MECHATRONICS TOOLS AND EQUIPMENT LIST

Multimedia projector and screen
Desktop or laptop computer (one per student)
Variety of personal protective equipment, including:
- Safety glasses, goggles, and face shields
- Safety harness
- Hearing protection

Fire extinguisher
Variety of communication tags and signs
Materials to create hypothetical fire hazards

Variety of safety tags, including:
- Lockout/tagout tag
- Fire extinguisher tag

Variety of ladders, including:
- Straight ladder
- Extension ladder
- Stepladder

CORE CURRICULUM: Introductory Craft Skills
Materials and Equipment
Levels
Feeler gauges
Calipers
Micrometers
Dial indicators
Parallels and gauge blocks
Precision straightedges
Calculator (industry does not allow for employment testing)
Standard ruler (with 1⁄16-inch markings)
Metric ruler (with centimeters [cm] and millimeters [mm])
Tape measure
Metric scale
Protractors
Claw hammer
Ball peen hammer
Screwdrivers, including:
- Slotted
- Phillips

Hex key wrenches (English/standard and metric)

Pliers, including:
- Slip-joint
- Long-nose
- Needle-nose
- Lineman
- CHANNELLOCK®

Measuring tools, including:
- Steel rule
- Laser measuring tool

Spirit level

Squares, including:
- Machinist's square
- Combination square

Plumb bob

Clamps, including:
- C-clamp
- Locking C-clamp
- Spring clamp
- Hand-screw clamp

Files and rasps, including:
- Utility knife
- Square file
- Triangle file
- Flat file
- Rat-tail file

Rasp

File card

Cold chisel

Punches (center and round)

Wrenches, including:
- Nonadjustable wrench (English/standard and metric)
- Adjustable wrench
- Torque wrench

Sockets and ratchets (English/standard and metric)

Power drills, including:
- Electric drill
- Cordless drill
- Hammer drill

Electric screwdriver

Variety of drill bits (letter, number, and fractional)

Saws, including:

- Reciprocating saw (SawZall®)
- Portable handheld band saw

Handheld grinders, including:

- Angle grinder
- End grinder
- Detail grinder

Air compressor

Nuts, bolts, and screws (English/standard and metric)

Hand truck