

Mechatronics/Industrial Automation Advisory Board Meeting

Clovis Community College
5:00-6:00 March 1st, 2024

Members responded both in person and Google Form Survey.

Members involved:

Mark Arnet, ABB Robotics
G Brooks-Zak, Outlier Automation
Erik Hanson, Madera Community
Diego McCollough, H2I Group
Anthony Olivo, ICAD Automation
David Pruitt, Producers Dairy
Gary Potter, Central/Mother Regional Consortium
Alain Spalard, Rexel

Advisory Meeting Agenda

1. **Welcome/Introductions**
2. **Approve 7/19/22 Minutes** - Accepted
3. **Program update**
 - News: Mechatronics/Industrial Automation program scheduled for the new CTE building on main campus starting Fall 2024.
4. **New Robotics Courses/Program**
 - Courses:
 - MECH 51 Introduction to Industrial Robotics (2 units)-Feedback
 - Feedback:
 - Well detailed. Great introduction course.
 - It seems the intent of this course is to be familiar enough with a robot to go up to a pendant and know where to look to see what could be wrong. In thinking about how robotics might be used in our local economy, I would guess palletizing might be the most common application, but perhaps also covering different types of robot applications they might encounter (and are also common in food & bev) like SCARA and Delta.

- This course description is comprehensive and I believe students will have a practical opportunity to learn.
 - This sounds like a great introduction course for robotics and for students who haven't used a robot before. Having students expose to hooking up input and output signals is really important because that's the main
 - Recommend and approve
- The advisory committee supports adding MECH 51 course.
- MECH 52 Industrial Robotics Systems (2 units)
 - Feedback:
 - I like the interfacing to a programmable controller
 - I question teaching gluing applications in this course; it seems like a specific topic that should be pretty easy to pick up in the workforce if they needed to do it and understood the fundamentals of robotics. Are there many gluing application examples that apply to our local economy? Maybe a good alternate example could be to interface with end of arm tooling that needs its own inputs / outputs that would be controlled by the robot directly (kind of an extension of the digital IO of the robot topic). I'm thinking like a Shunk gripper with torque feedback.
 - This course description is comprehensive and I believe students will have a practical opportunity to learn.
 - In this course what stands out the most is the use of PLC integration with your robots. A question I would have is how you are doing the machine load and unloading. A conveyor project of moving different products around will be beneficial as this project is an industry type of automation.
 - Recommend and approve
 - The advisory committee supports adding MECH 52 course.
- Programs:
 - Industrial Robotics Technician, Certificate of Achievement
 - Feedback:
 - Looks complete!
 - Looks good for the type of certificate.
 - I like the idea and the only concern is the length of time involved to complete. Considering the students may be working in industry and only have evenings to dedicate to completing certification.
 - All the classes for automation look very detailed of what the students must accomplish. As well as it looks like a lot

of hands on time with the technology in your class that would be beneficial as well.

- Recommend and approve

- The advisory committee supports adding a Robotics Certificate.

■ Industrial Robotics Technician, Associate in Science

- Feedback:

- Looks good.
- Impressive. First in the area.
- Overall, curious what the main applications of someone who got this degree would work in our local economy. Yes, robotics are only increasing, but also Robotics are a subset of disciplines versus the overall industrial automation landscape. I am wondering if their skillset will not be broad enough to work in other areas. In any case, exciting effort to have this degree available!
- For this new degree it is strictly about robot technician where the students learn how to install, setup, program, and integrate because this sounds like a great degree to have especially if you are incorporating all the electronics, hydraulics, and pneumatics with it as well.
- Recommend and approve

- The advisory committee supports adding a Robotics Degree.

5. **Get the word out-** There is space in classes for Fall 2024- contact me for more info.

6. **Adjournment**