

# Engineering ACADEMY

**Career-Technical Education Program News from the Six District Educational Compact** 



Carter Jagger (Cuyahoga Falls)

Evan Legnani (Roosevelt) Ryan Noble (Roosevelt)

#### **Catapult Day**

This year the Level II Engineering Academy students continued the tradition of building their own catapults for a friendly competition. Students designed and built their catapults at home. During the competition, data was collected that the students then used to make numerous calculations about the performance of the catapults. Carter Jagger (Cuyahoga Falls High School) won the distance portion of the competition with a distance of 25.5 meters. Matt Keleman (Stow-Munroe Falls High School) won the accuracy portion of the competition with a dead center bullseye on the target. Top competitors for both sections combined were Carter Jagger, Matt Keleman, Andrew Kriska from Stow-Munroe Falls High School, Evan Legnani from Theodore Roosevelt High School and Logan Watson from Tallmadge High School.

### **Level I Manufacturing**



Students pictured are working in teams practicing with a vertical manual mill. This is one of the manufacturing processes studied as a Level I Academy student.

Katherine Logue (Roosevelt) and Alex Wagner (Tallmadge)

## Success Story



Academy graduate
off to Princeton
Opportunities without
limits. Discovery.
Critical thinking. Chloe
Froning, 2017 Roosevelt
graduate, describes her

time in the Engineering Academy as one that allowed her to explore the boundless career opportunities and fields within engineering, without pigeonholing herself into a specific career. "I was very lucky to be in the Engineering Academy, a space where I could explore my creativity and interests and develop my skills into what they are today," Chloe says.

This fall, Chloe began her first semester at Princeton University pursuing her Master of Architecture, and is one of five students that was admitted into the Advanced Placement program. Chloe graduated from Kent State University in May 2021 with her Bachelor of Science in Architecture.

Instructor **Jeff Bee** explains, "From the get-go she displayed her desire and interest in CAD design and architecture. It was a WOW moment for me once I heard she was going to attend Princeton for her graduate degree. To see a young person like Chloe, that I had a hand in teaching, well that's a feeling every teacher cherishes."



During Chloe's senior year at KSU, she earned Best Overall Project for her systematic design of a high school in Miami.



Caleb Mancuso (Woodridge) is instructed by Stow Fire Fighter Mel on how to properly handle and use a fire extinguisher

Carter Jagger (Cuyahoga Falls) uses an electronic fire extinguisher to practice proper fire extinguisher use

#### **Fire Safety Day**

Level II Engineering students participated in a Fire Safety Training hosted by Stow Fire and Life Safety Educator **Mel Gammell**. Students learned the proper steps to take to use a fire extinguisher and used the laser based training simulator to practice using a fire extinguisher. Students also learned about the different types of fire extinguishers and how they are made to put out different types of fires, for example, electrical versus wood based fires.

Logan Watson (Talimadge); Ryan Noble (Kent); Alex Wagner (Talimadge); Teddy Gregory (Stow); Carter Jagger (Cuyahoga Falls)





Lorena Villarreal (Cuyahoga Falls); Logan Brugmann (Stow); Andrew Macilvain (Cuyahoga Falls); Josh Wall (Stow); Katherine Logue (Roosevelt)

#### **Egg Drop**

As part of the first day of school activities, students participated in a design challenge. They were given a set amount of paper and tape and had to design a contraption that would keep an egg from breaking when dropped from the roof. Above are photos of the winning teams - the eggs that survived the drop!



From left: Matt Keleman, Ricky Legg, Logan Watson, Andrew Kriska, Ryan Noble, Isaiah Ulrich, Carter Jagger, Max White, Evan Legnani, Neeraj Joshi, Kaeden Cyc, Sam Borthwick, Caleb Mancuso, Lorena Villareal, Emilee Elliott

#### **Students field trip to Alpha Technologies**

Level II Engineering Academy students toured Alpha Technologies in Hudson. Alpha Technologies is a leader in Rubber and Polymer Rheological Testing, and the Engineering students experienced how many different Engineering disciplines work together to create the testing equipment manufactured by Alpha. Students took a tour of the entire facility and saw Electrical, Mechanical, Software and Programming, and Material Science Engineers all working together to create these machines that are widely used in the automotive industry to test specifications on their rubber compounds for tire production.

#### **Celebrate Success**

The Engineering Academy hosted their Celebrate Success awards ceremony on May 11, 2021. Program completers were given Career Passports, and The Excellence in Engineering Award was presented to students who obtained a 3.5 GPA and 95% attendance during their time in the Academy. Four students, Joe Sabetta (Tallmadge), Stephanie Good (Roosevelt), Braden Cowger (Stow), and Noah Gyulai (Stow) who displayed both skill and motivation in CAD, Electronics, Material Science, Manufacturing were honored with Technology Awards. Additionally, the Gene Haas Foundation Scholarship was awarded to Stephanie Good (Roosevelt) and Braden Cowger (Stow).



2021 Academy Completers (from left to right)
Front Row: Stephanie Good (Roosevelt); Leni
Leipertz (Hudson); Megan Cowher (Cuyahoga
Falls); Megan Braeutigam (Tallmadge)
Back Row: Josh Hido (Roosevelt); Elijah
Fawcett (Stow); Anthony Ennemoser
(Roosevelt); Liam Goetz (Stow); A.J. Powers
(Roosevelt); Lucas Pierre (Roosevelt); Noah
Gyulai (Stow); Braden Cowger (Stow)
Not pictured: Joe Sabetta (Tallmadge); Travis

Arbogast (Stow)



Gene Haas Scholarship Award Recipients: Stephanie Good (Roosevelt) and Braden Cowger (Stow)