and "Roadside Design Guide", as well as other industry accepted manuals. It also avoids specific design software.

## **CDOT Lighting Design Guide Training**

2-day course **\$350** 

Lighting Design for CDOT projects emphasizes quality lighting for motorists by encouraging effective lighting methods. This includes designing for optimal visibility, selecting proper equipment, locating lighting effectively to minimize glare, increasing uniformity, and reducing light pollution. Topics include: Lighting Guidelines overview, visibility basics, Dark Skies' State Law impacts, lighting equipment selections, roadway design guidelines, selected non-roadway design examples, introduction to CDOT M standards and introduction to CDOT lighting specs (sections 613 and 715).

# **Construction Project Administration**

3-day course • \$460

The Construction Project Administration specialty course is intended to introduces CDOT project managers best practices in project administration. This includes understanding the contract and its implications, meeting facilitation, field inspections, paperwork completion and reporting, and documentation helpful to a project's success.

### **Context Sensitive Solutions**

1-day course • \$100

This course is an introduction to the basic elements and principles of Context Sensitive Solutions. The course provides participants with the tools to apply Context Sensitive Solutions to project design.

### **CPM Scheduling for Design & Construction**

2-day course - \$350

This is an intermediate level course addressing scheduling including creating and managing CDOT design and construction schedules in Microsoft Project 2010.

Basic learning objectives include:

- Introduce basic functions of Microsoft Project 2010 used to create a work schedule.
- Describe the fundamental techniques used to create and analyze a Critical Path Method schedule.
- Create a reasonable, achievable schedule in Microsoft Project based on the project's key tasks.
- Enter the start, finish and milestone dates.
- Update Microsoft Project schedule to show changes in project schedule.
- Analyze a complex Critical Path Method schedule to determine the status of a project, identifying slack or float and delays.

# **Design Work-Hour Estimation**

2-day course • \$350

This is an introduction to developing design workhour estimates for both in-house and consultant staffed projects. The work-hour estimates will be based on CDOT's generic scope of work.

# **Dispute Resolution Boards-Construction Project**

1-day course • \$100

This course is intended to provide potential users of the process and potential members of dispute resolution boards with a good foundation in the establishment of Dispute Resolution Boards (DRBs), operation of DRBs, DRB ethics, and DRB hearings. The course will also explain how to effectively present an issue to a DRB.

### **Disputes and Claims Resolution**

1-day course • \$100

This is an introductory-level course provides instruction on resolving disputes and claims according to CDOT specifications.

# Interchange Planning and Design

2-day course **=** \$350

This course covers basic traffic operational and geometric design for various interchange types. Students will examine the process of efficient study for interchanges including selection of appropriate configuration and development of design and traffic documentation to support decision-making. Students will be trained in the latest tools and techniques for the planning and design of service interchanges. Attendees will be given an opportunity to work as part of a group on an interchange reconstruction problem.

# **Managing Contract Time**

1 -day course • \$100

Access the pre-work materials for this elearning course at: http://cdotelearning.regislearning.com.

This course is designed for Project Managers and Project Engineers and is an overview of how to manage contract time. The course also addresses using CPM schedules to manage contract time and delay issues on construction projects. There will be detailed discussions on issues that arise with an early completion date, how to handle a delay, float ownership, the benefit of using a baseline schedule, and the risks and benefits of risks and benefits of common encountered while managing a construction project.

# **Project Development Manual**

1-day course • \$100 1/2 E-learning 1/2 instructor-led

This course introduces you to the Project Development Manual (PDM). CDOT has specific policies and processes in place to ensure all projects are conducted consistently and efficiently. The PDM is designed to support your project and its specific requirements. The PDM helps you avoid common pitfalls and explains why you need to take specific steps at certain times

**Visit TETP FY2016 Training Calendar for** 

# **Reading Structural Plans**

2-day course **\$350** 

This course will prepare engineers, technicians and inspectors to read and interpret structural plans in order to provide design input and ensure construction compliance.

# Writing for Engineering Professionals (Write-Logic) 3-day course • \$460

Day One, you will learn the fundamentals of technical writing. This program will provide strategies to increase the clarity of your writing, metrics to enhance its readability, and best practices to improve your email communications.

Day Two, you will learn concepts building on the fundamentals taught in the Day One. You will learn how to adjust your writing for tone, ensure its coherence (flow), apply additional clarity and organization strategies, and proofread to ensure error-free documents.

Day Three, you will review grammar and punctuation concepts and apply them to technical documents. When reviewing grammar concepts, you will examine the use of active versus passive voice, parallel structure, and agreement. When studying punctuation concepts, you will review the use of commas, hyphens, colons, semicolons, and dashes.