

# The A-Team

## About the team

A-Team is short for Apprentice Engineering Team. We are an interdisciplinary, interdependent, and highly-motivated group of students looking to strengthen our skills by learning and imparting knowledge to one another beyond the classroom and sharing what we learn with the university community. It is our goal to make ourselves more marketable in the workforce, to obtain better jobs, and higher pay. We have students majoring in all engineering disciplines as well as students from other colleges across our campus! We are highly organized and we receive training and guidance from our technologists and student worker managers. Our team is a well oiled machine. We are always looking for additional team members who have the "right stuff" or GRIT as we call it.

The departments within the Henry M. Rowan College of Engineering manage an incredible array of resources. We currently have access to and assist with technology in the following departments: ECE, ME, CoE IRT, CoE Outreach, ChE; and we are in discussions with several other departments. As a team member you will be extended the privilege to access these resources, and provide you with training. As a member of our team, you will learn to operate instrumentation, equipment, and tools. You will learn the breadth and depth of several departments' inventory, and gain exposure to components and instruments outside of class. You will be able to apply your core talents and gain new ones.

The ECE and ME Departments are graciously granting us access to the resources under its purview so we can improve ourselves; we in return take turns and spend time in the Resource and/or Fabrication Centers, Projects Lab, or any other spaces (referred to generically as "Centers") as needed while we learn so we can help the general engineering community with our knowledge and skills; this helps us grow even further. We have scheduled "shifts" (term used by our scheduling software) as well as free time in the Centers. Helping the engineering community while in the Centers entails assisting faculty and students with their parts, instrumentation, and equipment needs.

## Who makes up the team?

Although we primarily work with the engineering department, not all team members are engineering majors. We have students majoring in all engineering disciplines, as well as students from other colleges across our campus. We invite all majors to the Apprentice Engineering Team to emulate the structure of a real business. Working outside of students' comfort zones challenges them to think outside of the box and allows them to see problem solutions in a different light. Our interdisciplinary structure encourages this collaboration between different disciplines and fosters a more engaging environment. Not only are we teaching our team the technical skills to be successful, we are also giving them the soft communication and teamwork skills vital to success in industry.

## Why Join?

We offer workshops to our members on a weekly basis. Most of the skills you will gain will be taught by other students, and you will have the opportunity to pass your knowledge and skills onto others. Some topics may be taught by faculty or staff. Both attending and teaching workshops are great ways to develop practical hands-on skills.

The A-Team also has a broad array of projects they will making available to you to tackle as additional learning opportunities. You are welcomes and encouraged to work on projects that stimulate your passions. Not only will you have the opportunity to apply your skills to the many projects, you will also have opportunities to interact with and get to know faculty and other students engaged in research and development. Networking is the key to getting your foot in the door early on opportunities. Ultimately, the skills you gain as part of our community will set you apart from future job applicants and open doors for you. All we ask from you is to make a commitment of 10 hours/week to learn, teach, and help others.

Spending time in the Centers is an excellent way for you to collaborate with your teammates and gain knowledge of the many projects and research opportunities available in the college. You are free to spend as much time as you like learning in the Centers to develop your depth of understanding and proficiencies. You can also meet and learn outside the Centers, many teams meet in collaboration rooms across campus to work on their projects. Based on past team member involvement, 10 hours /week is the minimum time investment required in order to gain sufficient benefit from your experience. This time can be split between shift and free time. Many team members invest far more time.

This is not a job or volunteer position; it is an opportunity to learn and to give back to the community. Although this experience is not a job and not about making money, if funding should become available, a Technologist may reward you with a stipend. Funding can come from Federal Work Study (FWS), Institutional Work Study (IWS), grants, scholarships, internships, etc. The funding allotment will not cover all the hours you spend learning and helping others and is not intended to be as such; stipends are **secondary** to the experience. Being part of the A-Team is a prerequisite for receiving any stipend.

### On this page:

- [About the team](#)
- [Why Join?](#)
- [Highlights of A-Team members hip:](#)

The A-Team partners closely with the Product Engineering and Development Center (PEDC). The PEDC at Rowan University is a multi-disciplinary facility, supported by the University's world-class academic programs and resources. The PEDC serves as an economic development resource for the region by providing new product engineering and development support for industry and corporate partners, academic collaborators, and the Rowan University community. The PEDC hires students primarily within the A-Team to work for their Product Implementation Lab (PIL). This is an as needed, contract basis, but is another great opportunity for students on the team.

### **Highlights of A-Team membership:**

- Access to parts/supplies
- Access to instrumentation beyond the classroom
- Access to equipment beyond the classroom
- Access to tools not accessible to students
- Increased exposure to faculty
- Help faculty with their needs in the Centers
- Help faculty during lab (you're in) with Resource Access during off hours
- Shining stars get noticed (we will make sure of it)
- Assignment to special projects
- Extra learning opportunities
- Research opportunities
- Industry jobs
- Resume building
- Additional letters of recommendation
- Management experience
- Leadership skills
- Project management training/experience
- Metrology (calibration) experience
- PCB fab experience
- 3D printer experience (maintenance & operation)
- PCB mill experience (maintenance & operation)
- Rapid prototyping experience
- Machine shop equipment training and experiences
- Outreach experiences
- Maker Space experiences
- First hand interaction with many students working on many projects - ideas, network