AUTOMOTIVE SERVICE TECHNICIAN

APPENDIX A
D.O.T. CODE 620.261-010
O*NET CODE 49-3023.01

This training outline is the current standard for Work Processes and Related Instruction. Changes in technology, regulations, and safety & health issues may result in the need for additional on-the-job or classroom instruction.

WORK PROCESSES

		Approximate Hours
A.	Shop Routine Proper use and operation of tools, equipment, and fixtures. Familiarity with shop operations, manufacturers' policies, procedures, and maintenance schedules. New vehicle service, inspect and lubricate engines and other components, test drive vehicles, perform NYS inspection. Repair and replace parts. Install accessories such as cruise control and GPS. Keep shop clean and orderly. Handle flammable and toxic materials in a safe manner.	500
B.	Brake Systems Inspect, service and repair brake systems and all related components. Adjust and reline brakes. Repair hydraulic systems. Service air and vacuum brakes and ABS. Replace brake lines and pads. Inspect, repair, and replace wheel bearings.	500
C.	Chassis, Steering, and Suspension Systems Repair or replace frames. Inspect, service and repair springs, shocks, struts and related suspension components. Inspect, replace and repair all steering components and linkage, including steering gears, pumps, hoses and rack-and-pinion units. Align and balance wheels. Repair and replace tires.	550

D.	Electrical and Electronic Systems Practical application of electrical and electronic theory. Diagnose and repair electrical circuits. Troubleshoot and repair all electrical and electronic component parts and systems. Maintenance and repair of electric-powered cars.	1,500
E.	Engine Service, Diagnosis and Major Repair Repair and rebuild power plants. Test, repair and rebuild starters, alternators, and related engine electrical systems. Diagnose and repair all electronic, solid state and computer-controlled engine related systems. Repair/ replace valves, timing gears, chains, pumps, piston and ring assembly, bearings and crankshafts. Recondition cylinders. Troubleshoot and repair fuel/ignition/exhaust systems. Perform computer diagnostics.	2,050
F.	Heating and Air Conditioning Diagnose, service, and repair manual and automatic HVAC systems. Repair radiator leaks.	500
G.	Transmissions, Clutches, Drive Lines, Axles Diagnose, service, and repair all manual and automatic transmissions, drive train systems and axles.	1,400
H.	Miscellaneous Welding, auxiliary devices, tune-ups, oil changes. Service and change filters and belts. Prepare repair estimates, and provide courteous and professional customer service.	1,000
	TOTAL HOURS	8,000

Apprenticeship work processes are applicable only to training curricula for apprentices in approved programs. Apprenticeship work processes have no impact on classification determinations under Article 8 or 9 of the Labor Law. For guidance regarding classification for purposes of Article 8 or 9 of the Labor Law, please refer to
http://www.labor.state.ny.us/workerprotection/publicwork/PDFs/Article8FAQS.pdf

AUTOMOTIVE SERVICE TECHNICIAN
(Time-Based)

APPENDIX B

RELATED INSTRUCTION

Safety and Health

General Workplace Safety
Personal Protective Equipment (PPE)
Ladder Safety
Proper Lifting Techniques
Right-to-Know/ Safety Data Sheets (SDS)
EPA Regulations for Working with Refrigerants, and Obtaining Required Certifications
First Aid – minimum 6.5 hours every 3 years
Sexual Harassment Prevention Training – must comply with current New York State Labor Law

Blueprints

Elementary Blueprint Reading
Reading Schematics
Reading Wiring and Ignition Diagrams
Reading Technical Manuals and Procedures

Mathematics

Arithmetic; Decimals; Fractions; Algebraic Equations and Formulas Commonly Used in the Trade
Metric System
Precision Measurement

Trade Theory and Science

Fundamentals of Mechanics
Automotive Electricity
Automotive Electronics
Tools, Equipment, Fixtures: Safe Use and Care
Automotive Terminology
Fuel Systems
Brake Systems
Chassis, Steering and Suspension Systems

Automotive Engines
HVAC Systems
Transmissions, Clutches, Drive Lines, Axles
Diagnostics
Troubleshooting Electrical and Electronic Systems
Welding
Obtaining Motor Vehicle Inspector's Certification from New York State Department of Motor Vehicles
Obtaining Tow Endorsement from New York State Department of Motor Vehicles (if applicable)
Preparation for ASE Certification Exams (optional)

Other Workplace Skills

Basic Computer Skills
Communication Skills
Customer Service

Other Related Courses as Necessary

A Minimum of 144 Hours of Related Instruction is Required for Each Apprentice for Each Year.