

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 a Robotics and Automated Manufacturing program and are not meant to dictate the number of students that can safely fit in a classroom and/or laboratory.

Cluster: Manufacturing
Program: Robotics and Automated Manufacturing

CLASSROOM EQUIPMENT

TOTAL: \$13,525

QUANTITY	ITEM DESCRIPTION	UNIT	TOTAL
5	Computer/device with Current Operating System	\$1,000	\$5,000
1	Industry related (simulation) software package	\$2,500	\$2,500
1	Copy Machine, own or have accessibility to use	\$500	\$500
1	Technology- LCD projector	\$2,500	\$2,500
1	Laser Printer, color	\$500	\$500
1	3-D Printer	\$1,000	\$1,000
1	Whiteboard	\$250	\$250
2	Filing Cabinets	\$100	\$200
3	File Sets	\$25	\$75
1	MSSC Unlimited Instruction	\$1000	\$1000

PROGRAM EQUIPMENT (Items over \$250)

TOTAL: \$45,200

QUANTITY	ITEM DESCRIPTION	UNIT	TOTAL
1	Borescope Inspection Camera Kit	\$1,000	\$1,000
1	Image Center/Storage Device Kit	\$2,200	\$2,200
1	Electro-optical Modulator	\$2,500	\$2,500
1	Optical Spectrometer	\$5,000	\$5,000
1	Spectrophotometer Kit	\$1,000	\$1,000
1	Optical Precision Machine	\$15,000	\$15,000
1	Software	\$2,000	\$2,000
1	System Board	\$2,000	\$2,000
1	Industrial Multimeter	\$600	\$600
1	Electrical Multimeter	\$300	\$300
1	Thermal Multimeter	\$1,300	\$1,300
1	Data Logging Multimeter	\$900	\$900
1	Voltage Model	\$300	\$300
1	Insulation Multimeter	\$1,100	\$1,100
1	Vision System	\$10,000	\$10,000

INSTRUCTIONAL SUPPLIES (Items under \$250)

TOTAL: \$6,445

QUANTITY	ITEM DESCRIPTION	UNIT	TOTAL
1	Cleaning/Chemical Cabinet, locked	\$250	\$250
1	Field Technician Multimeter	\$250	\$250
2	Drill Press (1HP-20')	\$250	\$500
1	Fiberglass Extension Ladder (20')	\$200	\$200
3	Eye Protection (Pack of 12)	\$15	\$45
30	Heavy Duty Work Gloves (S-M-L)	\$20	\$600
100	Uncorded Ear Plugs	\$15	\$15
10	Hard Hat Mount Earmuff (21 decibels)	\$40	\$400
10	Earmuffs	\$20	\$200
10	Hard Hat	\$50	\$500
2	Protective Facial Shield	\$25	\$250
6	Back Support Belt	\$20	\$120
1	Belt Tension Guage	\$40	\$40
1	Extension Ladder	\$250	\$250
2	Flashlight	\$20	\$40
1 per room	First Aid Kit	\$20	\$20
2	Eye Rinse Stations	\$115	\$230
As needed	Gloves, disposable	\$15	\$15
5	Brooms	\$10	\$50
1	Cleaning/Chemical Cabinet, locked	\$250	\$250
3	Fire Blankets (with Case)	\$100	\$100
1	Bloodborne Pathogen Kit	\$50	\$50
3	Flammable Material Storage Locker	\$200	\$600
4	Safety Can (Solvents, Rags, etc.)	\$100	\$400
1	OSHA "Right to Know" Compliance Kit	\$100	\$100
1	Hazardous Skill Response Kit	\$50	\$50
5	Boxes of 8.5" x 11" Paper	\$40	\$200
2	Dust Pans	\$10	\$20
2	Garbage Can (mobile)	\$75	\$150
2	Mop	\$20	\$40
1	Mop Bucket	\$50	\$50
6	Shop Brooms	\$20	\$120
2	Floor Squeegee	\$20	\$40
3	Storage Cabinets	\$100	\$300

OPTIONAL EQUIPMENT/SUPPLIES

ITEM DESCRIPTION
CNC Lathe with Tooling
CNC Milling with Tooling
CNC Software
CNC System
Precision Machining Simulator

Category Totals:

Classroom Equipment	\$13,525
Program Equipment	\$45,200
Instructional Supplies	\$6,445
Estimated Program Total	\$65,170