

# Student Organizations



The Technology Student Association fosters personal growth, leadership, and opportunities in technology,

innovation, design, and engineering. Members apply and integrate science, technology, engineering and mathematics (STEM) concepts through co-curricular activities, competitions and related programs.

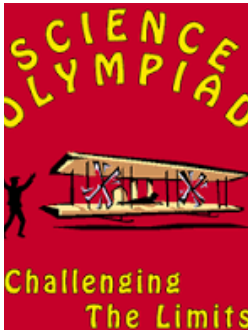
## ACE Mentors

Founded in 2007, the ACE Mentor Program of Charlotte is an after-school program for high school young people interested in exploring career opportunities in architecture, construction and engineering.



## Science Olympiad

A nonprofit organization with the mission to attract and retain the pool of K-12 students interested in STEM careers in NC. NCSO hosts tournaments annually that consist of hands-on interactive, challenging, and inquiry-based events.



**BE FUTURE  
READY**

ACADEMY OF ENGINEERING

## Academy Team

Alyssa R. English- Director

David Legrand—Principal

Amy Mims - Assistant Principal

Kenisha Williams—Instructional Coordinator

Patrice Wright—Career Development Coordinator

Andrew Chadderton—MeckEd Advisor

Anita Durr - Academic Advisor/ Counselor

Garry High - Engineering

Kristen Ward—Engineering

Keonn Gordon - Drafting

Myron McLean—Drafting

## Independence High School MISSION STATEMENT

“Ensuring success for ALL students.”



Independence

**AOE**  
Academy of Engineering®

**“INNOVATION.  
PROCESS.  
DESIGN.”**



1967 Patriot Drive  
Charlotte, NC 28227  
980.343.6900



# ACADEMY OF ENGINEERING - "INNOVATION. PROCESS. DESIGN."

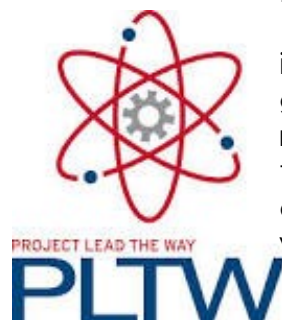


**BE FUTURE  
READY**

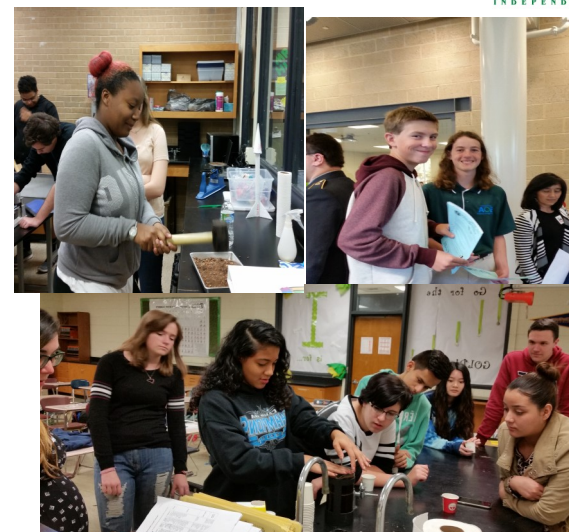
ACADEMY OF ENGINEERING

The **NAF Academy of Engineering (AOE)** answers an acute need for engineers in this country by educating high school students in the principles of engineering, and providing content in the fields of electronics, biotech, aerospace, civil engineering, and architecture. This **national network** and proven model of success is designed to impact students' post-secondary plans and opportunities for life achievement.

**All Independence AOE graduates have the opportunity to qualify to be NAF Track Certified**—guaranteeing them interviews with some of the nations top Fortune 500 companies. Learn more at [www.naf.org](http://www.naf.org)



Project Lead The Way (PLTW) is the nation's leading provider of STEM programs. Our world-class curriculum and high-quality teacher professional development model, combined with an engaged network



## What does it mean to be College and Career Ready?



In addition to learning from a career focused curricula and working on collaborative projects, AOE students gain critical career knowledge both inside and outside the classroom. These include college fairs, job readiness events, soft skills, resume' writing workshops, job shadows, and the culminating experience—a compensated internship.

Local business partners work with our team to provide these opportunities to round out our students' education.

## AOE COURSE OFFERINGS

### IED—Introduction to Engineering Design

Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects. They work individually and in teams to design solutions to a variety of problems using 3D modeling software and document their work in an engineering notebook.

### POE—Principles of Engineering

Through problems that engage and challenge, students explore a broad range of engineering topics including mechanisms, the strength of structures and materials, and automation. Students develop skills in problem solving, research, and design while learning strategies for design process documentation,

### CEA—Civil Engineering and Architecture

Students learn important aspects of building and site design and development, applying math, science, and standard engineering practices to design both residential and commercial projects. They document designs using 3D architecture design software.

### CIM—Computer Integrated Manufacturing

Students will discover and explore manufacturing processes, product design, robotics, and automation, and then apply their knowledge to design solutions for real-world manufacturing problems.



[indyaoe.weebly.com](http://indyaoe.weebly.com)

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