Meeting Minutes for SRJC Mechatronics Advisory Committee Meeting (09/26/2024)

Attendees: MJ Papa, Victor Tam, Robert Grandmaison, Rachel Smith, Lauralyn Larsen, Megan Rhodes, Mackenzie Galindo, Joe Seymour, Kelli Butler, Tim Irizarri, Tom McKenzie, Andy Hulse

1. Call to Order

A quorum was established and the meeting was called to order.

2. Welcome and Introductions

MJ, Joe, Victor, Robert, Lauralyn, Lauralyn, Tom, Mackenzie, Megan, Andrew, and Abby introduced themselves and their roles. Lauralyn and Megan discussed their roles as interim coordinators and their problem-solving capabilities. Robert asked Kelli about her role, and she confirmed her position as the program manager for their apprenticeship program. Joe and Mackenzie discussed the importance of connecting students with industry needs. The conversation ended with no open questions or action items.

3. Industry Updates

The team discussed the current state of the industry, the need for stronger math skills among students, and the success of the certificate program. They also discussed the need for promoting the program and expanding outreach to middle and high schools, and the challenges faced by the program, particularly in relation to math courses. The conversation ended with plans for a future meeting to discuss potential equipment funding and the possibility of reorganizing the automation lab.

Keysight: Apprenticeship program (ARK) program is continuing although it is not a guarantee of a job.

Viavi: Just hired 3 new engineers

S.M.A.R.T.: hired a new intern who never showed up

Joseph Phelps: Harvest time. There is a hiring freeze. We have upgraded our bottling line.

4. Certificate and Program Updates

- MJ to update counseling on stackable certificates and share organizational chart.
- MJ to explore options for setting up an automation lab in room 1453.
- MJ to include cost estimates for reorganizing room 1453 in the PRPP (Planning Resource Planning Software).
- Victor to continue exploring solutions for offering appropriate math classes within legislative constraints.
- Megan and Lauralyn to work with MJ on planning an evening career fair or employer engagement event for mechatronics students.

- Mackenzie to support MJ with marketing efforts and outreach to Napa middle schools.
- Kelli to work with Michael to fully load and set up perpetual licenses for the Field Fox devices donated to the program.

5. Internship and Apprenticeship Opportunities

Improving Math Skills and Curriculum Changes

The team discussed the current state of the industry, with a focus on the need for stronger math skills among students, particularly in algebra and trigonometry. They agreed that students could benefit from taking a beginner business class and suggested unofficially recommending students take math courses to improve their candidacy for jobs. The team also discussed changes to the math curriculum at the community college due to Assembly Bill 1705, which has led to the elimination of placement exams and the direct placement of students into transfer-level math courses. They also discussed the success of the certificate program and the introduction of the RF class. Lastly, they discussed a new project for the soldering class, which involves designing a buck converter, and the need to update the class curriculum to include surface mount soldering.

Expanding Outreach and Promoting Programs

The team discussed the need for promoting a program and expanding outreach to middle and high schools, particularly to help students who missed out on education during Covid. MJ expressed her desire to be a guest speaker at after-school programs and suggested organizing a job fair or open house event. Kelli and Joe suggested partnering with the Sonoma County Office of Education. Victor discussed ongoing efforts to establish a more robust STEM ecosystem in Sonoma County and the potential to bring Tinker Academy to SRJC in summer 2025. Robert proposed a permanent installation of automation equipment in a room north of MJ's current rooms. Mackenzie offered to provide support in marketing and facilitate informational interviews for her students with local employers. Both agreed to share their contact information for further collaboration.

Certificate Program Success and Placement Discussion

Mackenzie raised a question about job placement for certificate program graduates, seeking information on how the program tracks their success. Joe and MJ responded, noting that while some certificates are basic and may not lead to advanced positions, others like the Mechatronics certificate could be more promising. MJ shared that her reports show a 30% increase in certificate completers and that many students are already working in the industry. She also mentioned her plans to update the team on stackable certificates. Joe agreed with the idea of stackable certificates but emphasized that one certificate alone is not enough.

Part-Time Student Internships and Financial Constraints

MJ discussed the shift towards more part-time students working alongside their studies and emphasized the importance of providing hands-on learning opportunities for them. Joe noted one internship position open in June and six more pending approval, but Tom and Andrew cited financial constraints and bandwidth limitations as challenges. Joe proposed passing on the chairmanship role he had held since 2018, which MJ agreed to while Tim preferred Joe to continue.

Appreciation for Program and Addressing Challenges

The meeting was a positive discussion about the appreciation for the program and the dedication of the participants. The team, including MJ, Tim, Kelli, Joe, and Victor, expressed their gratitude for the program and the support it has received. They also discussed the challenges faced by the program, particularly in relation to math courses. Victor mentioned that the math department is exploring ways to fill the gap left by the lack of transferable math courses. The team agreed on the importance of controlling the enrollment process for math classes to avoid legal issues. Victor and Joe discussed the challenges of navigating a complex legislative issue, with Victor explaining that while the law has good intentions, it is difficult to execute and has revealed gaps that need to be addressed. Joe agreed, noting that no laws are ever perfectly executed or written. They both expressed hope for finding a solution to the issue.

Discussing AI Limitations and Automation Lab Funding

Joe, Victor, MJ, Kelli, and Michael discussed the limitations of AI in capturing chat notes and the need for manual editing. MJ suggested scheduling the next meeting in March to discuss potential equipment funding and the possibility of reorganizing the automation lab. The team agreed to meet again in March, with the possibility of a campus tour for Joe. Kelli and MJ discussed the licensing for their Fieldfox devices, with Kelli confirming that all options were available due to a company donation. Joe confirmed that the license keys were tied to the model number and serial number of the devices. Kelli agreed to inform Michael to fully load the licenses and make them perpetual to avoid future issues.

6. Adjournment and Next Meeting

The meeting was adjourned at 1:30pm. The next meeting will be held in March 2025. The date will be determined at the beginning of the Spring 2025 semester.