

Computer Integrated Machining Tool List

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 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 are the minimum and recommended computer requirements.

For technical requirements please reference:

<https://www.mastercam.com/support/technical-support/system-requirements/>

OS

Minimum: 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.

Tools:

Item	Description	Item/Model #	Vendor	\$/Unit	Qty	Total
1	Tool Box (20" X 9" X 12")	33626169	MSC	112.76	1	\$112.76
2	1" Travel Dial Indicator & Magnetic Base	55023113	MSC	101.98	1	\$101.98
3	Dial indicator- horizontal, .0005 res, .030 range	30752299	MSC	222.3	1	\$222.30
4	Indicator Articulated Arm Positioner and Holder w/ Fine Adjust	92259084	MSC	101.55	1	\$101.55
5	Machinist Square	79267951	MSC	19.76	1	\$19.76
6	.200"/.500" Edge Finder	6499628	MSC	22.19	1	\$22.19
7	Center Gage	67385013	MSC	19	1	\$19.00
8	Screw Pitch Gage*	1221043	MSC	52.01	1	\$52.01
9	Thread Wire Measuring Set	78156619	MSC	57	1	\$57.00
10	Parallel Set	6820898	MSC	123.49	1	\$123.49

11	Metric and English Hex Key Set*	5051644	MSC	35.4	1	\$35.40
12	10 pc. Wrench Set, 3/8" to 15/16"	85765618	MSC	66.57	1	\$66.57
13	Adjustable wrench*	33173857	MSC	24.7	1	\$24.70
14	Torx Key Set*	63615744	MSC	15.38	1	\$15.38
15	Ball-Peen Hammer*	43557289	MSC	13.18	1	\$13.18
16	Dead blow Hammer*	3486867	MSC	17.96	1	\$17.96
17	5 Piece File Set w/ Handle	30237671	MSC	113.67	1	\$113.67
18	Needle Nose Pliers*	73211120	MSC	10.93	1	\$10.93
19	File Card*	650655	MSC	17.31	1	\$17.31
20	Swiss File Set*	36397180	MSC	54.6	1	\$54.60
21	Sharpening Stone – Fine Grade	71459267	MSC	11.13	1	\$11.13
22	Single Point Scriber with Magnet*	76498898	MSC	8.67	1	\$8.67
23	0-1" micrometer	6231658	MSC	142.22	1	\$142.22
24	6" Dial Caliper	84477736	MSC	103.32	1	\$103.32
25	6" steel rule*	59624643	MSC	20.59	1	\$20.59
26	Protractor	6475172	MSC	15.27	1	\$15.27
27	3/16-3/4" HSS 4 flute end mill set	3052990	MSC	144.66	1	\$144.66
28	3/4" HSS 4 flute end mill	Removed	MSC		1	\$0.00
29	3/8" Tool Bit Blanks (qty 5)	2603249	MSC	9.93	5	\$49.65
30	3/8" x 120° spot drill	56444060	MSC	16.07	1	\$16.07
31	Drill Index, 115 pc. (Letter, Wire & Fractions to 1/2")	73285355	MSC	189	1	\$189.00
32	Padlock for toolbox & locker (qty 2)*	87743670	MSC	13.62	2	\$27.24
33	Deburring tool set	5750997	MSC	29.93	1	\$29.93
34	Safety Glasses*	76652007	MSC	1.71	1	\$1.71
35	Scientific 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:	\$2,015.20
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Above items and pricing are through www.mscdirect.com. Tools and supplies may be substituted with comparable alternatives and vendors. Non-precision tools have an asterisk. It's suggested not to substitute 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.