

Alabama CTE Equipment List

This list is based on a classroom size of 25 students and meets minimum standards. All costs are estimated. No specific equipment vendor or brand names are endorsed, but school districts should consult with stakeholders to ensure industry-recognized equipment and software are purchased. The intent of this list is to provide school districts with guidance on the equipment needed to cover the state standards for an Automotive Technology program and are not meant to dictate the number of students that can safely fit in a classroom and/or laboratory.

Cluster: Transportation, Distribution and Logistics

Program: Automotive Technology

CLASSROOM EQUIPMENT

Total: \$11,100

QUANTITY	ITEM DESCRIPTION	UNIT	TOTAL
5	Computer/Device with Current Operating System	\$1,000	\$5,000
1	Copy Machine, own or have accessibility to use	\$500	\$500
3	File Cabinet	\$100	\$300
1	Industry related (simulation) Software Package	\$2,500	\$2,500
1	Laser Printer, color	\$300	\$300
1	Technology- LCD projector or TV/Computer connection and/or overhead projector with video streaming capability	\$2,500	\$2,500

PROGRAM EQUIPMENT (Items over \$250)

Total: \$40,000

QUANTITY	ITEM DESCRIPTION	UNIT	TOTAL
1	Air Compressor and Hoses	\$1,100	\$1,100
1	Automatic Transmission/Transaxle-Flushing Equipment	\$1,500	\$1,500
1	Automatic Transmission/Transaxle-Holding Fixtures	\$350	\$350
1	Automatic Transmission/Transaxle-Removal and Installation Equipment	\$2,500	\$2,500
1	Bench/Pedestal Grinder	\$400	\$400
1	Brakes-Brake Bleeder (Pressure or Vacuum)	\$250	\$250
1	Brakes-Brake Lathe (on Car)	\$2,000	\$2,000
1	Cleaning Tank Kit	\$360	\$360
1	Constant Velocity Joint (CV) Service Tools-Boot Installation Tool	\$350	\$350
1	Constant Velocity Joint (CV) Service Tools-Front Wheel Drive Engine Support Fixture	\$300	\$300
1	Constant Velocity Joint (CV) Service Tools-Rotating Torque Wrench (Beam-type)	\$500	\$500
1	Electrical/Electronic Systems-Connector Pick Tool Set	\$1,500	\$1,500
1	Electrical/Electronic Systems-Headlight Aimer or Screen	\$1,200	\$1,200
1	Engine Performance-Fuel Injection Pressure Gauge Sets with Adapters	\$1,000	\$1,000

1	Engine Performance-Injector Pulse Tester	\$500	\$500
1	Engine Performance-Logic Probe	\$470	\$470
1	Fire Extinguisher (ABCK)	\$270	\$270
1	Heating & Air Conditioning-Hygrometer	\$360	\$360
1	Heating & Air Conditioning-Refrigerant Charging Station (HFC-134a)	\$3,200	\$3,200
1	Heating & Air Conditioning-Refrigerant Identification Equipment	\$5,000	\$5,000
1	Heating & Air Conditioning-Refrigerant Recovery/Recycling Machine (HFC-134a)	\$3,500	\$3,500
1	Hoist	\$500	\$500
1	Impact Wrench-1/2" Drive	\$280	\$280
1	Manual Drive Train and Axles-Clutch Pilot Bearing/Bushing Puller/Installer	\$320	\$320
1	Suspension and Steering-Tire Mounting Machine (Rim Clamp Type)	\$3,000	\$3,000
1	Suspension and Steering-Wheel Balancer-(Electronic Type)	\$2,000	\$2,000
6	Work Bench (1 per 4 Students)	\$1,440	\$8,640

INSTRUCTIONAL SUPPLIES (Items under \$250)

