

CCC Program Outcomes

Automotive Technology

Upon successful completion of the technical education requirements and the suggested program requirements for a Certificate the student shall:

Program Outcomes

- 1 Provide fundamentals of basic engine principles, operation and maintenance
- 2 Provide knowledge of principles, operation, diagnosis and service of disc brakes, drum brakes, and ABS systems
- 3 Provide knowledge of principles, operation, diagnosis and service of steering and suspension systems and alignments
- 4 Provide knowledge of principles, operation, diagnosis and service of automotive electrical systems, and wiring diagrams
- 5 Provide knowledge of principles, operation, diagnosis and service of engine performance problems with diagnostic equipment such as scanners and analyzers
- 6 Demonstrate shop procedures and repair procedures with the correct tools and equipment in a safe environmentally friendly manner
- 7 Provide training to develop mathematical, along with oral and written communication skills to problem solve effectively in an automotive repair shop
- 8 Provide knowledge of principles, operation, diagnoses and service of heating and air conditioning systems
- 9 Provide knowledge of principles, operation, diagnoses and service of automatic transmissions and transaxles

Course #	Course Title	PO. 1	PO. 2	PO. 3	PO. 4	PO. 5	PO. 6	PO. 7	PO. 8	PO. 9
ASTC-109	Brakes 1									
	Diagnose general brake systems		X				X			
	Diagnose and repair hydraulic systems		X				X			
	Perform drum brake diagnosis and repair		X				X			
ASTC-237	Brakes 2									
	Diagnose and repair disc brake systems		X				X			
	Perform power assist units diagnosis and repair		X				X			
	Diagnose and repair related systems (wheel bearings, parking brakes, electrical)		X				X			
	Diagnose and repair electronic brake control systems		X				X			

[illegible]

Course #	Course Title	PO. 1	PO. 2	PO. 3	PO. 4	PO. 5	PO. 6	PO. 7	PO. 8	PO. 9
	Understand the handling of monies personally and professionally							X		
ASTC-217	Shop Math and Communication II									
	Understand Work Ethics							X		
	Understand Customer Relations							X		
	Understand Employability Skills							X		
	Complete a Personal Portfolio							X		
ASTC-296	Automotive Heating and Air Conditioning									
	Perform general heating, ventilation and air conditioning systems diagnosis and repair								X	
	Understand refrigeration system component diagnosis and repair								X	
	Understand heating, ventilation, and engine cooling systems diagnosis and repair								X	
	Understand operating systems and related controls diagnosis and repair								X	
ASTC-171	Automatic Transmission									
	Perform general transmission and transaxle diagnosis									X
	Perform transmission and transaxle maintenance and adjustment									X
	Perform in-vehicle transmission and transaxle repair									X
	Perform off-vehicle transmission and transaxle repair									X
	Inspect diagnose and repair the oil pump and converter									X
	Explain the gear train, shafts, bushings and case									X
	Determine the friction and reaction units									X
ASTC-148	Engine Repair									
	Perform engine repair	X								
	Understand cylinder head and valve train diagnosis and repair	X								
	Perform lubrication and cooling systems diagnosis and repair	X								