

COURSES

TRANSPORTATION COURSES

TRN 010 Introduction to Transit Industry Careers (1.0 Lecture) 1.0 UNIT

Introduction to careers in the public transit industry. Gain knowledge of departments and career pathways in public transit.

TRN 101 Foundations of Public Service for Transit Workers (1.0 Lecture/1.0 Lab) 2.0 UNITS

Students are introduced to public transit agencies and the personal and interpersonal skills needed in serving the public. Per California Code of Regulations, this course is limited to students admitted to the Coach Operator Apprenticeship Program or the Public Transit Leadership Certificate program.

TRN 102 Public Service and Stress Management for Public Transit Employees (1.0 Lecture) 1.0 UNIT

Students are introduced to the relationship between delivering professional public service and managing stress factors inherent in the transit industry. Students acquire fundamental knowledge of public service strategies and stress management skills needed for a career in transit industry operations. This course is limited to students admitted to the Public Transit Leadership Certificate program.

TRN 103 Community Health Issues for Public Transit Employees (1.0 Lecture) 1.0 UNIT

Students are introduced to common community health problems and issues they are likely to encounter on the job in the public transit industry. Topics include biohazards, communicable disease, and occupational safety. Additionally, students are taught a framework for understanding and handling interactions with members of the community suffering from difficult health issues, such as substance abuse or mental illness. This course is limited to students admitted to the Public Transit Leadership Certificate Program.

TRN 104 Peer Mentoring for Public Transit Workers: One-on-One Skills 1.0 UNIT

Students are introduced to the basic elements of one-on-one peer mentoring in a transit industry environment. Students acquire fundamental knowledge of the personal and interpersonal skills needed to be an effective peer mentor in entry-level transit operations. This course is limited to students admitted to the Public Transit Leadership Certificate program.

TRN 105 Group Facilitation and Training Skills for Peer Mentors (1.0 Lecture) 1.0 UNIT

This course focuses on the theory and practice of facilitating effective meetings in a public transit environment. Topics include the differences between leading and facilitating, fundamental facilitation techniques, and personal strategies for facilitators to maintain neutrality while guiding meeting participants to successful outcomes. This course is limited to students admitted to the Public Transit Leadership Certificate program.

TRN 106 Interpersonal Communication for Transit Workers (1.0 Lecture) 1.0 UNIT

Students are introduced to the principles of effective interpersonal communication in public transit professions. Topics include verbal and non-verbal communication, active listening, and accountability in communication. This course is limited to students admitted to the Public Transit Leadership Certificate program.

TRN 107 Labor/Management Problem Solving in Public Transit (1.0 Lecture) 1.0 UNIT

Students are introduced to the principles of effective labor/management problem solving in public transit professions. Topics include an overview of labor and management, trust building, and developing problem solving strategies. This course is limited to students admitted to the Public Transit Leadership Certificate Program.

TRN 108 Performance Coaching for Public Transit Leaders (1.0 Lecture) 1.0 UNIT

Students are introduced to the principles of effective performance coaching in unionized public transit professions. Topics include leadership roles, management styles, and positive performance coaching. This course is

limited to students admitted to the Public Transit Leadership Certificate program.

TRN 109 Transit Business Technology and Practices for Transit Employees (0.5 Lecture/0.5 Lab) 1.0 UNIT

Students acquire fundamental technology skills necessary in today's public transit agencies, including computer basics, simple usage of Microsoft Office applications, and accessing the Internet. This course is limited to students admitted to the Public Transit Leadership Certificate Program.

TRN 110 Transit Operations for New Leaders (2.0 Lecture) 2.0 UNITS

Students are introduced to major support departments in public transit bus (coach) operations: coach maintenance, transit planning and scheduling, transit radio dispatching, and field supervision. Students learn the major functions, relationships, and overall impact of these departments on delivering safe and reliable public bus service on the street. This course is limited to students admitted to the Public Transit Leadership Certificate program.

TRN 121 Way, Power, & Signal Maintenance Core Training I (0.5 Lecture/0.5 Lab) 1.0 UNIT

Students are introduced to the Way, Power, and Signal shop floor and basic safety protocols. This course prepares students for positions in light rail maintenance. Per California Code of Regulations, this course is limited to students admitted to light rail apprenticeship programs at Santa Clara Valley Transportation Authority.

