Machine Tool Technology

Required Tool List

Safety equipment required by 1st week of class. Tools must be acquired by the 5th week of class. Students may source their tools from a vendor of their choice. Price will range between \$900-\$1500 depending on quality and vendor. Discussion regarding each tool specification and recommendations will occur the first week of class.

Vendor	Contact Person	Email	Phone	Website
MSC Industrial	Carla Ross	rossc@mscdirect.com	(775) 788-7502	http://www.msc direct.com
Intermountain Machinery	Jay Gill	jgill@ims.supply	(406) 260-1060	https://ims.sup ply.com
Snap-On	Jeff Wadsworth	jeffery.l.wadsworth@snapon.com	(801) 874-5187	https://www.snap on.com/en
Stellar Industries	Jeff Ouzts	JOuzts@stellarindustrial.com	(406) 896-0066	https://www.ste llar.com
Norco Industrial	<u>Sheridan</u> Tony Kassen	<u>Sheridan</u> tonyk@norco-inc.com <u>Gillette</u>	<u>Sheridan</u> (307) 672-9754 Gillette	https://www.no rco-inc.com
	<u>Gillette</u> Jeremy Ellis	jeremye@norco-inc.com	307) 682-8250	

*Toolbox- personal preference, most of our students prefer one with a tray or drawers.

**Steel rule- rigid or flexible, there are applications for both. 4R Graduations most often used in the shop are 1/64", 1/32", 1/16", and 1/8".

***If you are serious about this occupation, a 0-1" Depth Micrometer is also suggested.

Safety Glasses - Clear ANSI Z87.1 (Minimum) indoor/outdoor & mirrored lenses *NOT* allowed Safety Toe Boots - (Minimum) Steel or composite toe, slip resistant, leather preferred

Scientific calculator - (Minimum Texas Instruments TEXTI30XA) OR Machinist Calc Pro

Small Toolbox - Portable with handles **NO LARGER** than 24" wide x 12" deep x 12" high *

6" Steel Rule - 4R Graduations**

6" Dial Caliper - 0.001" Increments

Mechanical Micrometer - 0-1" Range, Ratchet Thimble, 0.0001" Graduation ***

Dial Test Indicator - 0.0005" Graduation, 0.06" Travel Range

INDICOL Test Indicator Holder

Dial Drop Indicator - 1" Range, 0.001" Graduation with adjustable magnetic base

Mighty Magnetic Base

12" Combination Square Set - (Center, Protractor, and Square Head with Steel Rule, 4R Graduations)

Telescoping Gage Set - 5/16"- 6"

Thread/Screw Pitch Gages - (Standard and Metric)

Feeler Gage Set - Hardened 0.0015-.025"

Center Gage - 60 Degree, 1/32" to 1/14" graduations

Scribe

Center Punches - 60 and 120 Degree

Automatic Prick Punch

Machinist's Double Face Hammer or Ball Peen Hammer

Soft Face Dead Blow Hammer (Optional)

File Set- Round, Half Round, Mill, Slim Taper, Flat Single and Double Cut

Hand Deburring Tool - Swivel Type with Replacement Blades

Allen Wrenches/Hex Key Set- Inch .05" to 3/8" and Metric 1.5-10mm

Torx Key Set- T1 to T25

Screwdriver Set - 6 pieces, Standard {3/16, 1/4, & 5/16} Phillips {#1-#3}

Center Drill Set (5 piece, #1-#5)

HSS Drill Bit Set (1/16"-1/2") 1/64" Increments

25/64" Twist Drill- HSS, Black Oxide OR Coated, 135° Included Angle

HSS 5/16" x 5/16" x 2 ½" Tool Blank (4 pieces)

4F Square End Mills- HSS Center Cutting: 1/8", 1/4", 5/16", 3/8", 1/2", 5/8", 3/4" (Qty 2 Each) 2F Square End Mills- HSS Center Cutting: 1/8", 1/4", 5/16", 3/8", 1/2", 5/8", 3/4" (Qty 2 Each)

Flashlight (**NOT BLINDING**)

Countersink- HSS, 3/8" and 3/4" Diamter, 90 Degree Included Angle, 2-6 Flutes

Mechanical Edge Finder-Single End