

Machine Tool Technology

Associate of Applied Science

Manufacturing, Logistics, & Transportation Pathway

AC Course Number	Required Course Titles	Credit Hours	Semesters Offered	Course Modalities
FIRST YEAR				
First Semester				
<input type="checkbox"/> MCHN 2431	Operation of CNC Turning Centers	4	F	F2F
<input type="checkbox"/> ENGL 1301	Composition I	3	F, W, Sp, Su	F2F, Int, Hyb
<input type="checkbox"/> MCHN 1343	Machine Shop Mathematics	3	F	F2F
<input type="checkbox"/> MCHN 1438	Machining I	4	F, Sp	F2F
<input type="checkbox"/> STSU 0300	Student Success	0	F, W, Sp, Su	F2F, Int, Hyb
Second Semester				
<input type="checkbox"/> MCHN 1441	Basic Machine Shop II	4	F, Sp	F2F
<input type="checkbox"/> MCHN 1190	Special Topic in Machine Shop Assistant	1	F, Sp	F2F
<input type="checkbox"/> WLDG 1337	Introduction to Welding Metallurgy	3	F, Sp	Int
<input type="checkbox"/> SOCI 1301	Introductory Sociology	3	F, W, Sp, Su	F2F, Int, Hyb
<input type="checkbox"/> MCHN 2434	Operations of CNC Machining Centers	4	Sp	F2F
SECOND YEAR				
First Semester				
<input type="checkbox"/> MCHN 1426	Introduction to Computer-Aided Manufacturing (CAM)	4	F, Sp	F2F
<input type="checkbox"/> SPCH 1318	Interpersonal Communication	3	F, W, Sp, Su	F2F, Int, Hyb
<input type="checkbox"/> MCHN 1191	Special Topics in Machinist/Machin Technologist	1	F, Sp	F2F
<input type="checkbox"/> MCHN 1452	Intermediate Machining I	4	F, Sp	F2F
<input type="checkbox"/> XXXX 13xx	Creative Arts Core*	3	F, W, Sp, Su	F2F, Int, Hyb
Second Semester				
<input type="checkbox"/> PHYS 1305	Elementary Physics	3	F, W, Sp, Su	F2F, Int, Hyb
<input type="checkbox"/> MCHN 2438	Advanced Computer-Aided Manufacturing (CAM)	4	Sp	F2F
<input type="checkbox"/> MCHN 1191	Special Topics in Machinist/Machine Technologist	1	F, Sp	F2F
<input type="checkbox"/> MCHN 1454	Intermediate Machining II	4	Sp	F2F
<input type="checkbox"/> WLDG 1421 or WLDG 1428	Welding Fundamentals or Introduction to Shielded Metal Arc Welding	4	F, Sp	F2F
TOTAL CREDIT HOURS		60		

* Choose from ARTS 1301, DRAM 1310, MUSI 1306, or MUSI 1310

Semesters: Fall (F), Winter (W)Spring (Sp), Summer (Su)

Modalities: Face-to-face (F2F), Internet/online (Int), Hybrid (Hyb)

Transfer Opportunities

Bachelors of Applied Arts and Science at some universities.

Career Opportunities and Salaries

Apprentice - \$42,843
Machine Tool Operator - \$41,169
Precision Machine Operator - \$50,628
Community College Instructor (with work experience) - \$42,000
Engineering technologist - \$50,592
Production Technician - \$ 50,592

Marketable Skills

- 1) Work well on a team
- 2) Define, explain and interpret technical information
- 3) Use critical thinking to identify strengths and weakness to determine solutions
- 4) Identify appropriate information sources
- 5) Use math to answer questions
- 6) Schedule/coordinate Operations
- 7) Use current technology to diagnose and solve problems
- 8) Use Troubleshooting to determine causes and decide what to do about it
- 9) Think on your feet

Technical Skills

Critical Thinking — Use logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.

Mathematics — Use mathematics to solve problems.

Judgment and Decision Making — Considering the relative costs and benefits of potential actions to choose the most appropriate one.

Systems Analysis — Determining how a system should work and how changes in conditions, operations, and the environment will affect outcomes.

Active Learning — Understanding the implications of new information for both current and future problem-solving and decision-making.

Operate manual and computer numerical controlled machines. Operate lathes, mills, engine lathes, surface grinders and other precision equipment.