

TRANSPORTATION SERVICES- AUTOMOTIVE (TSTA)

Courses

TSTA 245 Manual Drive Trains 4 Credits

Standard repair practices for drive train components to include: clutch, transmission, transaxle, drive axle, driveline, c-v, and R & R procedures.

Prerequisites: TSTC 100 and TSTC 101.

Terms Typically Offered: Fall.

Fees: Yes.

TSTA 247 Automatic Drive Train Service 4 Credits

Standard repair practices for automatic drive trains to include: diagnosis, testing, R & R, and servicing of transaxles/rear wheel drive transmissions.

Prerequisites: TSTC 100 and TSTC 101.

Terms Typically Offered: Fall.

Fees: Yes.

TSTA 265 Engine Control Services 3 Credits

Repair and diagnosis of engine control systems, with an emphasis on scan tool diagnosis and live, hands-on repair of systems.

Prerequisites: TSTC 100, TSTC 101, and TSTC 130.

Terms Typically Offered: Fall.

Fees: Yes.

TSTA 267 Body Controls 3 Credits

Theory, repair, and diagnosis of body accessories including air bags, electronic monitors, power seats, windows, and wipers.

Prerequisites: TSTC 100, TSTC 101, and TSTC 130.

Terms Typically Offered: Spring.

Fees: Yes.

TSTA 275 Alignment and Suspension Service 3 Credits

Repair of suspension systems to include alignments: (2 and 4 wheels), R&R suspension components, and pre-alignment inspections.

Prerequisites: TSTC 100, TSTC 101, and TSTC 170.

Terms Typically Offered: Fall.

Fees: Yes.

TSTA 286 Hybrid and Alternative Fueled Vehicles 2 Credits

Introduction to hybrid and alternative fueled vehicle technology in the transportation industry. Topics include power and transmission designs, batteries, plug-in technology, control systems, safety, associated systems, diagnostics, and repair of modern hybrid/alternative fueled vehicles.

Prerequisites: TSTC 100, TSTC 101, and TSTC 130.

Terms Typically Offered: Spring.

Fees: Yes.

TSTA 287 Engine Performance and Emissions 3 Credits

Diagnosis and repair of engine performance and emissions-related failures. Emphasis on strategy based diagnostics through the use of exhaust gas analysis.

Prerequisites: TSTC 100, TSTC 101, TSTC 130, and TSTA 265.

Terms Typically Offered: Spring.

Fees: Yes.