

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

Course #	Course Title	PO - 1	PO - 2	PO - 3	PO - 4	PO - 5	PO - 6	PO - 7
ASTC-137	Automotive Brakes I							
	Demonstrate Shop Safety With Tools and Equipment						X	
	Understand and test the internal components of a four-cycle internal combustion engine	X				X		
	Perform basic maintenance procedures	X					X	
	General Brake Systems Diagnosis		X				X	
	Hydraulic system diagnosis and repair		X				X	
ASTC-237	Automotive Brakes II							
	Disc brake diagnosis and repair		X				X	
	Power assist units diagnosis and repair		X				X	

Course #	Course Title	PO - 1	PO - 2	PO - 3	PO - 4	PO - 5	PO - 6	PO - 7
	Miscellaneous (wheel bearings, parking brakes, electrical, etc.) diagnosis and repair		X				X	
	Antilock brake and traction control systems		X				X	
ASTC-133	Automotive Suspension and Steering I							
	Demonstrate shop safety with tools and equipment						X	
	Understand and test the internal components of a four-cycle internal combustion engine	X				X		
	Perform basic maintenance procedures	X					X	
	Perform steering systems diagnosis and repair			X			X	
	Perform suspension system diagnosis and repair			X			X	
ASTC-233	Automotive Suspension and Steering II							
	Perform wheel alignment diagnosis, adjustment, and repair			X			X	
	Perform wheel and tire diagnosis and repair			X			X	
ASTC-143	Automotive Electrical Systems I							
	Perform general electrical system diagnosis				X		X	
	Perform battery diagnosis and repair				X		X	
ASTC-223	Automotive Electrical Systems II							
	Determine correct diagnosis and repair of gauges, warning devices, and driver information systems				X		X	
	Perform horn and wiper/washer diagnosis and repair				X		X	

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	Perform accessories diagnosis and repair				X		X	
ASTC-211	Automotive Engine Performance I							
	Perform general engine diagnosis	X				X	X	
	Diagnosis and repair computerized engine controls	X				X	X	
	Perform ignition system diagnosis and repair	X				X	X	
ASTC-280	Automotive Engine Performance II							
	Perform fuel, air induction and exhaust systems diagnosis and repair	X				X	X	
	Perform emissions control systems diagnosis and repair	X				X	X	
	Define engine related service	X				X	X	
ASTC-107	Shop Math and Communication I							
	Understand Linear Measurement							X
	Compute Fractions, Decimals and Percents.							X
	Understand Checking Accounts, ATMS, and Statement Reconciliation							X
	Understand Gross Earnings and Payroll Deductions							X
	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

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