TOTAL: \$22,513

QUANTITY	ITEM DESCRIPTION	UNIT	TOTAL
1	25' Tape Measurer (Standard)	\$25	\$25
3	Air Blow Gun (Meeting OSHA Requirements)	\$20	\$60
1	Air Chisel Set (Various Bits)	\$70	\$70
4	Air Pressure Regulator	\$20	\$80
2	Air Ratchet (3/8" Drive)	\$45	\$90
1	Automatic Transmission/Transaxle-Hydraulic Pressure Gauge Set	\$140	\$140
1	Automatic Transmission/Transaxle-Transmission Jack	\$200	\$200
3	Automotive Creeper	\$100	\$300
2	Automotive Stethoscope	\$130	\$260
2	Axel Support Stands (Screw Jacks)	\$60	\$120
4	Axle Stands (Jack Stands)	\$150	\$600
6	Back Support Belt	\$20	\$120
1	Battery Charger	\$220	\$220
1	Battery/Starter/Charging System Tester	\$100	\$100
2	Bearing Packer (Hand-operated)	\$30	\$60
1	Belt Tension Gauge	\$40	\$40
1	Bloodborne Pathogen Kit	\$50	\$50
5	Boxes of 8.5" x 11" Paper	\$40	\$200
1	Brakes-Brake Disc Micrometer	\$60	\$60
1	Brakes-Brake Drum Micrometer and Calibration Equipment	\$85	\$85

1	Brakes-Brake Lathe (Bench with Disc and Drum Service Attachments)	\$200	\$200
1	Brakes-Brake Seal and Rae Driver Set	\$30	\$30
1	Brakes-Brake Shoe Adjusting Gauge	\$50	\$50
1	Brakes-Brake Spoon	\$10	\$10
1	Brakes-Brake Spring Pliers	\$35	\$35
1	Brakes-Brake Spring Remover/Installer	\$30	\$30
1	Brakes-Piston Retraction Set	\$30	\$30
5	Brooms	\$10	\$50
1	Cleaning/Chemical Cabinet (Lockable)	\$250	\$250
1	Constant Velocity Joint (CV) Service Tools-Boot Clamp Pliers or Crimping Rings	\$20	\$20
1	Constant Velocity Joint (CV) Service Tools (Universal Joint Tools)	\$210	\$210
1	Coolant Conditioner Test Kit (Test Strips)	\$80	\$80
1	Coolant Tester	\$100	\$100
1	Coolant/Combustion Gas Detector	\$100	\$100
1	Cooling System Pressure Tester and Adapters	\$100	\$100
1	Cylinder Leakage Tester	\$100	\$100
1	Dial Indicator with Flex Arm and Clamp Base	\$125	\$125
2	Digital Multimeter with Various Lead Sets	\$160	\$320
3	Drain Pans	\$45	\$135
1	Drill ½" (Variable Speed, Reversible)	\$100	\$100
1	Drill 3/8" (Variable Speed, Reversible)	\$75	\$75
10	Earmuffs	\$20	\$200
1	Electrical/Electronic Systems-Connect Pick Tool Set	\$20	\$20
1	Electrical/Electronic Systems-Door Panel Trim Tools	\$30	\$30
1	Electrical/Electronic Systems-Heat Gun (or Equivalent for Heat Shrinking Operations)	\$50	\$50
1	Electrical/Electronic Systems-Wire and Terminal Repair Kit	\$40	\$40
1	Engine Coolant Recovery Equipment or Recycler	\$20	\$20
1	Engine Performance-Cylinder Power Balance Tester	\$50	\$50
1	Engine Performance-Graphing Multimeter (GMM) and/or Digital Storage Oscilloscope (DSO)	\$100	\$100
1	Engine Performance-Infrared Thermometer (or Appropriate Substitution)	\$30	\$30
1	Engine Performance-Oxygen Sensor Socket	\$25	\$25
1	Engine Performance-Pinch-off Pliers	\$15	\$15
1	Engine Performance-Sending Unit Socket	\$50	\$50
1	Engine Performance-Spark Plug Thread Tap	\$20	\$20
1	Engine Performance-Spark Tester	\$15	\$15
1	Engine Performance-Timing Advance Light	\$170	\$170
1	Engine Performance-Vacuum/Pressure Gauge	\$30	\$30
1	Engine Repair-Antifreeze/Coolant Tester	\$250	\$250
1	Engine Repair-Oil Pressure Gauge	\$200	\$200

