

# Precision Machining Technology

## Tool List – Minimum Requirement (subject to changes)

Quantity	Description
1	Laptop Personal Computer Recommend HP ZBook 14u Performance - Intel Core i7-8565U, 32GB RAM, 1TB SSD, Windows 10 64 (Available in Campus Store)
1 pair	Safety Glasses with side shields OSHA approved, non-prescription (Available in Campus Store)
1	6" Scale (Steel Rule) in Fractions, 32nds 64ths, 50ths, and 100ths
1	Steel Protractor
4 total	High speed steel with 5% cobalt lathe bits 3/8" x 3/8" (Available in Campus Store)
2	3/8" Brazed Turning Tool (Right Hand) (Available in Campus Store)
1 Each	1/4", 3/8", 1/2", 3/4" end mills (2 and/or 4 Flute) ( 1/2" Dia. Available in Campus Store)
1 Each	# 3 & #4 Center Drill
1	Drill bit set- up to 1/2"
1	6 or 8 inch caliper - digital or dial type (preferred)
1	Dial travel indicator (.001" graduation) - 1" minimum travel
1	Way Magnetic Base (Mighty Mag style)
1	Dial test indicator (.0005" graduation) with Quill Holder/attachment
1	Smooth cut file with handle - small
1	Thread center gauge - 60 degree standard
1	Outside Micrometer - 0-1" (Vernier Reading to 4th decimal place)
1	Outside Micrometer - 1-2" (Vernier Reading to 4th decimal place)
1	Outside Micrometer - 2-3" (Vernier Reading to 4th decimal place)
1	Depth Micrometer Set - 0-3"
1	Single End Edge finder
1	1 gallon shop vacuum
1	2 inch paint brush
1	Dead Blow Hammer
1	Combination grit Sharpening Stone
1	Tap guide
1 set	#0 to 1/2 Inch, T Handle, Tap Wrench Set
1	6 inch pliers
1	Deburring Tool
1 set	Screwdrivers - Regular and Phillips
1	Scriber
1	Dykem Paint Pen Marker
1	Wrench, Adjustable – 10" or 12"
1	Wrench, Hex Key - 1/32" to 3/8" and Metric 2-8
1 Set	25 piece radius gauge set
1	Small Can of Tap Magic
1	Tool Box – Recommend Roller Cabinet with Lock (Maximum size 36"long x 24"wide x 50")
<b>Optional – Not Required</b>	
1	Combination Set
1 Set	Combination Wrenches
1	Tape measure
1 Set	adjustable parallels
1	Hack Saw

Revised April 2024