High School Summer Research Academy in Engineering

For two years, The National Center for Education and Research on Corrosion and Materials Performance (NCERCAMP) supported the Corrosion Research Academy. Based off this model, the College of Engineering expanded this program in 2015 to include opportunities within all engineering disciplines at the University of Akron. The program will be in its fifth year in 2017.

The purpose of the Research Academy is to give qualified high school students considering a career in engineering hands-on research experience by working on collegiate level research projects alongside UA College of Engineering professors. Applications are open in the Spring semester to local, rising high school juniors and seniors. Participants should present demonstrated interest in science and engineering. Admission has been highly selective due to the limited space available. This 8 week program then takes place during the University’s summer session.

Pairs of students spend 200 hours (roughly 25 hrs/wk) in their mentor's lab either working on a specific project assigned to them or working alongside UA graduate students. This also gives UA graduate students the opportunity to be mentors. Faculty and staff will meet with program participants periodically to measure progress and address any participant questions. Each will earn $2000, payable as a stipend, for participating in this program and contributing to UA research. The students present their research at a poster symposium on the last day of the program. Their family, High School teachers, and all UA faculty and staff are invited to view their hard work.

Students also participate in a weekly workshop for their academic and professional development. Topics have included:

- The Fields of Engineering
- Honors College Opportunities and How to Apply
- Presenting your Research
- True Colors of Leadership
- The Importance of Co-op and How to Prepare
- Advice from a UA Alumnus
- The Engineering Industry with local Engineers
- Q&A with Current UA Students

In 2015, 27 students applied from 14 local schools. In 2016, the program grew to 54 applicants from 21 different schools. Each year, 12 students were chosen. These 24 students have represented:

- Akron Early College HS
- Archbishop Hoban HS
- Firestone HS
- Green HS
- Hoover HS
- Mayfield HS
- Medina County Career Center
- Mogadore HS
- NIHF STEM HS
- Revere HS
- Solon HS
- St Vincent-St Mary HS
- Theodore Roosevelt HS
- Western Reserve Academy