

TOYOTA TECHNICIAN TRAINING & EDUCATION NETWORK (TTEN), AAS

At Dunwoody College of Technology, the Toyota T-TEN program prepares graduates to be technicians servicing Toyota and Lexus vehicles at authorized dealerships. Students train specifically on current model Toyota and Lexus vehicles, information systems, scan tools, and training materials. Students also complete an internship under the guidance of a master technician at a sponsoring Toyota or Lexus dealership. These paid internships give students the opportunity to integrate their learning and further develop their skills in service technology.

Arts & Science curriculum supports the technical skills students learn as well as enhance students' oral and written communication skills.

All T-TEN instructors are certified by Toyota in the areas that they teach, in addition to being certified as Master Technicians by the National Institute for Automotive Service Excellence (ASE).

Dunwoody has received recognition from Toyota for being one of the best T-TEN automotive schools in the nation and is a Chassis, Electrical, Engine, Drivability (CEED) School, the highest level for a T-TEN school.

Credential Earned: AAS

Length of Program: 2 years (4 semesters + 1 summer session)

Classes Offered: Day

Available Starts: Fall Semester; Spring Semester

Bachelor's Completion Option(s): Business Management Leadership (AMGT), Bachelor of Science (<https://catalog.dunwoody.edu/catalog-student-handbook/academic-programs/business/business-management-leadership-amgt-bs/>)

Program Outcomes

- Identify and describe automobile components.
- Explain automotive systems' operations.
- Disassemble and assemble components.
- Diagnose vehicle conditions.
- Evaluate component condition and recommend action.
- Repair conditions and verify operation.
- Demonstrate effective customer satisfaction techniques.
- Demonstrate effective use of service information.

Degree Requirements

Code	Title	Credits
General Requirements		
Communications		3
Humanities		3
Natural Science/Mathematics		3
Social Sciences		3
General Electives		3
Technical Requirements		
AUTO1111	Fundamentals of Automotive Service I	6
AUTO1121	Fundamentals of Automotive Service II	6
TTEN1240	Introduction to Toyota	3

TTEN1250	Body Electrical I	3
TTEN1260	Body Electrical II	4
TTEN1270	HVAC	3
TTEN1280	Brakes	3
TTEN2140	Engines	4
TTEN2150	Engine Performance	6
TTEN2160	Hybrid	2
TTEN2240	Advanced Suspensions	3
TTEN2250	Drivetrain Systems	5
TTEN2510	TTEN Internship I	2
TTEN2520	TTEN Internship II	2
TTEN2530	TTEN Internship III	2
TTEN2540	TTEN Internship IV	2
Total Credits		71

Courses

Descriptions

AUTO1111 | Fundamentals of Automotive Service I | Lecture/Laboratory (6 Credits)

Introduction to automotive service, maintenance and repair, Part 1: Use of tools and measuring instruments. Identify fasteners and fittings. Removed damaged fasteners. Research service procedures using automotive information systems. Examine theory of design, principles of operation, and repair procedures of automotive chassis steering, suspension, and brake systems. Perform maintenance and service procedures in the following areas: tire/wheel service, four-wheel alignments, drivetrain inspection and fluid maintenance.

AUTO1121 | Fundamentals of Automotive Service II | Lecture/Laboratory (6 Credits)

Introduction to automotive service, maintenance and repair, Part 2: Research service procedures using automotive information systems. Disassemble, assemble component engines. Describe engine parts, systems, and operation. Perform vehicle oil changes and vehicle inspections. Identify HVAC system components. Perform OBD II code scan. Examine electrical systems. Introduction to Ohm's Law, theory and principles, circuits, magnetism, electromagnetism, induction, and basic electronics including semiconductors. Test batteries, test and replace starters. Practice use of digital multimeters and wiring schematics to trace, test, and diagnose circuits.

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

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.

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.

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.

Prerequisite(s): TTEN2150

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

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

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