



## Program Requirements

- **Program Books/Software:** Visit [pine.edu/campus-store](http://pine.edu/campus-store) for details.
- **Laptop:** Premium version required. Visit [pine.edu/supplies](http://pine.edu/supplies) for required specifications.
- **Tools/Supplies:** \$800-\$1,900. See details below.
- **Uniform:** Not required.

## Tool/Supply Requirements

The easiest way to purchase these tools is online. There are a large number of suppliers on different sites where you can price shop. If you already have the listed tools that are similar feel free to use those. They do not need to be new.

### Tools required for AENG 1231 Materials and Manufacturing Processes & Applied Engineering lab work (1<sup>st</sup> year)

Tool Name	Description/Suggested	Estimated Cost
3/8" socket set	SAE and metric	\$20-40
Flat wrench set	5/16"-11/16"	\$20-40
Allen Wrench Set	SAE and Metric Eklind 22 Piece Metric Ball Hex-L Key Set (13222)	\$30
Tool Box or Chest	One that can be secured	\$50-350
7" speed square or combination square	WORKPRO Aluminum Alloy Carpenter Square and Zinc-Alloy Square Ruler Set - 7 in. Rafter Layout Tool and 12 in. Combination Square Combo	\$10-25
15-25' tape measure		\$10-30
Automatic Center Punch		\$5-10
Safety Glasses		\$5
6" Dial Caliper	Stainless Steel, 0-6" range, .001" accuracy, Amazon Fowler 52-008-706	\$60-100

### Tools required for MTTP 1201 Basic Machine Shop (1<sup>st</sup> year)

Quantity	Description	Estimated Cost
**1	Safety Glasses with side shields OSHA approved, non-prescription	\$100 - \$200
1	6" Scale (Steel Rule) in Fractions, 32nds 64ths, 50ths, and 100ths	
**1	High speed steel with 5% cobalt lathe bits 3/8" x 3/8"	
**1	3/8" Brazed Turning Tool (Right Hand)	
**1	1/2" end mill (2 and/or 4 Flute)	
1	6 or 8-inch caliper - digital or dial type (preferred) <b>NO</b> Plastic Caliper	
1	Small Brush/Dustpan	
1	File with handle	



# Pine Technical & Community College

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## Tools required for MTTP 1201 Basic Machine Shop (1<sup>st</sup> year), continued.

Quantity	Description	Estimated Cost
**1	Wide Sharpie Marker	
1	Wrench, Hex Key - 1/32" to 3/8"	
1	Wrench, Hex Key Metric 2-8	
1	Spray Bottle for coolant	
1	Tool Box with Lock (Maximum size 36"long x 24"wide x 50")	

\*\* Available in the Campus Store

## Tools required for Automation classes (2<sup>nd</sup> year)

Tool Name	Description/Suggested	Estimated Cost
Digital Multi Meter	Must read up to 24 VDC. Cheaper models are accepted if only used for low voltage readings.	\$50 - \$100
Screw Driver Set	Wiha 32092 Slotted and Phillips Insulated Screwdriver Set, 1000 Volt, 6 Piece	\$50
Wire Stripper	Wire Stripping Cutter Tool, Strong Gripping Serrated Nose, Double Grip Comfortable Handle Klein Tools 11055	\$20

## 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.

### 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 2025