

ARCHITECTURAL AND CIVIL ENGINEERING

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 listed due to various possibilities, 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 Architectural and Civil Engineering program.

CLASSROOM EQUIPMENT**TOTAL: \$18,180**

QTY	ITEM DESCRIPTION	UNIT	TOTAL
25	Student Workstations w/chairs	\$400	\$10,000
1	Teacher Workstation w/chair	\$400	\$400
1	Teacher Computer (enhanced)	\$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 (black/white or color)	\$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	Sink with Soap Dispenser	\$100	\$100
1	First Aid Kit	\$100	\$100

PROGRAM EQUIPMENT**TOTAL: \$76,200**

QTY	ITEM DESCRIPTION	UNIT	TOTAL
25	Student Computers (enhanced graphics/memory/speed, download capable)	\$2,500	\$62,500
1	Technology Storage/Charging System (optional)	\$2,000	\$2,000
7	Advanced Robotics Kits	\$1,500	\$10,500
1	Networkable Large Format Color Plotter	\$1,200	\$1,200

INSTRUCTIONAL MATERIALS**TOTAL:****\$4,000**

QTY	ITEM DESCRIPTION	UNIT	TOTAL
25	Student Textbooks (Approved by NDE)	\$100	\$2,500
1	Teacher Textbook Edition and Resources	\$500	\$500
Varies	Instructional Resources (computer-aided design and drafting [CADD] software, manuals, posters, etc.)	\$1,000	\$1,000

INSTRUCTIONAL SUPPLIES**TOTAL:****\$7,875**

QTY	ITEM DESCRIPTION	UNIT	TOTAL
7	Dual-range Force Sensors	\$115	\$805
3	Cordless Drills (14 volt or higher)	\$100	\$300
2	Compact Scales (2000 g x 1 g)	\$85	\$170
7	Variable DC Power Supplies (18V 0-2A)	\$65	\$455
3	Balsa Wood Strips (3/32" x 3/32"x36")	\$45	\$135
3	Self-healing Cutting Mats	\$35	\$105
1	Drill Press Vise	\$30	\$30
15	Digital Multimeters	\$25	\$375
15	Dial Calipers (6" steel, graduated to 0.001 inches)	\$20	\$300
Varies	Supplies (various types of paper, sketching pencils/paints, lead, erasers, ink cartridges, etc.)	\$2,500	\$2,500
Varies	Project Supplies (LEDs [light emitting diodes] in various colors, single AAA battery holders, push-button switches, resistor kits and wires, solderless breadboards, alligator leads, 1" masking tape, low-temp full-size glue gun, glue sticks, various syringes, items for sorting, etc.)	\$1,000	\$1,000
Varies	Tools and Hardware (25' metal tape measures, clamp lights and bulbs, adjustable wrenches, wrench sets, wire strippers, needle nose pliers, locking pliers, hex key sets, hacksaws and blades, files and file handles, hickory handle hammers, drill bits, precision screwdriver sets, S-hooks, utility knives and blades, etc.)	\$800	\$800
Varies	Computer Accessories (cases, covers, etc.) (optional)	\$500	\$500
Varies	Clamps (various sizes)	\$250	\$250
Varies	Personal Protective Equipment (PPE) (gloves, safety glasses/goggles, etc.)	\$150	\$150

OTHER

TOTAL:

\$300

QTY	ITEM DESCRIPTION	UNIT	TOTAL
1	Occupational Safety and Health Administration (OSHA) Instructor Training	\$300	\$300

CATEGORY TOTALS:

CLASSROOM EQUIPMENT	\$18,180
PROGRAM EQUIPMENT	\$76,200
INSTRUCTIONAL MATERIALS	\$4,000
INSTRUCTIONAL SUPPLIES	\$7,875
OTHER	\$300
ESTIMATED PROGRAM TOTAL	\$106,555