



Program Requirements

- **Books/software:** Visit pine.edu/campus-store for details
- **Laptop:** Premium version required—visit pine.edu/supplies for required specifications
- **Tools/supplies:** See details below
- **Uniform:** Not required

Tool/Supply Requirements

These tools are required for the certificate, diploma, and AAS degree program on day one and should be ordered before the semester begins. The recommendations are made to provide the highest quality tools while also keeping them affordable. Please take this into consideration when purchasing your tools. Price estimates are subject to change and availability.

Qty.	Description	Estimated Cost	Standard Package	Optional Package
1	Personal laptop computer (Required specifications: CPU - Intel i7 or i9 8500 series and up, RAM - 32GB min., Storage - 1TB or more, OS - Windows 10 or 11 64-bit, VRAM - 2GB min. Laptops tailored for this program are available in the campus store. Not included in either tool package)			
1	USB flash drive—16GB max (Not included in either tool package)	\$10		
1	Safety glasses with side shields—Z87+ rated (Over the glass safety glasses required if you wear prescription glasses. Always required in lab environment. Basic safety glasses available in the campus store. Not included in either tool package)	\$5		
1	6" scale/steel rule in fractions and decimals—must have 32nds, 64ths, 50ths, and 100ths of an inch (Recommended model: General Tools #616)	\$12	X	X
1	6" dial caliper—no digital (Recommended model: SPI 17-982-0 or Fowler 52-008-706)	\$45	X	X
1	Outside micrometer 0"-1" range—Vernier reading to 4th decimal place (Recommended model: SPI 17-640-4. Kit that includes all three micrometers: SPI 17-634-7)	\$35	X	X
1	Dial indicator—1" travel and 0.001" graduations (Recommended model: SPI 22-300-8)	\$65	X	X
1	Magnetic indicator base (Recommended model: Mighty Mag 400-1)	\$30	X	X
1	Dial test indicator 0.0005" graduations—0.03" range. Indicator holder is required (Combination kit recommendation: SPI 13-726-5. Individual purchase recommendation: SPI 21-378-5 and Indicol 178)	\$75	X	X
1	Steel angle protractor (Recommended model: General Tools #17)	\$17	X	X
1	25-piece radius gauge set—1/64"-1/2" range (Recommended model: Accusize 3602-5021)	\$50	X	X

Qty.	Description	Estimated Cost	Standard Package	Optional Package
1	Standard screw pitch gauge (Recommended model: Mitutoyo 188-111 or Grip 35428)	\$10	X	X
1	60° thread center gauge (Recommended model: SPI 13-658-0)	\$15	X	X
1	6" precision machinist square (Recommended model: SPI 13-627-5)	\$20	X	X
1	Thread measuring wire set (Recommended model: Accusize EG06-1001)	\$17	X	X
1	Single ended edge finder—0.200" tip (Recommended model: Mitutoyo 050101 or SPI 98-321-3)	\$7	X	X
4	High speed steel lathe bits with 5% cobalt—3/8" x 3/8" (Available in the campus store)	\$35	X	X
2	Carbide brazed turning tool—3/8", right hand (Available in the campus store)	\$17	X	X
1 Ea.	1/4", 3/8", 1/2", and 3/4" high speed steel end mills—2 or 4 flutes (1/2" diameter available in the campus store)	\$50	X	X
1 Ea.	#3 and #4—60° high speed steel center drills (Recommended set: Accusize 0556-5500)	\$7	X	X
1	118° drill bit set—size range up to 1/2" (Recommended set: Drill America 115-piece HSS set D/A115J-P-SET)	\$230	X	X
1	8" smooth or single cut file with handle (handle required)	\$10	X	X
1	2-3 lb. rubber dead blow hammer	\$30	X	X
1	Tap guide (Recommended model: Fowler 52-490-100)	\$15	X	X
1	0"-1/2" tap wrench set (Recommended model: General Tools #165)	\$65	X	X
1	Hook style deburring tool (Recommended set: Shaviv 155-29065)	\$15	X	X
1	The Spillmaster spill proof cutting oil cup with acid brushes	\$15	X	X
1	2" paint/chip brush	\$5		
1	Dykem Layout Fluid—felt tip applicator only! No brush bottles or large chisel point Sharpie marker. (Dykem model number: 80200) (Sharpie model number: Magnum 44001A)	\$12	X	X
1	Adjustable wrench—10"-12" (Recommended model: Crescent AT212BK)	\$27	X	X
1 Ea.	Long handle hex key wrench sets—standard sizes 1/32"-3/8" and metric sizes 2mm-10mm (Recommended brands: Eklind, Bondhus, Wiha, and Wera)	\$40	X	X
1	Rolling and lockable cabinet style toolbox—Maximum: 30" wide x 20" deep x 50" tall (Not included in either tool package)			

Optional but Recommended

Qty.	Description	Estimated Cost	Standard Package	Optional Package
1	Magnetic test indicator stand (Recommended model: Noga NF10433)	\$110		X
1	Outside micrometer 1"-2" range—Vernier reading to 4th decimal place (Recommended model: SPI 17-641-2. Kit that includes all three micrometers: SPI 17-634-7)	\$45		X
1	Outside micrometer 2"-3" range—Vernier reading to 4th decimal place (Recommended model: SPI 17-642-0. Kit that includes all three micrometers: SPI 17-634-7)	\$45		X
1	Depth micrometer set 0"-4" range (Recommended set: Fowler 52-225-110-0)	\$120		X
1	Parallel set 1/2"-1 5/8" (Recommended set: Shars 303-7201-P)	\$110		X
1	Hacksaw with bi-metal blade (Not included in either tool package)	\$20		
1	Box of paper towels (Not included in either tool package)	\$10		
1	Basic needle nose pliers (Not included in either tool package)	\$10		
Hill Industrial Package Cost Estimates:			\$1,200	\$1,700

Preferred Vendors

Both tool packages are available from Hill Industrial Tools.

Hill Industrial Tools
 3110 Ranchview Lane N.
 Plymouth, MN 55447
 763-476-5005
sales@hillindustrialtools.com

You are not required to use Hill Industrial Tools, but they will be the easiest option when purchasing tools. If you would like to purchase a tool package, contact them and request either a Standard Package or Optional Package for the Precision Machining Technology program at PTCC. You may pay with a credit/debit card, and the packages will either be shipped directly to you or delivered to the college during the first week of class. Not all the required tools are in either package. These will need to be purchased separately.

If you already have some of these tools and would like to order the remainder on your own, please consider the recommendations for tools listed above. A student discount is available from MSC Industrial Supply, and the remainder can be found online.

Notes

Some tools and supplies may be available for purchase at the campus store. If you have financial aid funds available, you may use financial aid for these items, provided the purchases are made through the campus store.

If your program requires a specific laptop, you may also use financial aid to purchase it through the campus store. However, laptops do not need to be purchased through the campus store. You may choose to buy from another retailer. If purchasing a laptop elsewhere, it is the student's responsibility to carefully review the required specifications for their specific program to ensure compatibility.

For questions about using financial aid in the campus store, please contact the bookstore staff or your student success advisor.

If you have any questions about this tool list, please contact:

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Disclaimer

This tool and supply list is accurate as of the date of printing. However, items and requirements are subject to change without prior notice. For the most up-to-date information, please contact the program faculty directly.

Last date reviewed: April 2026