
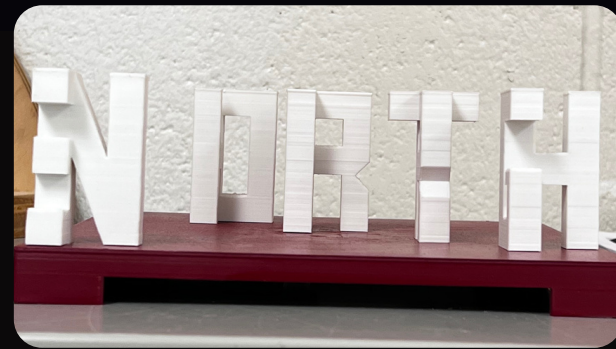




CHARGE  north
NORTH GWINNETT HIGH SCHOOL

STEM PATHWAY
RISING 9TH GRADE
INFORMATION
SESSION



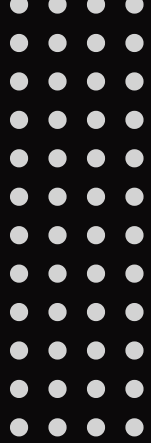
What is CHARGEnorth?



CHARGEnorth:

Connecte**H**umanities **A**nd **R**esearch **G**ear**E**d for **E**ngineering

A 4-year cohort program for students seeking a high-level, hands-on, rigorous, STEM experience while in high school



Mission

STEM for the
advancement
of the human
condition.



Vision

Empowering students
to generate
sustainable solutions
on a local and global
scale through STEM-
focused learning.

Three Pillars of Our Program



STEM: Science, Technology, & Engineering

Humanities: Language Arts & AP Social Studies

Research: Integrated into both the STEM and Humanities blocks, projects are connected to personal areas of interest and course content

Eligibility Requirements



Required:

- Resident of North Gwinnett cluster or has approved Permissive Transfer from North Gwinnett High School
- 8th grade student enrolled in Enhanced Algebra or higher in 8th grade and going into Geometry or higher in 9th grade
- Recommended for Honors/Gifted 9th LA
- Must complete and submit the online interest form by the deadline

Eligibility Recommendations



Recommended:

- Students should score at the Proficient or Distinguished levels on 7th (& 8th) grade EOG assessments in Math, Language Arts, & Social Studies
- Students should score Proficient or higher on the COGAT
- Students should be recommended for Accelerated Geometry
- Students should be self starters and have strong internal motivation
- Students will be expected to collaborate with peers on group projects

What is Our Day Like?



9th, 10th, & 11th Grades

Half day spent in the program:

- Humanities block (Language Arts & AP Social Studies - 2 credits)
- STEM block (Science & Engineering - 2 credits)
- Research (embedded course earning 1 credit)

Half day spent in classes outside of the program:

- Math
- Other electives

12th Grade

Flexible schedule combining

- AP classes
- Dual Enrollment and/or online classes
- CHARGEexperience senior pathway

Course Sequence



9th

Humanities: AP Human Geography & H/G 9th LA
STEM: H/G Chemistry & Foundations of Engineering
Research: Scientific Research I
Math
2 Elective Classes

10th

Humanities: AP World History & AP Seminar
STEM: AP Environmental Science & Engineering Concepts
Research: AP Seminar*
Math
2 Elective Classes

