BEGIN YOUR CAREER PATHWAY WITH TSTC DUAL ENROLLMENT

PRECISION MACHINING TECHNOLOGY

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TSTC offers an Associate of Applied Science degree in Precision Machining Technology and can be completed in four semesters. For those who want to enter the workforce more quickly or add to their existing knowledge, TSTC also offers certification in machining.

This intense, hands-on training consists of a series of machine tool operation courses to develop and challenge your skills using various conventional and Computer Numerical Controlled machines.

Precision Machining Dual Enrollment Pathway		
Course	**Course Name**	**Credit Hours**
MCHN 1302	Print Reading for Machining Trades	3
MCHN 1320	Precision Tools and Measurements	3
MCHN 1300	Beginning Machine Shop	3
MCHN 1343	Machine Shop Mathematics	3

Precision Machining Certificate I		
Course	**Course Name**	**Credit Hours**
MCHN 1302	Print Reading for Machining Trades	3
MCHN 1320	Precision Tools and Measurements	3
MCHN 1300	Beginning Machine Shop	3
MCHN 1343	Machine Shop Mathematics	3
MCHN 2303	Fundamentals of CNC Machining	3
MCHN 1371	Engineering Computer Graphics I	3
MCHN 1438	Basic Machine Shop I	3
MCHN 2344	Computerized Numerical Control Programming	3

Manufacturing Technology Program of Study

The Manufacturing Technology program of study focuses on the development and use of automatic and computer controlled machines, tools, and robots that perform work on metal or plastic. CTE learners will learn how to set up and operate a variety of machine tools to produce precision parts and instruments. Students will also learn how to modify parts to make or repair machine tools or maintain individual machines, and how to use hand-welding or flame-cutting equipment.

TSTC AWARDS	Median Wage
Certificate I	$13-18/Hour
Certificate II	$15-20/Hour
Associate of Applied Science	$18-$32/Hour

CAREER OPPORTUNITIES

Precision machinists are skilled artisans who create parts to fit a need. In precision machining, a tool or piece of hardware is made from a material to create a needed part. Machinists help create these parts used in everything from automobile production to surgical devices and aircraft parts. It's a job that has an application in every industry.

Texas is already the second-largest employer of machinists in the nation. Between now and 2028, there will be a 10% increase in the number of machinist jobs in Texas. Graduates can find careers in commercial and military aircraft, medical and telecommunications equipment, automotive tool manufacturing, and, of course, oil tool manufacturing.

Precision Machining Suggested PEIMS Crosswalk

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
MCHN 1300 Beginning Machine Shop/ Metal Fabrication and Machining I	13032700 (2 credits)	None	None

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
MCHN 1302 Print Reading for Machining Trades/ Precision Metal Manufacturing I	13032500 (1 credit)	None	None
MCHN 1320 Precision Tools and Measurements/ Metal Fabrication and Machining II	13032800 (2 credits)	Metal Fabrication and Machining I	None

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
MCHN 1343 Machine Shop Mathematics/ Precision in Metal Manufacturing II Lab	13032610 (3 credits)	None	None
MCHN 2303 Fund. Of CNC Machining/ Practicum in Manufacturing	13033000 (2 credits)	Metal Fabrication and Machining I	None
MCHN 1371 Engineering Computer Graphics I/ Practicum in Manufacturing	13033005 (3 credits)	Metal Fabrication and Machining I	None
MCHN 1438 Basic Machine Shop I/ Practicum in Manufacturing	13033010 (2 credits)	Metal Fabrication and Machining I	None
MCHN 2344 Computerized Numerical Control Programming/ Practicum in Manufacturing	13033015 (3 credits)	Metal Fabrication and Machining I	None