1	Engine Repair-Straight Edge	\$150	\$150
1	Engine Repair-Torque Angle Gauge	\$250	\$250
1	Engineer Performance-Compression Tester	\$30	\$30
5	Extension Cords (50 ft.)	\$50	\$250
1	Extension Ladder	\$250	\$250
3	Eye Protection (Pack of 12)	\$15	\$45
2	Eye Rinse Stations	\$115	\$230
3	Face Shields	\$20	\$60
8	Fender Covers	\$70	\$140
3	Fire Blankets (with Case)	\$100	\$100
1 per room	First Aid Kit	\$20	\$20
3	Flammable Material Storage Locker	\$200	\$600
1	Flare Nut (Tubing) Wrench (10mm – 17mm)	\$50	\$50
2	Flashlight	\$20	\$40
1	Flexible Socket Set 3/8" Drive (10mm-19mm)	\$70	\$70
1	Flexible Socket Set 3/8" Drive (3/8"-3/4")	\$30	\$30
3	Floor Jack (1 ½ Ton Minimum)	\$200	\$600
2	Fuse Removers	\$8	\$16
1	Fused Jumper Wire Set	\$7	\$7
1	Gear Oil Dispenser	\$110	\$110
As needed	Gloves (Disposable)	\$15	\$15
1	Hack Saw Kit	\$30	\$30
2	Hammer (16oz. Ball Peen)	\$15	\$15
1	Hammer (24oz. Brass)	\$90	\$90
1	Hammer (Dead Blow Plastic Mallet)	\$25	\$25
1	Hammer (Plastic Tip)	\$10	\$10
1	Hammer (Rubber Mallet)	\$15	\$15
1	Hand-held Vacuum Pump	\$180	\$180
10	Hard Hat	\$50	\$500
10	Hard Hat Mount Earmuff (21-decibels)	\$40	\$400
1	Hazardous Skill Response Kit	\$50	\$50
1	Heating & Air Conditioning-A/C Compressor Clutch Service Tool	\$65	\$65
1	Heating & Air Conditioning-A/C Service Port Adapter Set	\$100	\$100
1	Heating & Air Conditioning-Dye Injector	\$20	\$20
1	Heating & Air Conditioning-Hygrometer	\$360	\$360
1	Heating & Air Conditioning-Leak Detector (SAE Standard)	\$25	\$25
1	Heating & Air Conditioning-Manifold Gauge Set or Equivalent (HFC-134a)	\$60	\$60
1	Heating & Air Conditioning-Thermometer	\$30	\$30
30	Heavy Duty Work Gloves (S-M-L)	\$20	\$600
1	Hood Prop	\$200	\$200
1	Hydraulic Press with Adapters	\$50	\$50
1	Impact Socket Set-3/8" Drive (Standard and Metric)	\$150	\$150
1	Impact Sockets-1/2" Drive (7/16"-1 1/8")	\$75	\$75

