

A MEMBER OF MINNESOTA STATE

900 Fourth Street SE • Pine City, MN 55063

Automated Systems Technology & Applied Engineering Double Major

Books • Laptops • Tools • Supplies • Uniforms

Program Requirements

Program Books/Software: \$1,000-\$2,500. Visit pine.edu/campus-store for details.

• Laptop: Premium version required. Visit pine.edu/supplies for required specifications.

Tools/Supplies: \$800-\$1,900

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.

Tool Name	Description/Suggested	Estimated Cost
**Digital Multi Meter	CAT III-600 V or CAT III-1000 V rated. (see note at bottom of page)	\$350 - \$700
	Suggested: Fluke 179 Fluke 87-V	
Screw Driver Set	Wiha 32092 Slotted and Phillips Insulated Screwdriver Set, 1000 Volt, 6	\$50
	Piece	
Wire Stripper	Wire Stripping Cutter Tool, Strong Gripping Serrated Nose, Double Grip	\$20
	Comfortable Handle Klein Tools 11055	
3/8" socket set	SAE and metric	\$20-40
Flat wrench set	5/16"-11/16"	\$20-40
Allen Wrench Set	SAE and Metric	\$30
	Eklind 22 Piece Metric Ball Hex-L Key Set (13222)	
Tool Box or Chest	One that can be secured	\$50-350
7" speed square or	WORKPRO Aluminum Alloy Carpenter Square and Zinc-Alloy Square Ruler	\$10-25
combination square	Set - 7 in. Rafter Layout Tool and 12 in. Combination Square Combo	
15-25' tape measure		\$10-30
Automatic Center Punch		\$5-10
Safety Glasses		\$5
2 nd year	6" Dial Caliper (see instructor for recommendation)	\$40-200

Tools required for MTTP 1201 Basic Machine Shop (2nd year)

Quantity	Description	Estimated Cost
***1	Safety Glasses with side shields OSHA approved, non-prescription	37.2
1	6" Scale (Steel Rule) in Fractions, 32nds 64ths, 50ths, and 100ths	4 - 48.00
***1	High speed steel with 5% cobalt lathe bits 3/8" x 3/8"	¢100 ¢200
***1	3/8" Brazed Turning Tool (Right Hand)	\$100 - \$200
***1	1/2" end mill (2 and/or 4 Flute)	
1	6 or 8-inch caliper - digital or dial type (preferred) NO Plastic Caliper	

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Tools required for MTTP 1201 Basic Machine Shop (2nd year), continued.

Quantity	Description	Estimated Cost
1	Small Brush/Dustpan	
1	File with handle	
***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")	

Tools required for WELD 1501 Introduction to Welding (2nd year)

Quantity	Description	Estimated Cost
1	Welding Jacket – Similar to Black Stallion FN9-30C or FRB9-30C	
1	John Tillman 48 Mig Gloves	
1	Safety Glasses	
1	Welding Helmet Fixed Shade/Auto Darkening – (see instructor for recommendations	\$100 - \$200
	based on your plans)	
1	Whelper welding pliers	
1	Chipping Hammer with Wire brush.	

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

^{**} If you already have a multimeter that reads DC volts you can use this for the first 8 weeks. A cheaper multimeter can be used for the first 8 weeks. These meters will be subject to Instructor approval when used for voltages above 24vdc.

^{***}Available in the campus store.