

**TE-29 California Traffic Engineering License Exam Review
Fall 2018 (Online) Course Agenda***(Revised: 9 April 2018)*

[California Traffic Engineer Exam](#)
[October 25, 2018 \(Thursday\)](#)
[Traffic Examination Reference Materials](#)

Session 1: Wed, September 5th, 5-6:30PM**Instructor: Tech Transfer Staff & All Instructors**

- 5:00PM: Course Introduction & Overview
 - Course Materials
 - Canvas LMS Tutorial
 - Assistance from Tech Transfer Staff
- 5:15PM: California Traffic PE Exam Resources
 - Navigating <http://bpelsq.ca.gov/>
 - Test Preparation Strategies
- 5:30PM: Test-taking Strategies
 - Stress Management
 - Time Management
 - Resources: What to Bring
- 5:50PM: Introduction of Instructors
- 6:00PM: Q&A

Session 2: Mon, September 10th, 5-7:30PM**Instructor: Obaid Khan**

- Traffic Modeling/Estimating Traffic Volumes
- Traffic Impact Analysis:
 - Trip Generation
 - Trip Distribution
 - Trip Assignments
 - Pass-By Trips
 - Diverted Trips

References:

- 2010 HCM, 5th Edition
- ITE Trip Generation Manual, 9th Edition, 2014
- Caltrans HDM, 6th Edition
- ITE Manual of Transportation Engineering Studies, 2nd Edition
- ITE Transportation Planning Handbook, 3rd Edition

Session 3: Wed, September 12th, 5-7:30PM

Instructor: Joy Bhattacharya

- Level of Service (LOS)/Capacity Analyses:
 - Vehicle LOS
 - Pedestrian LOS
 - Bicycle LOS
 - Transit LOS
- VMT vs LOS

Reference:

- 2010 HCM, 5th Edition

Session 4: Mon, September 17th, 5-7:30PM

Instructor: Obaid Khan

- Parking Analysis:
 - Parking Generation
 - Parking Demand
 - Parking Studies
- Parking Facilities and Design:
 - Off-Street
 - On-Street
- Parking Regulation & Policies
- Shared Parking

References:

- ITE Parking Generation Manual, 4th Edition, 2010
- ITE Manual of Transportation Engineering Studies, 2010, 2nd Edition
- Caltrans HDM, 6th Edition
- CAMUTCD 2014

Session 5: Wed, September 19th, 5-7:30PM

Instructor: Obaid Khan

- Geometric Design of Roadway & Transportation Facilities
 - Vertical and Horizontal Alignments
 - Driveways
 - Design of Spacing
 - Intersections
 - Channelization Designs for Turning Movements
 - Roundabouts
 - Roadway Improvements
 - Interchanges

References:

- 2010 HCM, 5TH Edition
- CAMUTCD 2014
- ITE Manual of Transportation Engineering Studies, 2010, Second Edition

Session 6: Mon, September 24th, 5-7:30PM**Instructor: Tom Mericle**

- Engineering and Traffic Surveys
 - Speed-Zone Surveys
 - Traffic Engineering Assessments
 - Field Investigations of Roadway Conditions
- Traffic Collisions
 - Collision Diagrams
 - Collision Rates
 - Techniques for Analyzing Collisions
- Benefit/Cost Analysis
- Mid-Course Evaluation

References:

- CAMUTCD 2014
- ITE Manual of Transportation Engineering Studies, 2010, Second Edition
- ITE Transportation Planning Handbook, 2009, 3rd Edition

Session 7: Wed, September 26th, 5-7:30PM**Instructor: Tom Mericle**

- Safety and Traffic Control Devices
- Roadway Signing
 - Regulatory Sign Warrants and Placement
 - Warning Signs
 - Parking Signs
- Pavement Markings/Striping
- Temporary Traffic Controls

References:

- CAMUTCD 2014
- Caltrans Standard Plans, 2010 Edition

Session 8: Mon, October 1st, 5-7:30PM**Instructor: Obaid Khan**

- Bicycle Facilities Design
 - Signing and Marking
 - Bicycle Facilities Improvements
- Pedestrian Facilities Design
 - Signing and Marking
 - ADA Compliance
- School Zones

References:

- Caltrans HDM, 6th Edition
- CAMUTCD 2014
- Caltrans Standard Plans, 2010 Edition

Session 9: Wed, October 3rd, 5-7:30PM**Instructor: Joy Bhattacharya**

- Traffic Signal Design:
 - Warrants
 - Features, Standards & Specifications
 - Layout
 - Modifying Signal Hardware
- Street/Roadway Lighting

References:

- CAMUTCD 2014
- ITE Manual of Traffic Signal Design, 1998, 2nd Edition

Session 10: Mon, October 8th, 5-7:30PM**Instructor: Obaid Khan**

- Traffic Calming
- Access Management
- Surface Transit Accommodations
- Cost-Benefit Evaluation

References:

- ITE Transportation Planning Handbook, 2009, 3rd Edition
- ITE Manual of Transportation Engineering Studies, 2010, 2nd Edition
- Caltrans Standard Plans, 2010 Edition

Session 11: Wed, October 10th, 5-7:30PM**Instructor: Joy Bhattacharya**

- Traffic Signal Operations:
 - Timing/Phasing
 - Coordination
- Intelligent Transportation Systems

References:

- CAMUTCD 2014
- FHWA Signal Timing Manual, 2008

Session 12: Mon, October 15th, 5-6:30PM**Instructor: Tech Transfer Staff & All Instructors**

- Q&A (All Instructors)
 - Joy Bhattacharya
 - Obaid Khan
 - Tom Mericle
- Final Course Evaluation (post-training)