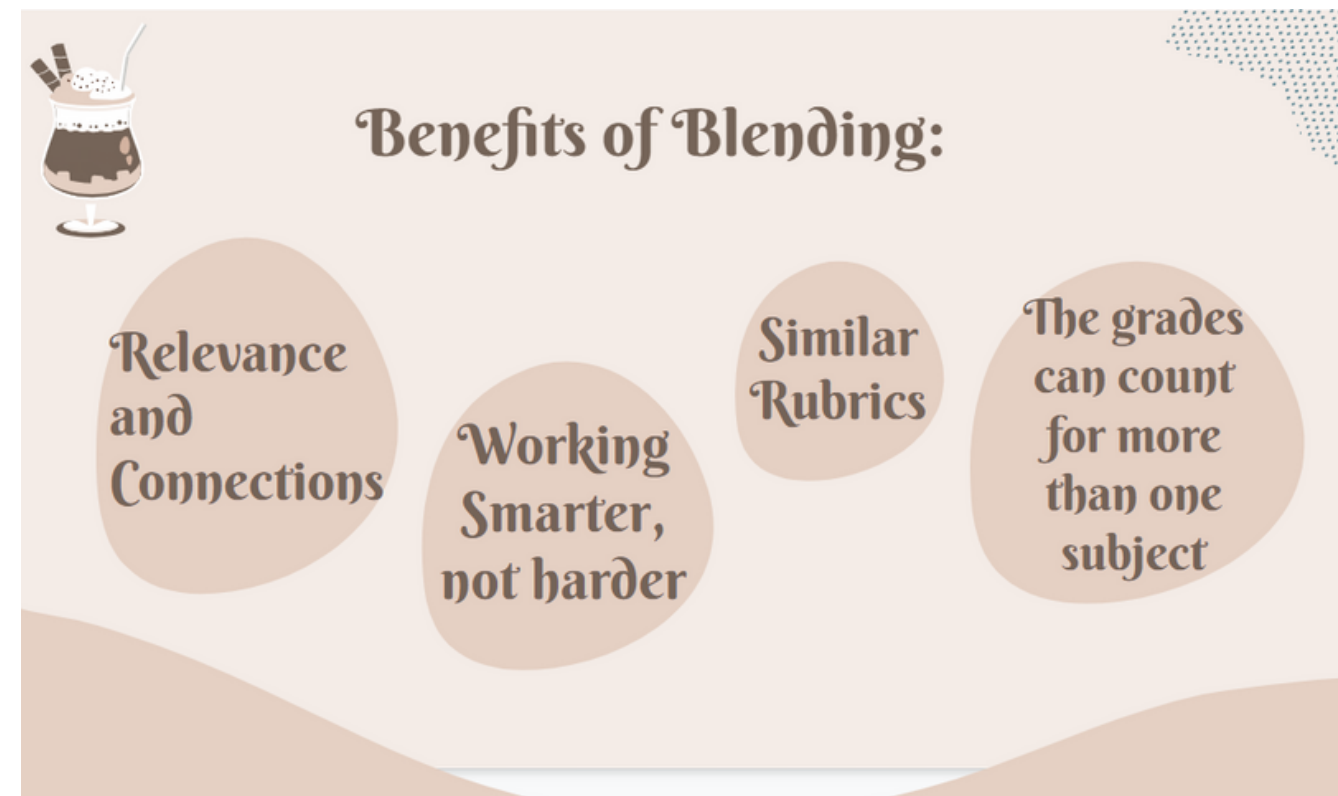
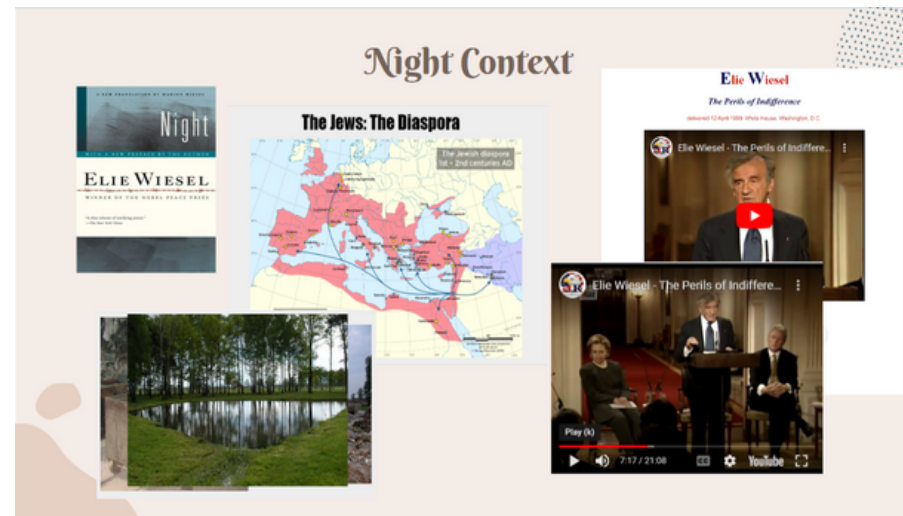
11th

