Machine Tool Technology (MTT.CNC.CT)

Certificate

Engineering/Manufacturing and Industrial Technology

Auburn Hills Campus

The Machine Tool Technology program is designed to emphasize the concepts of manually operated and computer-driven metal cutting machinery. Instruction will include cutting principles, programming techniques, computer controls, and computer numerical control (CNC) machine tool operations. In addition, the interfacing of automated equipment with computer aided design (CAD) and computer aided manufacturing (CAM) systems will be addressed.

Machine Tool Technology program webpage

Full Time - Machine Tool Technology program plan example

Code	Title		Credit Hours
Major Requirements			
MTT 1000	Introduction to Computer Numerical Control (CNC)		4
MTT 1050	G&M Code CNC Programming		4
MTT 1150	Metrology		2
MTT 1200	Machine Tool Setup & Operation		3
MTT 2250	Fundamentals of Computer Aided Manufacturing		3
MTT 2300	2D & 3D Computer Aided Machining		4
Required Supportive Courses			
CAD 1050	Geometric Dimensioning and Tolerancing (GD&T)		4
CAD 1501	Special Topics in CAD: Fusion 360 Design		2
MSE 1000	Material Science Fundamentals-Metallurgy		3
IST 1300	Industrial Print Reading		3
Complete one of the following math courses:			3
IST 1000	Industrial Math I	3	
or MAT 1560	Trigonometry	3	
Total Credit Hours			**35**

A minimum cumulative 2.00 grade point average (GPA) overall is required for graduation.