

Date: September 26, 2018

Lake Shore Compact CNC Manufacturing Newsletter Update

Dear Stakeholders and Community,

The 2018/2019 school year is now well underway, and I wanted to take the time to provide an update on the Lake Shore Compact CNC Program's improvements, current initiatives, and goals for this school year and the future.

Technology Improvements and Initiatives

Haas Simulator Stations:

At the end of the last school year, the Lake Shore Compact purchased 12 Haas CNC Control Simulators for the CNC Manufacturing Program in an effort to begin the process updating our program's technologies and become current with industry. With the addition of the 2 Haas simulators acquired several years ago the CNC program is now 1-to-1 with respect to the number of simulator stations to number of students in the program. The 1-to-1 is an initiative that Mentor School District began several years ago which provides students with individualized access to new technology platforms to enhance and advance the learning process of our students. Our course content will be updated this year to include the new Haas simulators and will allow for students learning objectives and outcomes to meet skills required of today's machining industry and its technology.



CAM Software Update:

During the 2018/2019 school year, the CNC Program will be updating the CAM software used and taught in the program. Our program is switching from 2015 SurfCAM to the 2018 Solidworks CAM package. Solidworks CAM runs as a toolbar inside of Solidworks which allows for CAM work to be completed on 3D models created in the same software. No file transfers or extension changes are required, which mitigates the loss of part data and redundancy of work typically performed several times when using separate 3D modeling software and CAM software. Automatic Feature Recognition and Tolerance-Based Machining combine to offer many efficiencies that the previous software and some of the competitors software did not contain. Although there are many options for CAM software that widely utilized in the machining

industry, GibbsCam and MasterCam to name a few, we chose to update to SolidWorks CAM due to its many efficiencies and seamless transition from 3D modeling to working on CAM.

Student Experiences

Career Technical Student Organizations:

With the addition of the Haas Simulators to our program, the CNC Senior class will be sending two students to the SkillsUSA Regional Competitions this school year. This is the first year that the Lake Shore Compact's CNC Program will compete in the SkillsUSA event. Students will compete in the CNC Mill and CNC Lathe competitions which involve developing a machining process, calculating machining data, manually writing the G and M code, and performing the correct setup procedures and program input on the CNC control simulator. SkillsUSA holds regional, state, and national levels of competitions for high school students in Career Tech classes like ours. There is still a lot of work to be done by our students to prepare for competitions, but we are hoping for a medal!

Enrollment:

I am happy to report that this school year the CNC program's junior class enrollment has grown 20% over last year's junior class, and we currently have 12 of the 13 available seats in the program filled. The 2018 graduating senior class had 8 students return from their junior year and this year the senior class has 9 students.

Senior Internships:

During the 2017/2018 school year, the CNC program implemented the first workforce development program by partnering with local machining companies to place senior students into internships during the school year. Senior students were able to learn and experience CNC Manufacturing practices, technologies, procedures, and business operations that are currently in place in the machining industry. I would like to thank Rimco Products, Advanced Sleeve, Fischer Specialty Tool, Burton Industries, Habco Tool, and Sunset Industries for making the commitment last school year to host one or more internships from the Lake Shore Compact CNC Program.

This year's qualifying senior students will be able to begin internships as early as November 1st. Companies that would like to host an internship this year or would like to learn more about how to partner with the Lake Shore Compact's CNC Manufacturing Program can email kulbis@mentorschools.org to set up a meeting.

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