

## 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