

California Traffic Engineering License Exam Review (TE-29) Fall 2024 Course Outline

California Traffic Engineer Exam: http://www.bpelsg.ca.gov/applicants/plan_traffic.pdf

Exam Period: October 13-27, 2025

https://www.bpelsg.ca.gov/applicants/exam_schedule_final_filing_dates.pdf

Traffic Examination Reference Materials: https://www.bpelsg.ca.gov/applicants/trafrefs.shtml

Session 1 - Tuesday, September 02, 2025 5:00PM - 6:30PM

Instructors: Tech Transfer Staff & All Instructors

5:00PM: Course Introduction & Overview 5:05PM: Introduction of Instructors 5:20PM: Getting Familiar with the Course

- Course Materials
- Canvas LMS Tutorial/Course Recordings
- Assistance from Tech Transfer Staff

5:30PM: California Traffic PE Exam Resources

- Navigating http://bpelsg.ca.gov/
- Test Preparation Strategies

5:40PM: Test-taking Strategies

- Stress Management
- Time Management
- Resources: What to Bring

5:50PM: Getting the Most from the Course

6:00PM: Q&A

Session 2 - Wednesday, September 03, 2025 5:00PM - 7:30PM

Instructor: Obaid Khan

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



Session 3 - Thursday, September 04, 2025 5:00PM - 7:30PM

Instructor: Obaid Khan

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

<u>Session 4 – Tuesday, September 09, 2025 5:00PM – 7:30PM</u>

Instructor: Joy Bhattacharya

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

Session 5 - Wednesday, September 10, 2025 5:00PM - 7:30PM

Instructor: Tom Mericle

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

<u>Session 6 – Thursday, September 11, 2025 5:00PM – 7:30PM</u>

Instructor: Tom Mericle

- Engineering and Traffic Surveys
 - Speed-Zone Surveys
 - Traffic Engineering Speed Setting
- Traffic Crashes
 - Techniques for Analyzing Collisions
 - o Collision Diagrams
 - Collision Rates
- Traffic Safety Systems
 - Clear Recovery Zone
 - Guardrail
 - Barriers

Mid-Course Evaluation



Session 7 - Tuesday, September 16, 2025 5:00 - 7:30 PM

Instructor: Joy Bhattacharya

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

Session 8 - Wednesday, September 17, 2025 5:00PM - 7:30PM

Instructor: Tom Mericle

- Traffic Control Devices
- Roadway Signing
 - Regulatory Signs, Warrants, and Placement
 - Warning Signs and placement
- Pavement Markings/Striping
- Temporary Traffic Controls

<u>Session 9 – Thursday, September 18, 2025 5:00PM – 7:30PM</u> Instructor: Joy Bhattacharya

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

Session 10 - Tuesday, September 23, 2025 5:00PM - 7:30PM

Instructor: Obaid Khan

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

<u>Session 11 – Wednesday, September 24, 2025 5:00PM – 7:30PM</u>

Instructor: Obaid Khan

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



<u>Session 12 – Thursday, September 25, 2025 5:00PM – 6:00PM</u> Instructors: Tech Transfer Staff & All Instructors

- Q&A (All Instructors)
 - o Joy Bhattacharya
 - o Obaid Khan
 - Tom Mericle

Final Course Evaluation