1	Impact Sockets-1/2" Drive Deep (30mm, 32mm, and 36mm)	\$40	\$40
1	Impact Sockets-1/2" Drive(12mm-24mm)	\$70	\$70
1	Impact Wrench-3/8" Drive	\$220	\$220
1	Inspection Mirror	\$15	\$15
1	Jumper Cables	\$80	\$80
1	Magnetic Pick-up Tool	\$30	\$30
1	Manual Drive Train and Axels-Universal Joint Tools	\$220	\$220
1	Manual Drive Train and Axles-Axle Nut Socket Set (or Equivalent)	\$200	\$200
1	Master Puller Set	\$100	\$100
1	Mechanic Steel Ruler (Machinist Ruler)	\$20	\$20
1	Micrometer (Depth)	\$220	\$220
1	Micrometers: 0-1", 1-2", 2-3", 3-4", 4-5" (Outside Type)	\$110	\$110
1	Oil Can (Pump Type)	\$20	\$20
1	Oil Filter Wrench	\$40	\$40
1	OSHA "Right to Know" Compliance Kit	\$100	\$100
1	Oxy-Acetylene Torch	\$140	\$140
1	Pliers (Adjustable Joint)	\$30	\$30
1	Pliers (Combination-6")	\$10	\$10
1	Pliers (Electrical Crimpers)	\$40	\$40
1	Pliers (Hose Clamp)	\$45	\$45
1	Pliers (Locking-jaw)	\$20	\$20
1	Pliers (Needle Nose-6")	\$15	\$15
1	Pliers (Side-cutting)	\$10	\$10
1	Pliers (Slip Joint-Water Pump)	\$25	\$25
1	Pliers (Snap Ring-External)	\$20	\$20
1	Pliers (Snap Ring-Internal)	\$20	\$20
1	Pliers (Wheel Weight)	\$25	\$25
1	Pliers (Wire Stripper)	\$20	\$20
2	Protective Facial Shield	\$25	\$250
1	Pry Bar (Rolling-head)	\$40	\$40
1	Pry Bar (Straight)	\$30	\$30
1	Punch Kit (Pin: 1/8", 3/16", 1/4", and 5/16")	\$25	\$25
1	Punch Kit (Taper: 3/8", 1/2", and 5/8")	\$40	\$40
1	Punches (Brass Drift)	\$40	\$40
1	Punches (Center)	\$30	\$30
2	Remote Starter Switch	\$60	\$60
4	Safety Can (Solvents, Rags, etc.)	\$100	\$400
1	Scan Tool (OBDII w/Can Capability) or Personal Computer Equivalent Interface Capability	\$100	\$100
1	Scraper (Carbon 1")	\$10	\$10
1	Scraper (Gasket 1")	\$5	\$5
1	Screw Extractor Set	\$20	\$20
1	Screw Starter (Phillips)	\$20	\$20
1	Screwdriver (Blade Type-1", 6", 9", 12", Offset)	\$20	\$20

1	Screwdriver (Impact Driver Set)	\$40	\$40
1	Screwdriver (Phillips Offset #2)	\$15	\$15
1	Screwdriver (Phillips: 12" #3)	\$15	\$15
1	Screwdriver (Phillips: 6" #1 and #2)	\$20	\$40
1	Screwdriver (Phillips: Stubby #1 and #2)	\$20	\$20
1	Screws Starter (Standard)	\$20	\$20
5	Seat Covers	\$75	\$375
1	Serpentine Belt Tensioner Tools	\$45	\$45
1	Snap Ring Pliers Set (External)	\$120	\$120
1	Snap Ring Pliers Set (Internal)	\$90	\$90
1	Socket Set ¼" Drive (1/4" – ½" Deep)	\$50	\$50
1	Socket Set ¼" Drive (1/4" – ½" Standard Depth)	\$50	\$50
1	Socket Set ¼" Drive (3" and 6" Extensions)	\$10	\$10
1	Socket Set ¼" Drive (4mm - 12mm Standard Depth)	\$50	\$50
1	Socket Set ¼" Drive (6mm - 12mm Deep)	\$50	\$50
1	Socket Set ¼" Drive Flex/Universal Type	\$30	\$30
1	Socket Set ¼" Drive Ratchet Handle	\$20	\$20
1	Socket Set ½" Drive (10mm-24mm Deep)	\$140	\$140
1	Socket Set ½" Drive (10mm-24mm Standard Depth)	\$140	\$140
1	Socket Set ½" Drive (3", 6", and 12" Extensions)	\$50	\$50
1	Socket Set ½" Drive (7/16"-1 1/8" Standard Depth)	\$140	\$140
1	Socket Set ½" Drive (7/16-1 1/8" Deep)	\$140	\$140
1	Socket Set ½" Drive Flex Handle (Breaker Bar)	\$15	\$15
1	Socket Set ½" Drive Ratchet Handle	\$20	\$20
1	Socket Set 1/2" Drive Universal Joint	\$50	\$50
1	Socket Set 3/8" Drive (10mm-19mm Deep)	\$50	\$50
1	Socket Set 3/8" Drive (10mm-19mm Standard Depth)	\$50	\$50
1	Socket Set 3/8" Drive (3/8"-3/4" Deep-6-point)	\$50	\$50
1	Socket Set 3/8" Drive (3", 5", 10" Extensions)	\$20	\$20
1	Socket Set 3/8" Drive (5/16"-3/4" Standard Depth-6-Point)	\$50	\$50
1	Socket Set 3/8" Drive Ratchet Handle	\$20	\$20
1	Socket Set 3/8" Drive Spark Plug Sockets (5/8" and 13/16")	\$15	\$15
1	Socket Set 3/8" Drive Speed Handle	\$25	\$25
1	Socket Set 3/8" Drive Universal Joint	\$50	\$50
1	Socket Set 3/8" Drive (Flexhead Ratchet)	\$40	\$40
1	Soldering Gun	\$20	\$20
1	Soldering Iron (Pencil Tip)	\$40	\$40
1	Spark Plug Boot Puller	\$35	\$35
2	Spark Plug Feeler Gauge	\$20	\$40
1	Suspension & Steering-Ball Joint Press and other Specialty Tools	\$80	\$80
1	Suspension & Steering-Bushing Driver Set	\$120	\$120
1	Suspension & Steering-Chassis Ear	\$140	\$140
1	Suspension & Steering-Coil Spring Compressor Tool	\$40	\$40

