

Aviation Program Toolkit

Students in the Aviation Maintenance program are required to have a tool set for lab activities and assignments. This document provides students with a list of the minimum requirements. Please note that this is a minimum list and you may have more tools than that. We do insist that the tool storage, box or cart, not exceed the size listed due to space constraints in the hanger. We recommend that you purchase/bring the most professional set of tools you can afford. If you currently own some tools of professional quality, you can purchase what you need to fill out your set. We can provide information for vendors who want to work with students to build their professional tool sets by selling complete sets, partial sets, and offer discounts to students.

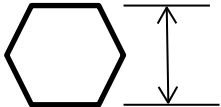
- Students registered for any of our aviation maintenance courses will be required to have their tools in the program area by the beginning of the second semester of classes (January) or they may be excluded from these lab classes.
- Sets must consist of professional grade tools and match the required list.
- Tool kits will be kept in the program area and must not be removed until the student has completed the program. Program staff and the student will inspect their box and contents when the student leaves the program.
- Most residential insurance companies can provide a rider to the policy at a minimal cost to cover personal tools and toolboxes.

The cost of the preferred tools is estimated to be \$2,691 (2023-2024 price). If you have financial aid and expect a refund this semester, you may be able to apply the refund toward the purchase of your tools. Contact your College Success Advisor to see about those arrangements. See your instructor for further details and other options available to you.

Several tool vendors offer substantial discounts to current students of aviation training programs. You have several options to purchase your tools. The Snap-On tool kit may be purchased directly from IWCC. Sets other than Snap-On may be purchased directly from that vendor. **It is REQUIRED to purchase prior to the beginning of the second semester to insure delivery in time for lab activities.**

Toolbox must not be larger than 4,300 cubic inch carrying cap.

Toolkit Minimum Requirements

-----Item-----	Size	-----Item-----	Size
1/4-inch Drive, 12 Point Shallow Universal Sockets	1/4"	1/4-inch Drive Ratchet	Overall length 4 7/16"
	5/16"	3/8 Inch Drive Ratchet	Overall length 10
	3/8"	Universal Joint	1/4" Drive
	7/16"	Universal Joint	3/8" Drive
	1/2"	1/4" Drive Extension	2 inches long
	9/16"	1/4" Drive Extension	4 inches long
1/4-inch Drive, 12 Point Deep Sockets	3/16"	1/4" Drive Extension	6 inches long
	7/32"	3/8" Drive Extension	3 inches long
	1/4"	3/8" Drive Extension	6 inches long
	9/32"	3/8" Drive Extension	11 inches long
	5/16"	Half Round File	10 inches long
	11/32"	Mill File	10 inches long
	3/8"	Adjustable Jaw File Handle	standard 4 1/2" long 1" dia.
	7/16"	File cleaner brush	std. 7 1/2" long
	1/2"	Long Nose Pliers with cutter	2 1/4" Jaw-- 8" overall length
9/16"	Combination Slip Joint Pliers	6 7/16" long	
1/4-inch Drive, 12 Point Shallow Sockets	3/16"	Duck Bill Pliers	Overall length 7 3/4"
	7/32"	Diagonal Cutting Pliers	Overall length 5"
	1/4"	Diagonal Cutting Pliers	Overall length 6 5/16"
	9/32"	Standard Needle Nose Pliers	Overall length 6"
	5/16"	Standard Hex Wrench Set "Allen Wrenches" consisting of the following sizes 	0.028"
	11/32"		0.035"
	3/8"		0.050"
	7/16"		1/16"
	1/2"		5/64"
9/16"	3/32"		
5/8"	7/64"		
11/16"	1/8"		
3/4"	9/64"		
13/16"	5/32"		
7/8"	3/16"		
3/8-inch Drive 12 Point Shallow Sockets	1/4"	7/32"	1/4"
	5/16"	7/32"	5/16"
	3/8"	7/32"	3/8"
	7/16"	7/32"	7/32"
	1/2"	7/32"	1/4"
	9/16"	7/32"	5/16"
	5/8"	7/32"	3/8"
	11/16"	7/32"	
	3/4"	7/32"	
	13/16"	7/32"	
	7/8"	7/32"	
		7/32"	



-----Item-----	Size
Aviation Style Cutting Shears "Aviation Snips"	Red Handle—left hand
	Green Handle—right hand cut
	Yellow Handle--straight
Ignition 15°/60° Offset Wrench Set	1/8—1/8"
	5/32—5/32"
	3/16—3/16"
	15/64—1/4"
	1/4—15/64"
	9/32—5/16"
	5/16—1/4"
	11/32—3/8"
3/8—11/32"	
True Flush Cut (tapered head) Electrical Service Cutter	Overall length 4 7/16 inches Cutting capacity AWG#17
Scribe/pick	straight end and 90° end
Ratcheting Soft Grip Stubby Screwdriver Handle	Overall (total) length 4 1/2" shank length 2"
Hex Shank Screwdriver Bit	No. 2 Phillips
Hex Shank Screwdriver Bit	Standard size flat bit
Reversible Blade Screwdriver	9/32 and 13/64 flat tip rev. bit #1 and #2 Phillips rev. bit
Combination Measuring Set	12-inch Rule with Square/90 head—Center Head and Protractor Head
6" Steel Rule	Graduated in 1/32 and 1/64"
Inspection Mirror 1 1/4" dia.	closed length 10" ext. length 14"
Feeler Gauge	25 blades .0015, .002 to .025" .001" increments.
Explosion Proof Flashlight	
Telescopic Magnetic Pen-style pick up tool	

-----Item-----	Size
Ball Peen Hammer	8 oz
Plastic Tipped Hammer	16 oz wt.
Pin Punch	3/32"
	1/8"
	5/32"
	3/16"
	7/32"
	1/4"
Center Punch	5/16 hex size 5" long
Pocket Magnifier	Multi Lens
Reversible Wire Twister/Cutters	6- or 9-inch pliers with overall
Open end Angled 30° and 60° Wrenches	3/8"
	7/16"
	1/2"
	9/16"
	5/8"
	11/16"
Combination Wrench with 12-point box end	3/4"
	7/32"
	1/4"
Short handle Combination Wrench with Ratcheting Box end	5/16"
	11/32"
	3/8"
	7/16"
	1/2"
	9/16"
3/8-inch Drive Crowfoot Wrenches	5/8"
	11/16"
	3/4"
	13/16"
	7/16"
	15/16"
	1"



<p>Tool Box</p> <p>No larger than 4,300 cubic inch carrying cap.</p> <p>all drawers must be shadowed for above tools.</p>	<p>Recommended: Snap-On KMC18062N with eight (8) drawers</p>	
<p>The Snap-On Aircraft Maintenance Kit with Portable Chest # KMC18AVTK with additional 211FCOA 3/8-inch Drive Crowfoot wrenches and OXIR707 Flank Drive Combination Ratcheting Box/Open End Wrenches is recommended.</p>		