



Machine Tool Technology

The Machine Tool Technology program develops basic skills in machine tool operations and provides experience on a variety of machine tools such as lathes, milling machines, computer numerical control (CNC) machines, and the CAD-CAM. Related math, blueprint reading, precision measuring, basic metallurgy, and heat treating are included. Graduates of the Machine Tool Technology program will be able to operate the lathe, milling machines such the CNC machine, surface grinders, and perform heat treating operations.

Program/Location	Length	Days	Time
Day Program/ACHEC and Knoxville Campus	16 Months	Monday—Friday	8:00 am—2:30 pm
Curriculum/Courses		MTT 4020	Intro to Additive Mfg
MTT 0001	Worker Characteristic	MTT 4030	Shop Theory IV
MTT 1010	Technology Foundations	MTT 4040	CNC Turning Center
MTT 1020	Orientation and Practical Safety	MTT 4050	CNC Machining Center
MTT 1030	Math Concepts I	MTT 4060	Electrical Discharge Machining
MTT 1040	Engineering Drawings I		
MTT 1050	Shop Theory I		
MTT 1060	Benchmark & Manual Machine Tool		
		Completion Awards	Required Hours
MTT 0002	Worker Characteristic	Production Machine Tender	432
MTT 2010	Math Concepts II	Machine Set-Up Operator	864
MTT 2020	Engineering Drawings II CAD	General Machinist	1296
MTT 2030	Shop Theory II	Machinist I	1728
MTT 2040	Manual Lathe		
MTT 2050	Manual Milling Machine	Completion Rate 2021: 90%	
MTT 2060	Grinding and Abrasive Machines	Placement Rate 2021: 94%	
MTT 2070	Mfg Materials & Processes		
MTT 2080	Intro to Comp Numerical Ctrl Machining		
MTT 0003	Worker Characteristic		
MTT 3010	Engineering Drawings III CAM		
MTT 3020	Shop Theory III		
MTT 3030	Precision Grinding		
MTT 3040	Comp Numerical Ctrl Machining		
MTT 0004	Worker Characteristic		
MTT 4010	Employability Skills		

HOW TO APPLY

All Documents Must be Presented Together to Apply

⇒ Complete the **Free Application For Federal Student Aid (FAFSA)** online – the website is www.studentaid.gov and our school code is 004025.

⇒ Complete **TCAT Knoxville Application for Enrollment** online at www.tcatknoxville.edu and select **APPLY NOW**