

**Approved Minutes of the
Industrial Mechanical & Fluid Maintenance**

State Apprenticeship Advisory Committee

May 26, 2022

Fox Valley Technical College, Appleton,
With Virtual Option

Members Present	Employer
Green, Carl	Expera Specialty Solutions LLC
Steckl, James	Quad
Members Absent	Employer
Dehnel, Charle	Domtar
Harry, Bob	GKN Sinster
Lezendorf, Bryan	3M
Lischka, Ken	John Deere Horicon
Consultants and Guests	Employer
Badger, Richard	Bureau of Apprenticeship Standards
Gast, Brad	Northcentral Technical College
Hayden, Terry	WI-Germany Social Partnership
Herber, Ryan	Bureau of Apprenticeship Standards
Lockwood, Eric	Northwoods Technical College
Metko, Katie	Northcentral Technical College
Nakkoul, Nancy	Wisconsin Technical College System
O'Shasky, Lynn	Bureau of Apprenticeship Standards
Rzensik, Mark	Waukesha County Technical College
Schroepfer, Melinda	Worldwide Instructional Design System
Smith, Owen	Bureau of Apprenticeship Standards

1. The meeting was called to order at 1:03 p.m. by Mr. Smith, in conformity with the Wisconsin Opening Meeting Law.
2. Attendees introduced themselves. Mr. Smith recorded attendance. A quorum was not present.
3. The committee reviewed the roster. Mr. Smith announced that Co-Chair Mortenson accepted a new position and resigned from the state committee.

***Action:** the Bureau will recruit additional members.*

***Action:** the committee will elect a new co-chair at the next meeting.*

4. Action Items

a. Approve the minutes.

Committee members in attendance agreed with the minutes as written. A quorum was not present, so the vote will occur at the fall meeting.

***Action:** the Bureau will present the minutes for approval at the fall meeting.*

b. Approve proposed revisions to related instruction.

Ms. Schroepfer reviewed the proposed revisions and progress to date. A quorum was not present, so Mr. Smith and Director Polk will discuss how the Bureau can gather industry input necessary for a decision.

***Action:** the Bureau will discuss next steps internally.*

5. Discussions

a. BAS Director's Call with State Committees

Director Polk reviewed that the Bureau convened the first Director's Call with State Committees this spring. The objective was to share all updates pertinent to most or all committees in a single, virtual forum., so that each state committee's meetings will focus on its unique needs. He noted that the forum was approved by the WI Apprenticeship Advisory Council. He asked the state committee for feedback to share with the Council.

The state committee supported the Director's Call. Members appreciated the efficient format and focused meetings.

b. Modified format of state committee meetings

Director Polk and Mr. Smith reviewed that the agendas will focus on the committee's unique needs and will always include time to revisit topics from the Director's Call or discuss items not listed on the agenda, if needed. They noted that, depending on the agenda, meetings may be shorter.

The state committee supported the streamlined agenda and virtual option.

c. Pending review of Wisconsin Apprenticeship Manual

Director Polk reported that the *Manual* was reviewed and approved by the Council's Policy and Standards Subcommittee. It will be reviewed by the full Council in June. Once the Council

approves the revisions, it will become an official working draft and a 90-day public comment period will begin. After the 90-day public comment period, all input will go back to the subcommittee and the Council for final approval.

Director Polk added that the Bureau will make the original version, revised version and a summary of changes available electronically.

Attendees did not have questions or comments.

d. Subsequent review of state committee standards

Mr. Smith explained that the *Manual* provides the boilerplate language that constitutes 90% of the each state committee's state standards. Therefore, once the *Manual* is approved, BAS will update all state standards accordingly. He emphasized that the state committee's unique policies—such as its Exhibit A—will not change. Rather, those are always available for the committee to review at its discretion.

Attendees did not have questions or comments.

e. Other

Ms. Nakkoul reported that the WTCS continues to conduct a cyclical, five-year review of related instruction for all registered apprenticeships. Occupations advised by this committee will begin in the fall.

Action: *A quorum was not present, so the WTCS and Bureau will discuss the next steps.*

Mr. Hayden reported that the status of the Wisconsin-Germany Vocational Training Social Partnership. The project will focus on three manufacturing registered apprenticeships. He invited attendees to participate

6. The state committee reviewed the participant statistics and did not find discrepancies.
7. The meeting adjourned at 2:00 p.m. The Bureau will schedule the next meeting via electronic survey.

Submitted by Owen Smith, Senior Analyst, Wisconsin Apprenticeship


7. WTCS Update

Ms. Nancy Nakkoul reviewed the written report. Attendees did not have questions or comments.

8. Participants included 267 apprentices and 84 employers with contracts in active or unassigned status on October 1, 2020.
9. The Bureau will schedule the next meeting via electronic survey.
10. The meeting adjourned at 11:20 a.m.

