

TOYOTA'S TECHNICIAN TRNG & EDUCATN NTRWK (TTEN)

TTEN1240 | Introduction to Toyota | Lecture/Laboratory (3 Credits)

Introduction to dealership systems: repair order writing, dealership management training, and Toyota/Lexus Interactive Networking systems. Emphasis is on vehicle inspection techniques, utilization of Toyota scan tools and Toyota manuals, and a Six Step Diagnostic process in troubleshooting advanced computer controlled vehicles.

Prerequisite(s): AUTO1111 And AUTO1121

TTEN1250 | Body Electrical I | Lecture/Laboratory (3 Credits)

Examine the theory of operation and diagnostic principles of Toyota/Lexus chassis and body electrical systems. On-vehicle component testing utilizing the Toyota scan tool, Toyota manuals, Six Step Process, digital multimeters, lab scopes, and factory electrical schematics.

Prerequisite(s): TTEN1240

TTEN1251 | Body Electrical | Lecture/Laboratory (5 Credits)

Examine and explain the theory of operation and diagnostic principles of Toyota/Lexus chassis and body electrical systems. Explain the advanced theory of operation and diagnostic principles of Toyota/Lexus chassis and body electrical systems using CAN Body communications. On-vehicle component testing utilizing the Toyota scan tool, Toyota manuals, Six Step Process, digital multimeters, lab scopes, and factory electrical schematics.

TTEN1260 | Body Electrical II | Lecture/Laboratory (4 Credits)

Explain the advanced theory of operation and diagnostic principles of Toyota/Lexus chassis and body electrical systems using CAN Body communications. On-vehicle component testing utilizing the Toyota scan tool, Toyota manuals, Six Step Process, digital multimeters, lab scopes, and factory electrical schematics.

Prerequisite(s): TTEN1250

TTEN1270 | HVAC | Lecture/Laboratory (3 Credits)

Examine the theory of operation and diagnostic principles of Toyota/Lexus air conditioning and heating systems. Using the Toyota scan tool, Toyota manuals, and the Six Step Diagnostic process, perform refrigeration system service, control system repair, heater service, automatic heating/AC systems service, component testing, check for environmental issues, and troubleshoot the various systems.

TTEN1271 | HVAC | Lecture/Laboratory (2 Credits)

Examine the theory of operation and diagnostic principles of Toyota/Lexus air conditioning and heating systems. Using the Toyota scan tool, Toyota manuals, and the Six Step Diagnostic process, perform refrigeration system service, control system repair, heater service, automatic heating/AC systems service, component testing, check for environmental issues, and troubleshoot the various systems.

TTEN1280 | Brakes | Lecture/Laboratory (3 Credits)

Examine the theory of operation and diagnostic principles of Toyota/Lexus brake and suspension systems. Diagnose faults and principles of ABS (anti-lock braking system), traction control systems, advanced steering stability systems, pre-alignment inspections, 4-wheel alignment, suspension and steering systems, component repair and replacement, as well as troubleshooting vibration, noise, and harshness concerns using Toyota manuals and a Toyota scan tool.

TTEN1281 | Brakes | Lecture/Laboratory (2 Credits)

Examine the theory of operation and diagnostic principles of Toyota/Lexus brake and suspension systems. Diagnose faults and principles of ABS (anti-lock braking system), traction control systems, advanced steering stability systems, pre-alignment inspections, 4-wheel alignment, suspension and steering systems, component repair and replacement, as well as troubleshooting vibration, noise, and harshness concerns using Toyota manuals and a Toyota scan tool.

TTEN2140 | Engines | Lecture/Laboratory (4 Credits)

Hands-on diagnosis and repair of the Toyota/Lexus engines using diagnostic tools, Toyota manuals, Toyota scan tool, and the Six Step Process. Service procedures include cooling system repair, lubrication system repair, intake systems repair, exhaust repair, engine testing, engine replacement, engine disassembly, cleaning and measurement, cylinder head diagnostics, and timing belt/chain replacement, 4cyl, 6cyl, 8cyl.

