

**32-420-5 MACHINE TOOLING TECHNICIS  
2023-24 PROGRAM CURRICULUM CHECKLIST  
NORTHWOOD TECHNICAL COLLEGE  
NEW RICHMOND**



Name/ID				Date		
CATALOG NUMBER	COURSE TITLE	HOURS PER WEEK	CREDITS	ENTRY LEVEL MACHINING TECHNICAL DIPLOMA (31-420-6)	MULTI-AXIS CNC MILLING TECHNICAL DIPLOMA (30-420-3)	MACHINE TOOLING TECHNICIS TECHNICAL DIPLOMA (Financial Aid Eligible)
<b>FIRST TERM (Fall 2023)</b>						
<b>16 weeks</b>						
32420306	Machine Shop Theory 1	4 hours per week	2 credits	Entry Level Machining		Machine Tooling Technics
32804325	Applied Technical Math 1	6 hours per week	3 credits	Entry Level Machining		Machine Tooling Technics
<b>First 8 weeks</b>						
32420308	Applied Machine Tooling 1	16 hours per week	4 credits	Entry Level Machining		Machine Tooling Technics
32420321	Print Reading for Machine Trades	4 hours per week	1 credit	Entry Level Machining		Machine Tooling Technics
<b>Second 8 weeks</b>						
32420309	Applied Machine Tooling 2 Corequisites: 32420308 Applied Machine Tooling 1 and 32420321 Print Reading for Machine Trades	16 hours per week	4 credits	Entry Level Machining		Machine Tooling Technics
32420338	CAD Basics	4 hours per week	1 credit	Entry Level Machining		Machine Tooling Technics
<b>FIRST TERM TOTAL</b>				15 Credits Entry Level Machining		15 Credits Machine Tooling Technics



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<b>SECOND TERM (Spring 2024)</b>						
<b>16 weeks</b>						
32420307	Machine Shop Theory 2 Prerequisite: 32420306 Machine Shop Theory 1	4 hours per week	2 credits	Entry Level Machining		Machine Tooling Technics
32420339	Mastercam Prerequisite: 32420338 CAD Basics	4 hours per week	2 credits	Entry Level Machining		Machine Tooling Technics
<b>First 8 weeks</b>						
32420336	Applied Machine Tooling 3 Prerequisites: 32420306 Machine Shop Theory 1 and 32420309 Applied Machine Tooling 2	16 hours per week	4 credits	Entry Level Machining		Machine Tooling Technics
<b>Second 8 weeks</b>						
32420337	Applied Machine Tooling 4 Corequisites: 32420307 Machine Shop Theory 2 and 32420336 Applied Machine Tooling 3	16 hours per week	4 credits	Entry Level Machining		Machine Tooling Technics
<b>SECOND TERM TOTAL</b>				12 Credits Entry Level Machining		12 Credits Machine Tooling Technics
<b>THIRD TERM (Fall 2024)</b>						
<b>16 weeks</b>						
32420311	Materials for Machine Tooling Technics	2 hours per week	1 credit		Multi-Axis CNC Milling	Machine Tooling Technics
32420334	CAD/CAM Demo Prerequisites: 32420321 Print Reading for Machine Trades and 32420339 Mastercam	4 hours per week	2 credits		Multi-Axis CNC Milling	Machine Tooling Technics
32420357	Advanced Machining Concepts	2 hours per week	1 credit		Multi-Axis CNC Milling	Machine Tooling Technics
32801361	Applied Communications	4 hours per week	2 credits		Multi-Axis CNC Milling	Machine Tooling Technics
<b>First 8 weeks</b>						
32420370	Machine Tooling Technics 1 Prerequisite: 32420337 Applied Machine Tooling 4	16 hours per week	4 credits		Multi-Axis CNC Milling	Machine Tooling Technics
<b>Second 8 weeks</b>						
32420371	Machine Tooling Technics 2 Corequisite: 32420370 Machine Tooling Technics 1	16 hours per week	4 credits		Multi-Axis CNC Milling	Machine Tooling Technics
<b>THIRD TERM TOTAL</b>					14 Credits Multi-Axis CNC Milling	14 Credits Machine Tooling Technics

All prerequisite/corequisite courses must be completed with a grade point of 2.0 or better.

Revised 6/15/2022



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<b>FOURTH TERM (Spring 2025)</b>						
<b>1st 8 Weeks</b>						
32420343	Machine Tooling Technics 3 Prerequisites: 32420321 Print Reading for Machine Trades, 32420371 Machine Tooling Technics 2, and Corequisite: 32420391 Toolmaking Theory	12 hours per week	3 credits			
<b>2nd 8 Weeks</b>						
32420344	Machine Tooling Technics 4 Prerequisites: 32420321 Print Reading for Machine Trades, 32420371 Machine Tooling Technics 2, and Corequisite: 32420391 Toolmaking Theory, 32420343 Machine Tooling Technics 3	12 hours per week	3 credits			
32420391	Toolmaking Theory	4 hours per week	2 credits			
32801362	Advanced Communication Skills Prerequisite: 32801361 Applied Communications	4 hours per week	2 credits			
32804335	Advanced Technical Math Prerequisite: 32804325 Applied Technical Math 1	6 hours per week	3 credits			
<b>FOURTH TERM TOTAL</b>						13 Credits Machine Tooling Technics
<b>PROGRAM REQUIREMENTS</b>				<b>27 Credits</b> Entry Level Machining	<b>14 Credits</b> Multi- Axis CNC Milling	<b>54 Credits</b> Machine Tooling Technics

*Please be advised that low enrollment class sections may be cancelled. You will be contacted by Student Services with information on other class sections available in alternate formats.*

*GRADUATION REQUIREMENTS: Although your academic advisor can provide guidance, you are ultimately responsible for selecting courses that meet a program's graduation requirements. If you do not take courses in the recommended sequence above, it may delay your completion of graduation requirements. A program plan GPA of 2.0 in a 4.0 grade system is required to graduate.*

**EARN CREDIT FOR WHAT YOU ALREADY KNOW:**

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