TRN 122 Way, Power, & Signal Maintenance Core Training II (1.0 Lecture) 1.0 UNIT

Students are introduced to ladder safety, basic Traffic Control, electrical safety, and lockout/tag out security. This course prepares students for positions in light rail maintenance. Per California Code of Regulations, this course is limited to students admitted to light rail apprenticeship programs at Santa Clara Valley Transportation Authority.

TRN 123 Way, Power, & Signal Maintenance Core Training III (1.0 Lecture) 1.0 UNIT

Students are introduced to rail certification (rules and regulations) and roadway worker protection (safety in the railroad environment). This course prepares students for positions in light rail maintenance. Per California Code of Regulations, this course is limited to students admitted to light rail apprenticeship programs at Santa Clara Valley Transportation Authority.

TRN 131 Basic Principles of Track Maintenance I (1.5 Lecture/0.5 Lab) 2.0 UNITS

Students are introduced to track structure, safety and use of track, track tools, roadbed, crossties, and ballast. This course prepares students for entry-level positions in railway track work. Per California Code of Regulations, this course is limited to students admitted to the Track Worker Apprenticeship Program.

TRN 132 Basic Principles of Track Maintenance II (1.5 Lecture/0.5 Lab) 2.0 UNITS

Students are introduced to rail maintenance, rail joint maintenance, track alignment and gage, track surface, turnouts, and roadway maintenance. This course prepares students for entry-level positions in railway track work. Per California Code of Regulations, this course is limited to students admitted to the Track Worker Apprenticeship Program.

TRN 133 Advanced Principles of Track Maintenance I (1.5 Lecture/0.5 Lab) 2.0 UNITS

Students are introduced to rail replacement, cutting and welding, turnouts and trackwork, track construction, railroad grade crossing, and management and security. This course prepares students for entry-level positions in railway track work. Per California Code of Regulations, this course is limited to students admitted to the Track Worker Apprenticeship Program.

TRN 134 Advanced Principles of Track Maintenance II (1.5 Lecture/1.0 Lab) 2.5 UNITS

Students are introduced to operation work equipment, vegetation control, rail defects, track inspection, Federal Railroad Administration (FRA) track standards, and derailment work. This course prepares students for entry-level

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positions in railway track work. Per California Code of Regulations, this course is limited to students admitted to the Track Worker Apprenticeship Program.

TRN 141 Principles of Electricity and Test Equipment (2.5 Lecture/0.5 Lab) 3.0 UNITS

This course covers basic principles of electricity and use of electrical test equipment. Per California Code of Regulations, this course is limited to students admitted to the Overhead Line Core apprenticeship program at Santa Clara Valley Transportation Authority.

TRN 142 Electrical Safety for the Trades (2.5 Lecture) 2.5 UNITS

This course covers the dangers of electricity and how to recognize and avoid electrical hazards. Per California Code of Regulations, this course is limited to students admitted to the Overhead Line Core apprenticeship program at Santa Clara Valley Transportation Authority.

TRN 143 DC Theory and Power Components (2.0 Lecture) 2.0 UNITS

Advisory: MAT 903 or High School Algebra I, or equivalent. This course covers DC (Direct Current) theory and various power components used in overhead line work. Per California Code of Regulations, this course is limited to students admitted to the Overhead Line Core apprenticeship program at Santa Clara Valley Transportation Authority.

TRN 144 Traction Power Safety Practices (2.5 Lecture) 2.5 UNITS

This course covers safe practices for the use of traction power systems. Per California Code of Regulations, this course is limited to students admitted to the Overhead Line Core apprenticeship program at Santa Clara Valley Transportation Authority.

TRN 151 Overhead Line Worker Apprenticeship Fundamentals I 2.5 UNITS

Prerequisite: Per California Code of Regulations, this course is limited to students admitted to the Overhead Line Worker apprenticeship program at Santa Clara Valley Transportation Authority. This course covers high voltage, NFPA 70E, red tag power outage procedures, print reading and documentation, and hand and power tools. Per California Code of Regulations, this course is limited to students admitted to the Overhead Line Worker apprenticeship program at Santa Clara Valley Transportation Authority. Pass/No Pass Option.