Prerequisite(s): TTEN1260

TTEN2150 | Engine Performance | Lecture/Laboratory (6 Credits)

Hands-on repair of the Toyota/Lexus fuel and computerized engine control systems. Service procedures include fuel pressure testing, fuel injector testing, exhaust gas analysis, advanced scan tool usage, and on-vehicle diagnostics using Toyota manuals, Toyota scan tool, and the Six Step Diagnostic Process. Advanced diagnostics, including hands-on repair of the Toyota/Lexus engine control systems. Service procedures include on-vehicle diagnostics of Toyota/Lexus including advanced computer control systems, networking communication, emission control systems, and test drive diagnostic techniques.

Prerequisite(s): TTEN1260

TTEN2160 | Hybrid | Lecture/Laboratory (2 Credits)

Introduction to electrified vehicles, hybrid safety system, HV batteries, hybrid drive systems, hybrid vehicle maintenance and diagnosis using Toyota manuals and scan tool.

TTEN2240 | Advanced Suspensions | Lecture/Laboratory (3 Credits)

Examine the advanced steering stability systems and pre-alignment inspection process of Toyota/Lexus vehicles. Perform 4-wheel alignment, investigate suspension and steering systems' issues, repair and replace components, as well as troubleshoot vibration, noise, and harshness concerns, using Toyota manuals and a Toyota scan tool.

Prerequisite(s): TTEN1260

TTEN2241 | Advanced Suspension | Lecture/Laboratory (2 Credits)

Examine the advanced steering stability systems and pre-alignment inspection process of Toyota/Lexus vehicles. Perform 4-wheel alignment, investigate suspension and steering systems issues, repair and replace components, as well as troubleshoot vibration, noise, and harshness concerns, using Toyota manuals and a Toyota scan tool.

TTEN2250 | Drivetrain Systems | Lecture/Laboratory (5 Credits)

Examine the theory of operation and diagnostic principles of Toyota/Lexus drivetrain systems. Using Toyota manuals, perform diagnostics on differentials, CV and universal joints, manual transmissions, transfer cases, automatic and CVT transmissions; perform system maintenance, periodic service and on-vehicle diagnosis; disassemble, inspect, and reassemble system components.

Prerequisite(s): TTEN1260

TTEN2251 | Drivetrain Systems | Lecture/Laboratory (6 Credits)

Examine the theory of operation and diagnostic principles of Toyota/Lexus drivetrain systems. Using Toyota manuals, perform diagnostics on differentials, CV and universal joints, manual transmissions, transfer cases, automatic and CVT transmissions; perform system maintenance, periodic service and on-vehicle diagnosis; disassemble, inspect, and reassemble system components.

TTEN2510 | TTEN Internship I | Internship (2 Credits)

Cooperative, paid on-the-job training at a sponsoring Toyota or Lexus dealership. Student must secure their own employment and must maintain good standing with the dealership. Work under the supervision of service management. Provides real life job skills and work habits in a variety of automotive areas. The TTEN Coordinator will oversee the internship.

Prerequisite(s): AUTO1111 And AUTO1121

TTEN2520 | TTEN Internship II | Internship (2 Credits)

Cooperative, paid on-the-job training at a sponsoring Toyota or Lexus dealership. Student must secure their own employment and must maintain good standing with the dealership. Work under the supervision of service management. Provides real life job skills and work habits in a variety of automotive areas. The TTEN Coordinator will oversee the internship.

Prerequisite(s): TTEN2510

TTEN2530 | TTEN Internship III | Internship (2 Credits)

Cooperative, paid on-the-job training at a sponsoring Toyota or Lexus dealership. Student must secure their own employment and must maintain good standing with the dealership. Work under the supervision of service management. Provides real life job skills and work habits in a variety of automotive areas. The TTEN Coordinator will oversee the internship.

Prerequisite(s): TTEN2520

TTEN2540 | TTEN Internship IV | Internship (2 Credits)

Cooperative, paid on-the-job training at a sponsoring Toyota or Lexus dealership. Student must secure their own employment and must maintain good standing with the dealership. Work under the supervision of service management. Provides real life job skills and work habits in a variety of automotive areas. The TTEN Coordinator will oversee the internship.

Prerequisite(s): TTEN2530