## **AUTOMATION TECHNOLOGY**

This recommended list is based upon a classroom size of 25 students. All costs are estimated and should be adjusted and verified with current quotes. No specific equipment vendor or brand names are endorsed due to various possibilities, and 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 Automation Technology program.

CLASSROOM EQUIPMENT T		OTAL:	518,310
QTY	ITEM DESCRIPTION	UNIT	TOTAL
25	Student Workstations w/chairs	\$400	\$10,000
1	Teacher Workstation w/chair	\$400	\$400
1	Teacher Computer (enhanced graphics/memory/speed)	\$2,500	\$2,500
1	Presentation Equipment (e.g., Interactive Whiteboard (IWB), or other interactive display system with software and accessories)	\$3,000	\$3,000
1	Networkable Laser Printer	\$400	\$400
1	Vertical File Cabinet (lockable)	\$330	\$330
2	Storage Cabinets (36" x 12" x 72") (lockable)	\$300	\$600
2	Bookcases (36" x 12" x 42")	\$115	\$230
2	White Boards (4' x 8')	\$110	\$220
1	Eyewash Station	\$300	\$300
1	Fire Extinguisher	\$130	\$130
1	Sink with Soap Dispenser	\$100	\$100
1	First Aid Kit	\$100	\$100

#### **PROGRAM EQUIPMENT**

TOTAL:

\$324,600

QTY	ITEM DESCRIPTION	UNIT	TOTAL
25	Student Computers (enhanced memory/speed)	\$1,500	\$37,500
5	"Virtual Trainer" Computers (enhanced memory/speed)	\$1,500	\$7,500
1	Technology Storage/Charging System (optional)	\$2,000	\$2,000
1	Robot System (including robot, conveyor system, sensors, vision, and switches)	\$40,000	\$40,000
1	Programmable Logic Controller/Human Machine Interface (PLC/HMI) System	\$15,000	\$15,000

# PROGRAM EQUIPMENT (CONT.)

QTY	ITEM DESCRIPTION	UNIT	TOTAL
6	Motor Control Trainers	\$12,000	\$72,000
6	Sensor Trainers	\$12,000	\$72,000
1	AC Drive	\$9,000	\$9,000
6	Programmable Logic Controllers (PLCs)	\$4,000	\$24,000
6	Electrical Trainers	\$3,200	\$19,200
1	Project Kit (including hardware and software for hands-on experiments)	\$2,500	\$2,500
6	Advanced Robotic Kits	\$1,750	\$10,500
1	Full-size Color Printer/Plotter (24" capacity)	\$1,000	\$1,000
1	Hazmat Locker (45-gallon capacity)	\$1,000	\$1,000
1	Storage Cabinet for Sanitized Eye Protection Equipment	\$800	\$800
1	Air Compressor w/accessories	\$600	\$600
Varies	3D Printers and Supplies	\$10,000	\$10,000

## **INSTRUCTIONAL MATERIALS**

TOTAL: \$3,000

QTY	ITEM DESCRIPTION	UNIT	TOTAL
25	Student Textbooks (approved by NDE)	\$100	\$2,500
1	Teacher Textbook Edition and Resources	\$500	\$500

## **INSTRUCTIONAL SUPPLIES**

TOTAL: \$17,120

QTY	ITEM DESCRIPTION	UNIT	TOTAL
13	Industry-standard Multimeters	\$400	\$5,200
1	Electrical Lockout Station	\$445	\$445
1	Grinder w/accessories	\$320	\$320
6	Circuit Kits (standard and computer interface)	\$300	\$1,800
1	Bench Grinder	\$270	\$270
2	Reciprocating Saws w/accessories	\$200	\$400
2	Power Drills and Drivers w/accessories	\$180	\$360
1	4-Lock Lockout Station	\$180	\$180

# INSTRUCTIONAL SUPPLIES (CONT.)

QTY	ITEM DESCRIPTION	UNIT	TOTAL
13	Industry-standard Tachometers	\$165	\$2,145
1	Oscillating Tool w/accessories	\$150	\$150
4	Handheld Rotary Power Tools w/accessories	\$120	\$480
6	Soldering Kits w/accessories	\$20	\$120
Varies	Measuring Equipment (framing squares, measuring tapes, calipers, micrometers, levels, etc.)	\$2,000	\$2,000
Varies	Hand Tools (socket sets, Allen/hex wrenches, vises, clamps, hammers, utility knives, etc.)	\$1,750	\$1,750
Varies	Personal Protection Equipment (PPE) (gloves, glasses/goggles, etc.)	\$1,000	\$1,000
Varies	Computer Accessories (cases, covers, etc.)	\$500	\$500

#### OTHER

## TOTAL:

\$325

QTYITEM DESCRIPTIONUNITTOTAL1Occupational Safety and Health Administration (OSHA) Instructor Training\$300\$3001OSHA Lockout/Tagout (LOTO) Instructor Training\$25\$25

#### **CATEGORY TOTALS:**

CLASSROOM EQUIPMENT	\$18,310
Program Equipment	\$324,600
INSTRUCTIONAL MATERIALS	\$3,000
INSTRUCTIONAL SUPPLIES	\$17,120
Other	\$325
ESTIMATED PROGRAM TOTAL	\$363,355