Humanities: AP US History & AP Language Arts
STEM: AP Physics I & Engineering Applications
Research: Scientific Research IV (Science Fair)
Math
2 Elective Classes

12th

CHARGEexperience: Internship, Aquaponics, or AP Research
No Block Academic Classes

Blended Projects

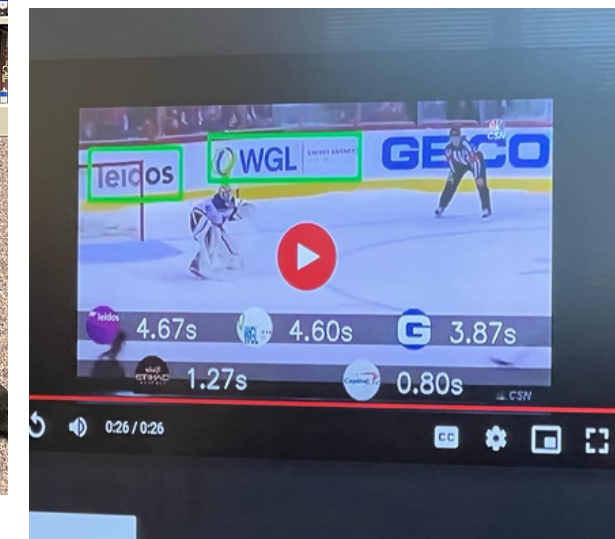


CHARGE Experience - Speaker Series



Various STEM professionals come to NGHS to share with our 9th & 10th grade students

Mix of interactive activities and learning about STEM career possibilities



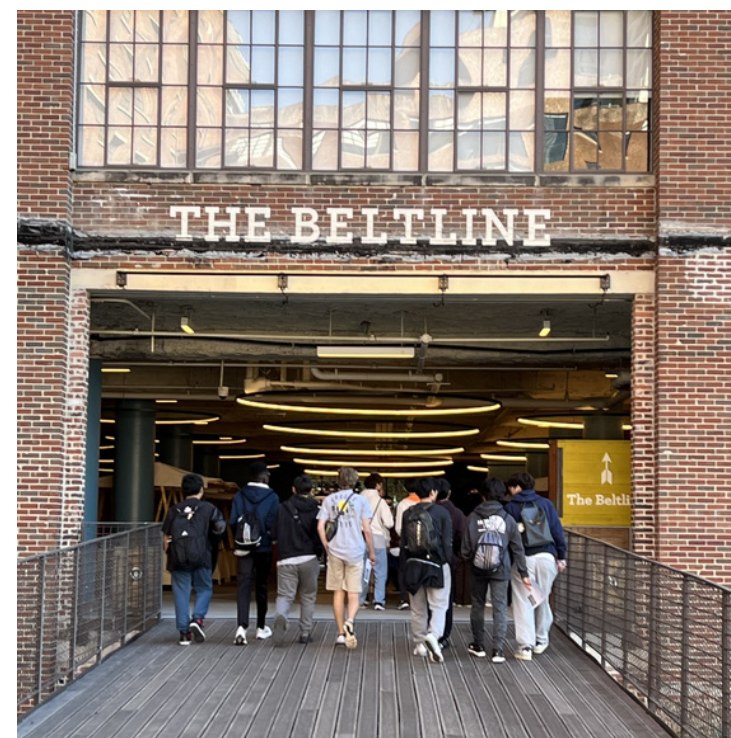
CHARGE Experience - Site Visits

9th - 10th Grades:

