

REQUIRED TOOL LIST (Approximate cost \$600 to \$800)

HVACR Programs required tools list are listed below. These tools are necessary for the required classes in the program and will meet many basic needs of employment in the HVACR Industry. These items may be purchased on campus during the first days of class or from a refrigeration supply house before arriving at the university.

TOOLS REQUIRED FOR SEMESTER ONE & TWO

(Manufactures and Models listed are suggestions only)

- 4-hose-gauge set with 48" hoses
Yellow Jacket Brute II, with vacuum hose and sight glass.
- 8" adjustable wrench
Klein – 500-B
- Refrigeration valve wrench
Robinair 10696
- Screw starter
Ullman D-2, MA Line MA181A
- Dial or digital thermometer – 40 to 160°
Robinair 10596, Universal T160 or Universal 300
- Quick connect discharge hose connectors
2 each (one straight and one 90°) not needed if purchased with 4 hose gauge set
Imperial 16C or Ritchie 19109 (straight) or 19209 (90 degree)
- Toolbox (plastic 20x11x9) or canvas
20" maximum
- Tape measures; 1/4"x 12' or 1/2"x 10' or 1"x 30'
Stanley 33-115, Klein – 922-10, and Stanley 33-430
- "IMP" tube cutter
Imperial TC1050
- Regular tube cutter
Imperial TC1000
- Flaring and swaging set
Imperial – 275FS
- Paste solder flux
Mueller, or Harris 40027
- 1/8" solder 1# 95-5
Mueller – 95-5
- Roll of flint paper
3M
- Combination nut driver
Klein 5 or 7 piece set
- Volt-amp-ohmmeter with digital readout
Universal DLP-259 or Amprobe ACD 14
- 6" needle-nose pliers with cutter
Klein – D203-6H2
- Plus 33 electrical tape
3M
- Wire stripper 5"
V6C0 #V 88202 or Klein 1011
- Diagonal cutter 5"
V-WS100C or Klein D210-5C
- 10" adjustable wrench
Klein – 500 – 10
- Slip-joint pliers or channel locks
Klein – 511 – 8 or Diamond HL1108H
- 6-in-1 electrical tool screwdriver
Lennox 23931
- 1/8" x 3" screwdriver
Klein – 19401, or A216-3
- Hex key set
Watsco P-13
- Wire ties
MA Line 3174
- Inspection mirror
Wagner M-3
- 1 Padlock (locker and/or toolbox)
- Flashlight and batteries
- Safety glasses or goggles (**REQUIRED**)