Computer Integrated Machining Tool List Fall 2025

Questions regarding the Tool List should be directed to Kyle Young young@stevenscollege.edu

Please be sure to read this entire document.

PLEASE NOTE: The Tool List is subject to change and all prices are an estimate.

Each student is responsible for obtaining ALL items listed below. Students are not required to utilize suggested vendors. Students receiving the Stevens Grant will have these tools loaned to them.

Tool Box Note:

Tool boxes must be able to be stored in a locker and moved daily. Therefore, MAXIMUM size is approximately equivalent to a "Craftsman Rally" or "Kennedy 520." 16" High x 22" Long x 15" Wide MAX. Larger cabinets or boxes will not be permitted.

Computer:

Students will have access to a computer lab on the Greiner Campus between the hours of 7:00 AM – 8:00 PM where they may complete their assignments. However, it is recommended that they have their own computer capable of running the modern programs we teach in this major. Listed below is a list of minimum and recommended computer requirements.

For technical requirements please reference: https://www.mastercam.com/support/technical-support/system-requirements/

OS

Minimum: Windows 10 or Windows 11 64-bit Professional

Recommended: Windows 11 64 bit Professional

Processor

Minimum: Intel® or AMD 64-bit processor, 2.4 GHz or faster

Recommended: Latest generation Intel i7/i9 processor, 3.2GHz or faster

Memory

Minimum: 8-12 GB

Recommended: 32-64 GB

Video Card

Minimum: OpenGL 3.2 and OpenCL 1.2 support with 1 GB memory. No onboard graphics.

Recommended: NVIDIA RTX or AMD FirePro™ / Radeon Pro card with 4 GB (or higher) dedicated memory.

Storage

Minimum: Hard drive with at least 20 GB free. USB drive.

Recommended: Solid State Drive (SSD) with at least 20 GB free.

Uniforms:

Uniforms are required daily. Safety toe boots, and dark blue, gray, or black (Dickies 874 style) work pants must be purchased.

T-shirt style uniform tops will be provided on the first day of class. Additional Thaddeus Stevens College Computer Integrated Machining attire may also be purchased through the CIM department while supplies last. Uniforms are subject to change annually.

Safety Glasses:

Safety glasses must be worn at all times in the CIM lab. It's recommended that students have at least one extra pair of safety glasses. Students with prescription eye wear will also need safety glasses equipped with Z87.1 lenses and side shields. Inquire with your eye doctor about obtaining prescription safety glasses.

6	.200"/.500" Edge Finder	6499628	MSC	13.62	1	\$13.62
7	Center Gage	67385013	MSC	10.56	1	\$10.56
8	Screw Pitch Gage*	1221043	MSC	22.11	1	\$22.11
9	Thread Wire Measuring Set	78156619	MSC	35.3	1	\$35.30

10	Parellel Set	6820898	MSC	83.82	1	\$83.82
11	Metric and English Hex Key Set*	5051644	MSC	21.08	1	\$21.08
12	10 pc. Wrench Set*	35159060	MSC	28.12	1	\$28.12
13	Adjustable wrench*	<u>79322046</u>	MSC	14.81	1	\$14.81
14	Torx Key Set*	63615744	MSC	11.96	1	\$11.96
15	Ball-Peen Hammer*	40973539	MSC	12.13	1	\$12.13
16	Dead blow Hammer*	6622708	MSC	17.1	1	\$17.10
17	5 Piece File Set w/ Handle	30237671	MSC	35.61	1	\$35.61
18	Needle Nose Pliers*	73211120	MSC	8.46	1	\$8.46
19	File Card*	650655	MSC	8.27	1	\$8.27
20	Swiss File Set*	36397180	MSC	18.51	1	\$18.51
21	Sharpening Stone – Fine Grade	71459267	MSC	6.54	1	\$6.54
22	Single Point Scriber with Magnet*	76498898	MSC	8.78	1	\$8.78
23	0-1" micrometer	6231658	MSC	122	1	\$122.00
24	6" Dial Caliper	84477736	MSC	125	1	\$125.00
25	6" steel rule*	59624643	MSC	8.37	1	\$8.37
26	Protractor	6475172	MSC	11.5	1	\$11.50
27	1/8-1/2" HSS 2 flute end mill set	<u>2477412</u>	MSC	73.41	1	\$73.41
28	¾" HSS 4 flute end mill	41115254	MSC	43.09	1	\$43.09
29	3/8" Tool Bit Blanks (qty 5)	2603249	MSC	4.48	5	\$22.40
30	3/8" x 120° spot drill	56444060	MSC	10.49	1	\$10.49
31	Drill Index, 115 pc. (Letter, Wire & Fractions to 1/2")	73285355	MSC	202.69	1	\$202.69
32	Padlock for toolbox & locker (qty 2)*	<u>87743670</u>	MSC	9.13	2	\$18.26
33	Deburring tool set	5750997	MSC	20.62	1	\$20.62
34	Safety Glasses*	76652007	MSC	2.24	1	\$2.24
35	Calculator with trig functions (NOT cell phone)	TI-30X Recommended	Any	15	1	\$15.00
36	2 permanent markers (black Sharpie)	Any	Any	4	1	\$4.00
37	Shop Reference for Students & Apprentices	ISBN-10: 0831130792	Any	35	1	\$35.00
		Total Estimated Tool Cost:			\$1	,070.85

Above items and pricing are through www.mscdirect.com. Tools and supplies may be substituted with comperable alternatives and vendors. Non-precision tools have an asterisk. It's suggested not to substitue precision inspection tools with lesser quality tools. Students may receive a discount at MSC. To use the TSCT discount account number it's easiest to place your order over the phone vs online. Mention account #2503341 and that you're a TSCT CIM student when ordering. Prices, MSC#, and availability are subject to change over time.