Submitted by Owen Smith, Bureau of Apprenticeship Standards

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Employment and Training Division
Bureau of Apprenticeship Standards
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STATE OF WISCONSIN

Department of Workforce Development
Tony Evers, Governor
Amy Pechacek, Secretary-Designee
Michele Carter, Division Administrator

May 20, 2022

TO: State Industrial Mechanical & Fluid Maintenance Apprenticeship Advisory Committee

FROM: Owen Smith, Bureau of Apprenticeship Standards; Owen.Smith@dwd.wisconsin.gov

SUBJECT: State Industrial Mechanical & Fluid Maintenance Apprenticeship Advisory Committee Meeting

DATE: Thursday, May 26, 2022

TIME: 1:00 p.m.

ACCESS: **Attend in person.**
Fox Valley Tech College; Room C-190A
1825 N Bluemound Dr
Appleton, 54912

Attend via phone.
608-571-2209; 228 957 592#

[Attend virtually.](#)

TENTATIVE AGENDA

1. Call the meeting to order.
2. Record attendees.
3. Review the current roster.
4. **Action items**
 - a. Approve the minutes.
 - b. Revisions to competencies, credits, and hours for Mathematics for the Machine Trade (add 18 hrs to total RI)
5. **Discussion items**
 - a. BAS Directors Call with State Committees
 - b. Modified format of state committee meetings
 - c. Review of the *Wisconsin Apprenticeship Manual*
 - d. Review of the state standards
 - e. Other
6. Review the program participants.
7. Adjourn.



WTCS Related Instruction

Outstanding Related Instruction Decisions
Remaining from 21-22 Projects

50-520-9 INDUSTRIAL MANUFACTURING TECHNICIAN APPRENTICE

CHANGES RECOMMENDED FOR THE *MATHEMATICS FOR THE MACHINE TRADES* COURSE

History - Changes Recommended for the *Mathematics for the Machine Trades* course

- ▶ Originally Presented to the Committee in February, 2021
 - ▶ Committee requested more time for consideration
- ▶ Presented to committee for vote in November, 2021
 - ▶ There were not enough committee attendees to form a quorum for a valid vote

Curriculum Review Participants

College	Apprentice Coordinator	Instructor
FVTC	Steve Straub	Mike Cattelino
LTC	Jeff Grunewald	Rich Pfister
CVTC	Julie Sherman	Darrin Falk
MATC	David Polk	Mitchell Schuttke
WCTC	Tim Alft	Mike Shiels
WTCS	Nancy Nakkoul	
WIDS	Terri Johnson	

Mathematics for the Machine Trades

This course is used by the following programs:

- ▶ 50-439-1 TOOL MAKER APPRENTICE
- ▶ 50-444-1 CNC MACHINE OPERATOR APPRENTICE
- ▶ 50-439-4 TOOL & DIE TECHNOLOGIES APPRENTICE
- ▶ 50-439-5 MOLD MAKER APPRENTICE
- ▶ 50-439-3 TOOL & DIE APPRENTICE
- ▶ 50-425-1 PATTERNMAKING APPRENTICE
- ▶ 50-420-2 MACHINIST APPRENTICE

Specific Curriculum Recommendations

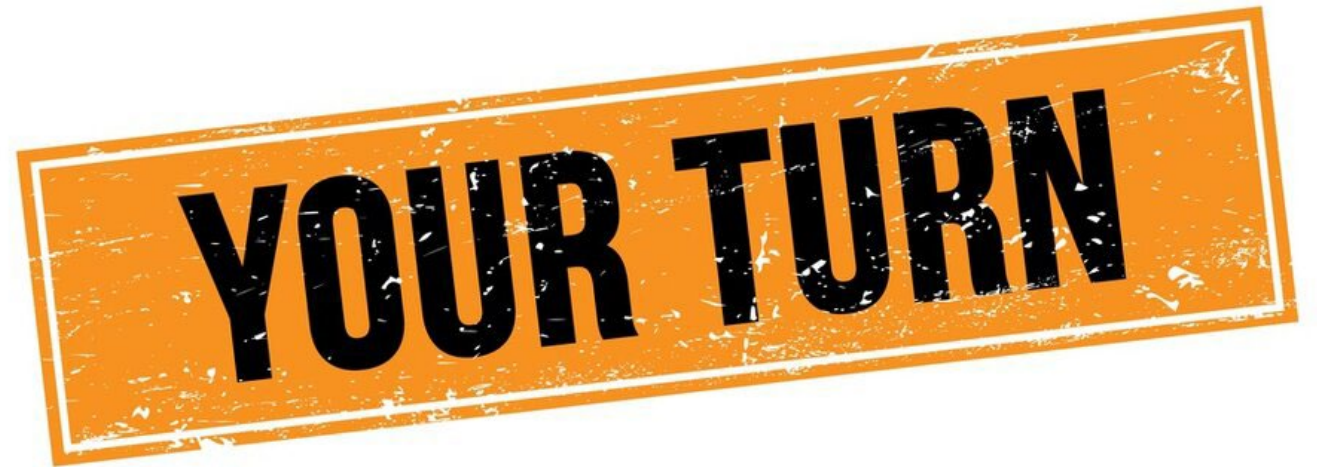
Course	Review Notes
50-420-711 Mathematics for the Machine Trades	<ul style="list-style-type: none">• Change the competency “Apply geometric formulas to right and oblique triangles” to “Apply geometric formulas to right triangles.” The group indicated the skill is not used often and when needed, apprentices can use electronic tools to do so. See detailed revision below.• Remove the competency “Solve compound angle applications.” Instructors indicated they were not teaching the content and it was unnecessary for apprentices.• Add additional time to the course. There are 12 competencies in this course and oftentimes apprentices struggle with math. Instructors suggested adding .5 credits/18 hours to the course to improve apprentice performance and grasp of the skills. <p>Note: This course is shared by other Apprenticeship programs and they will be given an opportunity to weigh in on the changes.</p>

