



Thaddeus Stevens

College of Technology

Computer Integrated Machining Required Tool List

	Description	MSC #	MSC \$ With Discount
1	Tool Box (20" X 9" X 12")	33626169	123.94
2	1" Travel Dial Indicator & Magnetic Base	55023113	74.35
3	Dial indicator- horizontal, .0005 res, .030 range	30752299	161.66
4	Indicator Articulated Arm Positioner and Holder	08074387	73.41
5	Machinist Square	06507537	25.50
6	.200"/.500" Edge Finder	06499628	13.62
7	Center Gage	67385013	10.56
8	Screw Pitch Gage*	01221043	22.11
9	Thread Wire Measuring Set	78156619	35.30
10	Parallel Set	06820898	83.82
11	Metric and English Hex Key Set*	05051644	21.08
12	10 pc. Wrench Set*	35159060	28.12
13	Adjustable wrench*	79322046	14.81
14	Torx Key Set*	63615744	11.96
15	Ball-Peen Hammer*	40973539	12.13
16	Dead blow Hammer*	06622708	17.10
17	5 Piece File Set w/ Handle	30237671	35.61
18	Needle Nose Pliers*	73211120	8.46
19	File Card*	00650655	8.27
20	Swiss File Set*	36397180	18.51
21	Sharpening Stone – Medium Grade	05111240	5.03
22	Single Point Scriber with Magnet*	76498898	8.78
23	0-1" micrometer	06231658	122.00
24	6" Dial Caliper	84477736	125.00
25	6" steel rule*	59624643	8.37
26	Protractor	06475172	11.50
27	1/8-1/2" HSS 2 flute end mill set	02477412	73.41
28	3/4" HSS 4 flute end mill	41115254	43.09
29	3/8" Tool Bit Blanks (qty 5)	02603249	4.48 (22.40)
30	3/8" x 120° spot drill	56444060	10.49
31	Padlock for toolbox & locker (qty 2)*	87743670	9.13 (18.26)
32	Deburring tool set	05750997	20.62
33	Safety Glasses*	76652007	2.24
34	Calculator with trig functions (NOT cell phone)	Not MSC	≈15.00
35	2 permanent markers (black Sharpie)	Not MSC	≈4.00
36	Shop Reference for Students & Apprentices (ISBN-10: 0831130792)	Not MSC	≈35.00
			Approx. Total \$1325

Above items and pricing are through www.mscdirect.com. Non-precision tools have an asterisk- these items may be substituted with alternatives. 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.

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.

Please contact the CIM instructors with any questions:

Mr. Jared Keim keim@stevenscollege.edu (2nd year instructor)

Mr. Kyle Young young@stevenscollege.edu (1st year instructor)