TRN 152 Overhead Line Worker Apprenticeship Fundamentals II (1.5 Lecture/1.0 Lab) 2.5 UNITS

This course covers traction power tools and test equipment, traction power substations, power distribution and control, and overhead contact systems. Per California Code of Regulations, this course is limited to students admitted to the Overhead Line Worker apprenticeship program at Santa Clara Valley Transportation Authority.

TRN 153 Overhead Line Worker Apprenticeship Fundamentals III (2.0 Lecture/0.5 Lab) 2.5 UNITS

This course covers fall protection, rigging and hoisting, hi-rail vehicles, bucket truck and bucket rescue, grounding, and confined space entry. Per California Code of Regulations, this course is limited to students admitted to the Overhead Line Worker apprenticeship program at Santa Clara Valley Transportation Authority.

TRN 154 Catenary Safe Work Practices (4.0 Lecture/1.0 Lab) 5.0 UNITS

This course covers the hazards of working on overhead catenary lines, and how to effectively protect against them. Per California Code of Regulations, this course is limited to students admitted to the Overhead Line Worker apprenticeship program at Santa Clara Valley Transportation Authority.

TRN 155 Mobile Crane - Boom Truck (1.5 Lecture/0.5 Lab) 2.0 UNITS

This course covers safe use of the mobile crane (boom truck). Per California Code of Regulations, this course is limited to students admitted to the Overhead Line Worker apprenticeship program at Santa Clara Valley Transportation Authority.

TRN 201 Service Mechanic: Orientation & Safety (2.5 Lecture) 2.5 UNITS

This course covers an orientation to VTA, the mechanic helper program, the shop floor, familiarization with the fleet, and electrical safety. Per California Code of Regulations, this course is limited to students admitted to the Service Mechanic apprenticeship programs at Santa Clara Valley Transportation Authority.

TRN 202 Service Mechanic: Tools & Fasteners (2.5 Lecture) 2.5 UNITS

This course focuses on tools and fasteners: correct work methods, care and selection of tools, common tools and uses, and common fasteners and uses. Per California Code of Regulations, this course is limited to students admitted to the Service Mechanic apprenticeship programs at Santa Clara Valley Transportation Authority.

TRN 203A Service Mechanic: Electrical/Electronics 1 (2.5 Lecture) 2.5 UNITS

This course covers direct current, circuits, Ohm's Law, and Watt's Law. Per California Code of Regulations, this course is limited to students admitted to the ServiceMechanic apprenticeship programs at Santa Clara Valley Transportation Authority.

TRN 203B Service Mechanic: Electrical/Electronics 2 (2.5 Lecture) 2.5 UNITS

Advisory: TRN 203A This course covers batteries, starters, and the ATEC course on wiring, circuits, and schematics. Per California Code of Regulations, this course is limited to students admitted to the Service Mechanic apprenticeship programs at Santa Clara Valley Transportation Authority.

TRN 204 Service Mechanic: Air Brakes (2.5 Lecture) 2.5 UNITS

This course introduces students to the air brake system used on VTA buses. Classroom theory on brake systems along Federal Motor Vehicle Safety Standards (FMVSS) will be emphasized. Topics include: air foundation brakes, air supply system, air service circuits, special circuits, and mechanical components. Per California Code of Regulations, this course is limited to students admitted to the Service Mechanic apprenticeship programs at Santa Clara Valley Transportation Authority.

TRN 205 Service Mechanic: Transmission (2.5 Lecture) 2.5 UNITS

This course covers transmission, including safety, driveline checks, hydraulics, and other related topics. Per California Code of Regulations, this course is limited to students admitted to the Service Mechanic apprenticeship programs at Santa Clara Valley Transportation Authority.

TRN 206 Service Mechanic: Diesel Engine (2.5 Lecture) 2.5 UNITS

This course focuses on diesel engine theory and components. Per California Code of Regulations, this course is limited to students admitted to the Service Mechanic apprenticeship programs at Santa Clara Valley Transportation Authority.