Current	Suggested Revision
<p>Apply geometric formulas to right and oblique triangles</p> <p>Assessment Strategies</p> <p>Machinist Math Worksheet</p> <p>Criteria</p> <p>Criteria - Performance will be satisfied when:</p> <ul style="list-style-type: none"> • apprentice selects the appropriate formula • apprentice selects the relevant dimensions • the formula has all numerical values correctly inserted • the formula solution is stated to specified precision with 90% accuracy • apprentice uses a calculator correctly • apprentice uses the Machinery's Handbook and other references • apprentice sets up a grinding process for V blocks 	<p>Apply geometric formulas to right triangles</p> <p>Assessment Strategies</p> <p>Machinist Math Worksheet</p> <p>Criteria</p> <p>Criteria - Performance will be satisfied when:</p> <ul style="list-style-type: none"> • apprentice selects the appropriate formula • apprentice selects the relevant dimensions • the formula has all numerical values correctly inserted • the formula solution is stated to specified precision with 90% accuracy • apprentice uses a calculator correctly • apprentice uses appropriate resources

Current	Suggested Revision
<p>Solve compound angle applications</p> <p>Assessment Strategies Machinist Math Worksheet</p> <p>Criteria</p> <p><i>Criteria - Performance will be satisfied when:</i></p> <ul style="list-style-type: none"> • apprentice determines missing dimensions using trigonometry • apprentice states solutions to specified precision with 80% accuracy • apprentice uses a calculator correctly • apprentice uses the Machinery's Handbook and other references • apprentice solves problems when given 2 angles applied simultaneously (i.e., machining taper on piece elevated in sine bar) • apprentice creates a draft angle for an injection mold 	<p>Remove this competency from the course.</p>

Your Turn

- ▶ Questions?
- ▶ Concerns?

A large, orange, rectangular stamp with a distressed, grunge texture. The words "YOUR TURN" are written in bold, black, sans-serif capital letters across the center of the stamp. The stamp is tilted slightly upwards to the right. In the top right corner of the slide, there is a small, solid green rectangle.

YOUR TURN

State Committee Report



This summary counts employers and apprentices, between 5/15/2022 and 5/15/2022 with contract status as Active & Unassigned in occupation(s) associated with this committee.

Report is based on apprentice contracts where:

- Contract sector is 'Industrial'.
- Contract occupation code matches a occupation code assigned to committee.
- Contract sponsor is the employer.

Note: Employers active in more than one occupation or committee can cause Column #3 totals at the Committee or State level to deviate from the summed total of the individual occupation or committee rows.

Occupation	Apprentices									Employers				
	Total	Minority		Females		Union		Non-Union		Total	Union		Non-Union	
		#	%	#	%	#	%	#	%		#	%	#	%
1	2	3	3a	4	4a	5	5a	6	6a	7	8	8a	9	9a
Report Total	601	38	6.3	15	2.5	282	46.9	319	53.1	190	65	34.2	128	67.4
Industrial Manufacturing Technician (0261636002202)	48	6	12.5	5	10.4	0	0	48	100.0	10	0	0	10	100.0
Industrial Pipefitter (0286228102202)	19	2	10.5	0	0	15	78.9	4	21.1	12	9	75.0	3	25.0
Lubrication Technician (0269968701804)	2	0	0	0	0	2	100.0	0	0	2	2	100.0	0	0
Machine Repair (0263826103001)	15	3	20.0	0	0	8	53.3	7	46.7	10	5	50.0	5	50.0
Maintenance Mechanic (0263828101401)	264	16	6.1	3	1.1	138	52.3	126	47.7	83	34	41.0	52	62.7
Maintenance Mechanic/Pipefitter (0263828101409)	34	1	2.9	1	2.9	29	85.3	5	14.7	6	4	66.7	2	33.3
Mechatronics Technician (0282826102202)	72	4	5.6	3	4.2	0	0	72	100.0	38	0	0	38	100.0
Millwright (0263828101801)	110	5	4.5	4	3.6	60	54.5	50	45.5	46	23	50.0	23	50.0
Millwright/Pipefitter (0263828101803)	20	1	5.0	0	0	20	100.0	0	0	1	1	100.0	0	0
Welder - Fabricator (0281936101003)	17	1	5.9	0	0	10	58.8	7	41.2	8	4	50.0	4	50.0