Automotive Technology Skill Sets

Automatic Transmissions & Transaxles			
Dept.		Course Title	Sem. Hrs.
ATT	226	Automatic Transmissions & Transaxles*	4
CIS	114	Introduction to Computer Applications & Concepts	3

Note: Course may require Pre/Corequisite courses.

Upon successful completion of the skill set, the graduate will be able to:

●Develop skills in maintaining and using computers through the use of Windows®

●Use the Internet, email, and other software applications

●Develop knowledge and skills to service automatic transmissions and transaxles

●Apply knowledge and skills to diagnose and repair system components such as automatic transmissions, transaxles, torque converters and electronic controls

Automotive Electricity/Electronics			
Dept.		Course Title	Sem. Hrs.
ATT	124	Automotive Electricity/Electronics I*	4
ATT	205	Automotive Electricity/Electronics II*	4
CIS	114	Introduction to Computer Applications & Concepts	3

**Note: Course may require Pre/Corequisite courses.*

Upon successful completion of the skill set, the graduate will be able to:

●Develop skills in maintaining and using computers through the use of Windows®

●Use the Internet, email, and other software applications

●Develop skills necessary for diagnosis and repair of automotive electrical and electronic components and systems

●Apply knowledge and skills in diagnosis and repair of electronically controlled operations such as anti-theft systems, supplemental restraints, body modules, and keyless entry

●Develop knowledge and understanding of hybrid and alternative fuel technology

Automotive Heating and Air Conditioning Systems			
Dept.		Course Title	Sem. Hrs.
ATT	128	Automotive Heating and Air Conditioning*	4
CIS	114	Introduction to Computer Applications & Concepts	3

Note: Course may require Pre/Corequisite courses.

Upon successful completion of the skill set, the graduate will be able to:

●Describe skills in maintaining and using computers through the use of Windows®

●Use the Internet, email, and other software applications

●Diagnose malfunctions in the vacuum, mechanical, and electrical components of the heating, ventilation, and A/C (HVAC) system

●Diagnose malfunctions in the electrical controls of heating, ventilation, and A/C system

Braking Systems			
Dept.		Course Title	Sem. Hrs.
ATT	105	Braking Systems*	4
BOS	114	Introduction to Computer Applications & Concepts	3

Note: Course may require Pre/Corequisite courses.

Upon successful completion of the skill set, the graduates will be able to:

●Develop skills in maintaining and using computers through the use of Windows®

●Use the Internet, email, and other software applications

●Remove, clean, and inspect brake shoes, springs, pins, clips, levers, adjusters/self-adjusters, other related brake hardware, and backing support plates; lubricate and reassemble

●Diagnose poor stopping, wheel lock-up, abnormal pedal feel or pulsation, and noise concerns caused by the antilock brake system (ABS); determine necessary action

Engine Performance			
Dept.		Course Title	Sem. Hrs.
ATT	126	Engine Performance I*	4
ATT	207	Engine Performance II*	4
CIS	114	Introduction to Computer Applications & Concepts	3

Note: Course may require Pre/Corequisite courses.

Upon successful completion of the skill set, the graduates will be able to:

●Develop skills in maintaining and using computers through the use of Windows®

●Use the Internet, email, and other software applications

●Develop knowledge and skills for the diagnosis and repair of systems that control engine performance

●Diagnose mechanical and electronic malfunctions and exhaust problems which impact engine performance

●Develop knowledge and skills necessary for diagnosis and repair of electronic systems that enhances engine performance

●Apply OBII and Mode 6 diagnostics techniques

Engine Repair			
Dept.		Course Title	Sem. Hrs.
ATT	103	Engine Repair*	4
CIA	114	Introduction to Computer Applications & Concepts	3

Note: Course may require Pre/Corequisite courses.

Upon successful completion of the skill set, the graduates will be able to:

●Develop skills in maintaining and using computers through the use of Windows®

●Use the Internet, email, and other software applications

●Disassemble engine block; clean and prepare components for inspection and reassembly

●Perform cooling system pressure tests; evaluate coolant condition; examine and test radiator, pressure cap, coolant recovery, and hoses; determine necessary action

Manual Drive Train & Transaxle			
Dept.		Course Title	Sem. Hrs.
ATT	224	Manual Drive Train & Transaxle*	4
CIA	114	Introduction to Computer Applications & Concepts	3

Note: Course may require Pre/Corequisite courses.

Upon successful completion of the skill set, the graduates will be able to:

●Develop skills in maintaining and using computers through the use of Windows®

●Use the Internet, email, and other software applications

●Develop knowledge and skills to service automotive manual drive trains and transaxles

●Apply knowledge and skills to diagnosis and repair system components such as clutches, manual transmissions, transaxles, and axles

Suspension and Steering Systems			
Dept.		Course Title	Sem. Hrs.
ATT	107	Suspension and Steering Systems*	4
CIA	114	Introduction to Computer Applications & Concepts	3

Note: Course may require Pre/Corequisite courses.

Upon successful completion of the skill set, the graduates will be able to:

●Develop skills in maintaining and using computers through the use of Windows®

●Use the Internet, email, and other software applications

●Diagnose power steering gear binding, uneven turning effort, looseness, hard steering, and fluid leakage concerns; determine necessary action
●Diagnose suspension system noises, body sway, and uneven riding height concerns; determine necessary action