

HIGHWAY/CONSTRUCTION SURVEYING

Course Description

This workshop will introduce participants to the most common measurement techniques encountered in the highway and construction environment. Topics will include Taping, Electronic Distance Measurement, Instrument set up, Leveling, and Angular Measurements.

More advanced topics will be introduced, such as GPS, and GIS, if time allows.

Hands on Lab Exercises will include:

- Testing the accuracy of Leveling Equipment.
- Calculating & Laying out grade stakes for roadways, gutters, curbs, and pipelines.
- Introduction to the Total Station, and Topographic Surveying.

Participants are welcome to bring in surveying equipment they have access to, for class inspection and discussion. In addition, their equipment can be checked out for condition and accuracy.

Contact Baystate Roads for additional information at:
admin@umasstransportationcenter.org
Maximum class size is 12.

Target Audience

Supervisors, Foremen and workers highway and construction environment interested in learning most common measurement techniques in surveying.

Instructor

Kenneth B. Black

Kenneth B. Black is a Civil Engineer, Land Surveyor, and Engineering Educator with over 30 years experience. He has taught several different seminar topics for Baystate Roads, and the UMass Transportation Center. He presently has a small private practice in Western Massachusetts.

He has a PhD in Civil engineering from UMass/Amherst, and has taught Engineering at UMass, and Mathematics at Smith College.

This event is accessible to people with disabilities and individuals with limited English proficiency. If you need a reasonable accommodation (such as American Sign Language Interpreters, assistive listening devices, handouts in alternate formats, etc.) and/or language assistance (such as translated documents or an interpreter) to fully participate, please contact Cindy Schaedig at 413-588-4549 or cschaedig@ecs.umass.edu at least 14 days prior to the event. Such services are provided free of charge

This Baystate Roads (LTAP) workshop is a cooperative effort of the Federal Highway Administration, the Massachusetts Department of Transportation and the University of Massachusetts Transportation Center.



UMass Transportation Center, 214 Marston Hall, Amherst, MA 01003
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www.UMassTransportationCenter.org



Agenda

- 8:00 AM Breakfast/Registration
- 9:00 Introduction
- 9:15 Linear Measurements
- 10:00 Break
- 10:15 Vertical Measurements
- 11:10 Angular Measurements
- 12:00 PM Lunch
- 12:45 Afternoon Lab
- Applied Field Exercises
(Participants will rotate through three hands-on field exercises)
- 3:00 Evaluations/Adjourn

Class Dates:

October 8, 2019

New Marlborough Fire Station
205 Norfolk Road, New Marlborough
8:00AM – 3:00PM

Registration Fee:

**\$75.00 Public Sector/
\$150.00 Private Sector**

If applicable, make checks payable to: University of Massachusetts. Please include course name and full name of attendee(s) on check Mail to: Baystate Roads, UMass Transportation Center, 214 Marston Hall, 130 Natural Resources Rd., Amherst, MA 01003.

Cancellations must be received 7 days prior to the workshop or you will be invoiced.

**This Course counts towards 1 Roads
Scholar Credit/0.6 CEUs**