1	Suspension & Steering-Inner Tie Rod End Tool	\$90	\$90
1	Suspension & Steering-Pitman Arm Puller	\$50	\$50
1	Suspension & Steering-Power Steering Pressure Gauge	\$100	\$100
1	Suspension & Steering-Power Steering Pump Pulley Special Tool Set	\$55	\$55
1	Suspension & Steering-Steering Column Special Tool Set	\$60	\$60
1	Suspension & Steering-Strut Spring Compressor Tool	\$50	\$50
1	Suspension & Steering-Tie Rod Puller	\$50	\$50
1	Suspension & Steering-Wheel Alignment Equipment	\$220	\$220
1	Suspension and Steering-Brake Pedal Depressor	\$35	\$35
1	Suspension and Steering-Hand Grease Gun	\$50	\$50
1	Suspension and Steering-Shock Absorber Tools	\$140	\$140
1	Suspension and Steering-Tire Patching Tool and Supplies	\$30	\$30
1	Tap and Die Set (Metric)	\$220	\$220
1	Tap and Die Set (Standard)	\$200	\$200
1	Tape Measurer (Metric)	\$25	\$25
1	Temperature Sensing Device	\$100	\$100
2	Test Light (12-volt)	\$20	\$40
1	Thread Repair Insert Kit	\$100	\$100
1	Tire Inflater Chuck	\$40	\$40
1	Tire Pressure Gauge (Car)	\$20	\$20
1	Tire Pressure Gauge (Truck)	\$25	\$25
1	Tire Thread Depth Gauge	\$20	\$20
1	Torque Wrench ½" Drive (50-250 lb. ft.)	\$60	\$60
1	Torque Wrench 3/8" Drive (10-250 lb. in.)	\$60	\$60
1	Torque Wrench 3/8" Drive (5-75 lb. ft.)	\$25	\$25
1	Torxa Set (Screwdrivers and/or Sockets)	\$40	\$40
1	Torxa Socket Set (T8-T60)	\$25	\$25
2	Tube Quick Disconnect Tool Set	\$30	\$30
1	Tubing Bender	\$75	\$75
1	Tubing Cutter/Flaring Set (Double-lap and ISO)	\$40	\$40
1	Twist Drill Set (1/64" – ½")	\$140	\$140
1	Ultraviolet Leak Detection Device (Black Light)	\$30	\$30
100	Uncorded Ear Plugs	\$15	\$15
1	Used Oil Receptacle with Extension Neck and Funnel	\$20	\$20
1	Valve Core Removing Tool	\$30	\$30
1	Vernier Calipers (0-125mm)	\$40	\$40
1	Vernier Calipers (0-6")	\$25	\$25
6	Vice	\$140	\$840
4	Wheel Chocks	\$60	\$240
1	Wire Brush	\$15	\$15
5	Work Lights (Fluorescent)	\$130	\$650

Optional Equipment

ITEM DESCRIPTION
Automotive/Virtual Simulator

Category Totals:

Classroom Equipment	\$11,100
Program Equipment	\$40,000
Instructional Supplies	\$22,513
Estimated Program Total	\$73,613