

**Machine Technology (MACH) and Welding (WELD)
Advisory Committee Meeting**

MINUTES

December 7, 2021

4 to 5:30 pm

<p>Introductions (Ron Palmer)</p>	<p>Attended:</p> <ul style="list-style-type: none">• Joe Osborn, founder, OMW Corporation• Josh Taylor, Owner, Turner & Taylor Metalworks• Mark Norstad, Owner, Paragon Machine Works• Jim Duer, Owner, MegaCycle Cams• Chris Donnelly, Business Agent, Ironworkers Local 377 San Francisco• Che Rocchild, Welding Instructor/Outreach Coordinator, Boilermakers Local 549• Derek Wilson, Multimedia Instructor and Curriculum Rep., College of Marin• Ron Palmer, Department Chair for Career Education, College of Marin• Grant Kerr, Machine and Metals Technology Instructor, College of Marin• Pdraig Mcgee, Welding and Metal Fabrication Instructor, College of Marin• Mark Martin, Bay Area Regional Director for Manufacturing Workforce Development• Reason Bradley, Owner, Universal Sonar Mount, Sausalito• Alina Varona, Dean of Workforce Development and Career Education, College of Marin• Heather Rahman, Workforce Program Specialist, College of Marin
<p>Program Overview – College of Marin, through COVID and beyond (Alina)</p>	<p>Alina spoke about College of Marin adjustments in regard to COVID-19:</p> <ul style="list-style-type: none">• Students to return back to campus for in-person instruction in Spring 2022, where safety measures are in place to help prevent the spread of COVID-19.• Tuition and fees will be free and covered by the college.• Masks will be required.• Faculty and staff are fully vaccinated.

	<p>Alina’s overview included a full description of what Career Education and the programs included.</p> <p>She reported out about enrollments, demographics, persistence, retention and course successes with the Machine and Metals Technology.</p> <p><i>Please refer to the presentation slides.</i></p>
<p>Discuss student labor market information (Heather)</p>	<p>Heather spoke about the labor market information pertaining to the industry occupations tied closely to our educational program. The committee stated that the demand and average salaries looked correct.</p> <p>For OMW, top-end employees will make significantly higher wages even double. High earning status requires talent and years of experience. Top employees usually have a college bachelor’s level degree. The higher end machining involves 5-axis equipment at OMW.</p> <p>Via Ironworkers Union, starting wage and top wages for apprentices are typically a little higher with full health care, vacation benefits, an annuity plan and retirement plan.</p>
<p>Advisory Check- in Staffing, Recruiting, and Training needs</p>	<p>For entry-level at Ironworkers the requirements are a high-school diploma or GED, i.d., pass a drug test. Companies are willing to sponsor in learn-as-you-go instruction, and companies will hire especially if the individual has a welding certification.</p> <p>The employees weld with 232 and 305 size of wire and meet the D1. 8 American Welding Society standards for certification which involves welding with a restrictor.</p> <p>It’s increasingly harder to find new employees for the few CNC positions in southern Marin area. Many are not applying and the commute is difficult for many.</p>
<p>Machine Tech Overview (Ron Palmer, Derek Wilson and Grant Kerr) Curriculum, Equipment, Workspace changes</p>	<p>Ron, Derek and Grant explained about the changes to the curriculum. In Fall 2022, the new Machining and Welding classes will be offered. Upgrades per the advice from the Advisory members from previous meetings include:</p> <ul style="list-style-type: none"> • CAD/CAM curriculum • Add some CNC programming <p>Many companies are looking for manual machining still and for some the fundamentals are required. The instruction in the first courses cover 100% manual machining.</p>

	<p>College of Marin is interested in aligning the Machine program with the NIMS certification standard.</p> <p><i>Please refer to the presentation slides.</i></p>
<p>Group Discussion about Machine and Metals Technology (group) Possible Educational Pathways Feedback for Machine and Metals program</p>	<p>The current Machining Certificate of Achievement comprises of 20 units. We're thinking of offering a shorter offering for a certificate for higher level skills for employment advancement and for entry-level.</p> <p>Most classes are 3 or 4 units.</p> <p>Reason Bradley explained from personal experience the fundamentals are critical to start working in this field. As an employer, a new employee should have some training and come into the business with a serious approach in dedication to produce good quality work.</p> <p>Grant request tours of the industry shops.</p>
<p>Welding Overview (Ron, Derek and Padraig) Curriculum, Equipment, Workspace plans</p>	<p>Ron and Padraig explained the updates to the curriculum and program growth:</p> <ul style="list-style-type: none"> • The courses are now aligned and clear for Welding including TIG and MIG in addition to brazing fundamentals. • The lower courses lead into a final fabrication course which enfolds all the other types of welding. • 232 wire welding will be taught. • The workspace is undergoing remodeling. • COM is interested in building a WELD pre-apprenticeship program • Adding a Welding certification could help students connect to jobs and toward upward employment mobility • Welding classes are filling up <p><i>Please refer to the presentation slides.</i></p>
<p>Group Discussion about WELD (group) Possible Educational Pathways Feedback for new Welding program</p>	<p>Knowing how to weld 232 wire is the easiest way to be able to work. Having knowledge of how to set up a machine and how to run a pass vertical and overhead to a 232 certification will help an individual get them in the door for solid employment with pay bump ups and time off.</p> <p>Welding classes are filling up.</p> <p>The committee stated connecting with high schools and finding opportunity for them to earn welding skills at COM is important. Most high schools don't have machine and welding shops any more, and many high school students are not on a college track and would rather learn trade skills.</p>

	Three industry certification standards could be reached on the pathway to a Certificate of Achievement in Welding.
Action Items, possible vote (Ron and Heather)	<p>No attending members opposed to COM to offer a certificate. However, to gain a majority vote, our COM team will follow through with the Advisory members at a later time.</p> <p>Chris Donnelly suggested the 232- wire industry certificate could suffice. Alina stated that perhaps our Certificate of Achievement could encompass a pathway to earn several industry certifications.</p>
Summary, wrap-up	Heather will follow up with the Advisory members with the notes of the meeting. The Career Education team will consider reaching out with questions to ensure a majority vote in revisions to the programs. We may convene again in the Spring at Indian Valley Campus to show how the shops and equipment are improving.

Q & A posed throughout the meeting:

- Do we recruit students from high schools? We are working with high schools creating impactful educational pathways.
- How many hours per/year are the apprenticeship workers work? Right now, welders are working a lot of overtime due to the greater demands in construction.
- How much manual machining are you teaching? Right now, Grant is teaching 100% manual machining in the first two fundamental courses. This will continue in the basic courses.
- Do we have new pictures of the workspace? Not yet. We'll have those once the space has gone through renovation/upgrades.
- What are the units for the MACH classes? How many hours will need to invest in earning a certificate? The courses are either 3 or 4 units with a total of 20 units for the certificate.