



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	Graduation 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**