TRN 207 Service Mechanic: Hybrid Familiarization (2.5 Lecture) 2.5 UNITS

This course focuses on hybrid engine systems and the different ways to work with them vs. traditional diesel engines. Per California Code of Regulations, this course is limited to students admitted to the Service Mechanic apprenticeship programs at Santa Clara Valley Transportation Authority.

TRN 208 Service Mechanic: I/O Controls (2.5 Lecture) 2.5 UNITS

This course focuses on Input/Output controls found on hybrid vehicles (onboard computer). Per California Code of Regulations, this course is limited to students admitted to the Service Mechanic apprenticeship programs at Santa Clara Valley Transportation Authority.

TRN 209 Service Mechanic: Preventative Maintenance - PMI (2.5 Lecture) 2.5 UNITS

This course focuses on preventative maintenance practices, such as routine inspections. Per California Code of Regulations, this course is limited to students admitted to the Service Mechanic apprenticeship programs at Santa Clara Valley Transportation Authority.

**TRN 210 Service Mechanic: Overhaul & Repair Orientation
(2.5 Lecture) 2.5 UNITS**

This course focuses on an overview of the Overhaul and Repair Department at public transit agencies. Per California Code of Regulations, this course is limited to students admitted to the Service Mechanic apprenticeship programs at Santa Clara Valley Transportation Authority.

**TRN 401 Coach Operator: New Operator Training I (1.5
Lecture/0.5 Lab) 2.0 UNITS**

This classroom/lab instruction course for Coach Operator Apprentices focuses on DMV legal regulations as they apply to the mass transit industry. Per California Code of Regulations, this course is limited to students admitted to the Coach Operator apprenticeship programs at Santa Clara Valley Transportation Authority.

**TRN 402 Coach Operator: New Operator Training II (2.5
Lecture/2.5 Lab) 5.0 UNITS**

Advisory: TRN 401 This classroom/lab instruction course for Coach Operator apprentices focuses on transit operations - rules and regulations, and processes. Apprentices also complete training in the field. Per California Code of Regulations, this course is limited to students admitted to the Coach Operator apprenticeship programs at Santa Clara Valley Transportation Authority.

**TRN 403 Coach Operator: New Operator Training III (1.0
Lecture) 1.0 UNIT**

Advisory: TRN 401 This classroom instruction course for Coach Operator apprentices focuses on customer service, internal relationships between departments, and personal well-being. Per California Code of Regulations, this course is limited to students admitted to the Coach Operator apprenticeship programs at Santa Clara Valley Transportation Authority.

**TRN 404 Coach Operator: New Operator Training IV (1.0
Lecture) 1.0 UNIT**

Advisory: TRN 401 This classroom instruction course for Coach Operator Apprentices focuses on safety and security while driving. Per California Code of Regulations, this course is limited to students admitted to the Coach Operator apprenticeship programs at Santa Clara Valley Transportation Authority.

**TRN 405 Coach Operator: New Operator Training V (1.0
Lecture) 1.0 UNIT**

Advisory: TRN 401 This classroom instruction course for Coach Operator Apprentices focuses on technical proficiency with coach equipment, troubleshooting, and vehicle inspection. Per California Code of Regulations, this course is limited to students admitted to the Coach Operator apprenticeship programs at Santa Clara Valley Transportation Authority.

**TRN 421 Transit Dispatching and Radio Communications
(4.0 Lecture/4.0 Lab) 8.0 UNITS**

This intensive course covers the combined classroom and field training sections of Transit Radio Dispatcher (TRD) training. Per California Code of Regulations, this course is limited to students admitted to the Transit Radio Dispatcher apprenticeship programs at Santa Clara Valley Transportation Authority.

**TRN 441 Business Technology and Writing for Supervisors
(0.5 Lecture/0.5 Lab) 1.0 UNIT**

This course covers fundamental technology and professional written communication skills necessary for supervisory roles in today's public transit agencies. Per California Code of Regulations, this course is limited to students admitted to the Transit Supervisor apprenticeship programs at Santa Clara Valley Transportation Authority.