



# 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	TCAT Knoxville Main Campus	16 Months	Monday-Friday	8:00am—2:30 pm
Day Program	TCAT Knoxville at Anderson County Campus	16 Months	Monday-Friday	8:00am—2:30 pm

Curriculum/Courses		Completion Award		Required Hours	Typical Job Opportunities
MTT 0001	Worker Characteristic	MTT 0004	Worker Characteristic		
MTT 1010	Technology Foundations	MTT 4010	Employability Skills		
MTT 1020	Orientation & Practical Safety	MTT 4020	Intro to Additive Mfg		
MTT 1030	Math Concepts I	MTT 4030	Shop Theory IV		
MTT 1040	Engineering Drawings I	MTT 4040	CNC Turning Center		
MTT 1050	Shop Theory I	MTT 4050	CNC Machining Center		
MTT 1060	Benchwork & Manual Machine Tool	MTT 4060	Electrical Discharge Machining		
MTT 0002	Worker Characteristic	Production Machine Tender	Certificate	432	
MTT 2010	Math Concepts II	Machine Set-up Operator	Certificate	864	
MTT 2020	Engineering Drawings II CAD	General Machinist	Diploma	1296	
MTT 2030	Shop Theory II	Machinist I	Diploma	1728	
MTT 2040	Manual Lathe				
MTT 2050	Manual Milling Machine				
MTT 2060	Grinding and Abrasive Machines				
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				

**Total Completion Rate 2017: 93%**

## HOW TO APPLY

⇒ Complete the **Free Application For Federal Student Aid (FAFSA)** online – the website is [www.fafsa.ed.gov](http://www.fafsa.ed.gov) and our school code is 004025.

⇒ Complete **TCAT Knoxville Application for Enrollment** online at [www.tcatknoxville.edu](http://www.tcatknoxville.edu) and select **APPLY NOW**