

2017 Alignment of Florida Advanced Manufacturing Technician Skills to the Educational Outcomes:

of the 2-year A.S. Engineering Technology Degree Program for Advanced Manufacturing (Mechatronics)

Obtaining feedback from industries is vital to reviewing curriculum content of schools preparing a competent workforce to meet industries' needs. Florida Makes in partnership with Polk State College (PSC) and FLATE (Florida Advanced Technology Education) are requesting your extremely valuable participation. The survey will take approximately 15 minutes to complete.

Section 1 is for Technical Skills and requests two responses: one for the importance of the item and the second for the frequency performed. Rank the importance responses using a scale from 1 to 5, with 5 being "Most Valuable" and 1 being "Least Important." Also, if appropriate, you may select "N/A" (Not Applicable) as an option. For frequency performed, select one of: "Never", "Sometimes" or "Always". If you select N/A for the importance response, please select "Never" for the frequency response.

Section 2 is for personal and teamwork skills and requests responses for only the level of importance and uses the same 1-5 scale as stated in section 1.

The survey will automatically conclude when you finish answering the questions and click on the "Done" button.

We sincerely appreciate you taking the time to provide us your valuable feedback and will share the results when all the data has been compiled.

*	What	Florida	county	are	you	located	in?

\* <u>Technical Skills</u> - A highly skilled employee at this plant is expected to have in-depth technical knowledge, critical thinking and judgment abilities, and systems thinking abilities in order to:

	Rank by Importance (1 being least important and 5 being the most valuable)	Frequency of Use
1. Implement all related safety codes and regulations in industrial working environments.	<b>\$</b>	<b>\$</b>
2. Perform tasks in a specialized technical area.	<b>\$</b>	<b>\$</b>
3. Work with computer aided drafting and create geometric part files.	<b>\$</b>	<b>\$</b>
4. Work at the entry level with traditional materials removal machines, (milling, lathe, drill press, cut-off-saws.)	•	<b>\$</b>
5. Understand mechanical and process characteristics of common materials.	<b>\$</b>	<b>\$</b>
6. Operate materials testing tools and equipment.	<b>\$</b>	<b>\$</b>
7. Operate, maintain, and repair mechanical, hydraulic, and pneumatic systems.	<b>\$</b>	<b>\$</b>
8. Operate AC electric-powered tools, and equipment.	•	<b>\$</b>
9. Operate DC electric-powered tools and equipment.	<b>\$</b>	•
10. Operate electronic sensors, switches, and controls.	<b>\$</b>	<b>\$</b>
11. Operate programmable logic controllers and use systems schematics.	•	<b>\$</b>
12. Diagnose causes and troubleshoot systems operations, using schematics and ladder logic diagrams.	•	<b>\$</b>
13. Report total quality improvements of a unit and the entire systems operation.	<b>\$</b>	<b>\$</b>
14. Evaluate the results of tasks performed in accordance with standard operating procedures (SOPs).	<b>\$</b>	<b>\$</b>
15. Perform root cause analysis and recommend corrective actions.	<b>\$</b>	<b>\$</b>
16. Participate in planning and evaluating processes.	<b>\$</b>	<b>\$</b>
17. Compare and contrast process alternatives.	<b>\$</b>	<b>\$</b>
18. Recommend new solutions and consider effects on various processes even in circumstances where requirements are subject to frequent changes.	<b>\$</b>	<b>\$</b>
19. Demonstrate a high level of independent judgment in a range of technical functions and articulate significant challenges involved.	<b>\$</b>	<b>\$</b>
20. Participate in the development of an existing and/or new product and/or operation.	•	<b>\$</b>

L. Use required learning guides and request learning guidance when needed.	2	3	4	5	N/.
2. Use initiative to set their own enhanced learning objectives related to daily tasks and performance.					
3. Evaluate personal strengths and weaknesses of knowledge and performance related activities.					
Define objectives for new simple applications and establish tasks to accomplish the objectives.					
5. Share with team members alternative ideas and strategies to define the objectives of complex applications.					
6. Express the mission, goals, and objectives of the workplace.					
7. Take responsibility for work environment.					
B. Demonstrate interpersonal communication.					
9. Follow rules and regulations in the workplace.					
10. Execute team assignments competently.					
1. Listen effectively.					
2. Effectively participate in a diverse work environment.					
13. Communicate clearly, timely, and relevant information on processes and results at all evels.					
.4. Conduct, analyze, interpret, and present complex facts and provide solutions.					
15. Take appropriate corrective actions based upon provided feedback.					
1.6. Build consensus from group discussions.					
17. Demonstrate the ability to transfer information and specialized skills to others.					
18. Set short-term and long-term goals.					
19. Represent the organization in a professional manner.					