Site Visits: off-campus trips to a variety of STEM-related locations for hands-on experiences

9th: Manufacturing/Engineering

10th: Environmental/Sustainability



CHARGE Experience - College Visits

11th Grade:

College Visits: trips to colleges to visit labs and learn about different STEM programs



CHARGE Experience - Special Events

Special events that have taken place due to the presence of the CHARGE Experience:

- **CHARGEd Up:** Interest day for rising 9th graders interested in CHARGE north, involving several activities to show what the program is about.
- **STEM Day:** A day-camp STEM-focused activity experience for elementary schoolers in coordination with local non-profit Path United, aimed to get children excited about opportunities in STEM.



CHARGE Experience - Special Events

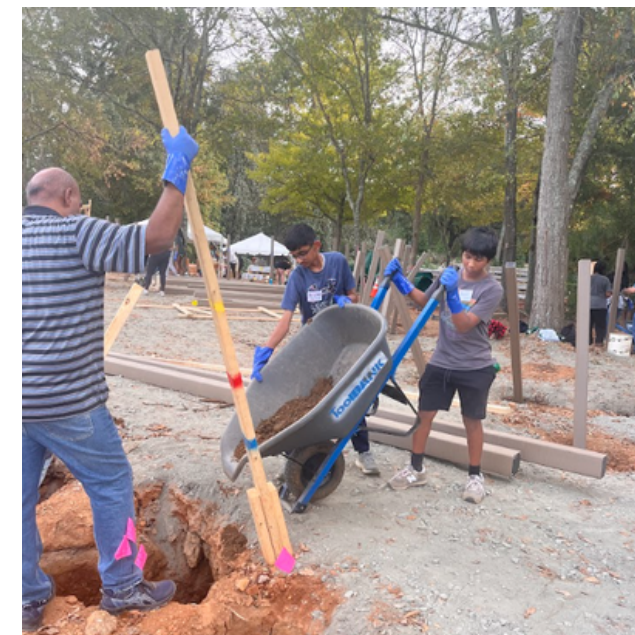
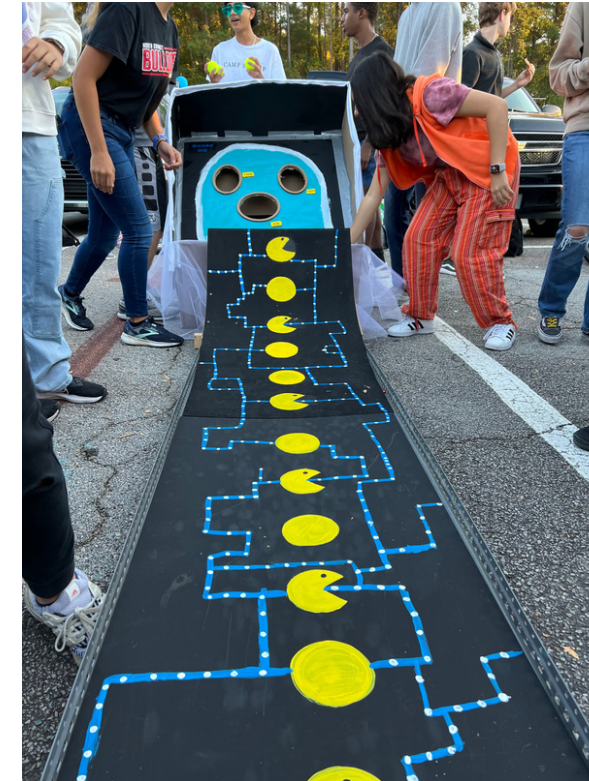


More examples of special events:

- **Underclassmen Field Day:** Half day succeeding AP exams aimed to just destress and build a sense of community within the class.
- **Junior Professionalism Day:** Half day dedicated to soft skills and etiquette; community business members are going to give tips on interviews, resumes, and more



CHARGE Experience



The Senior CHARGE Experience

Senior Pathways

Internship:

On-site internship placements with a local industry partners

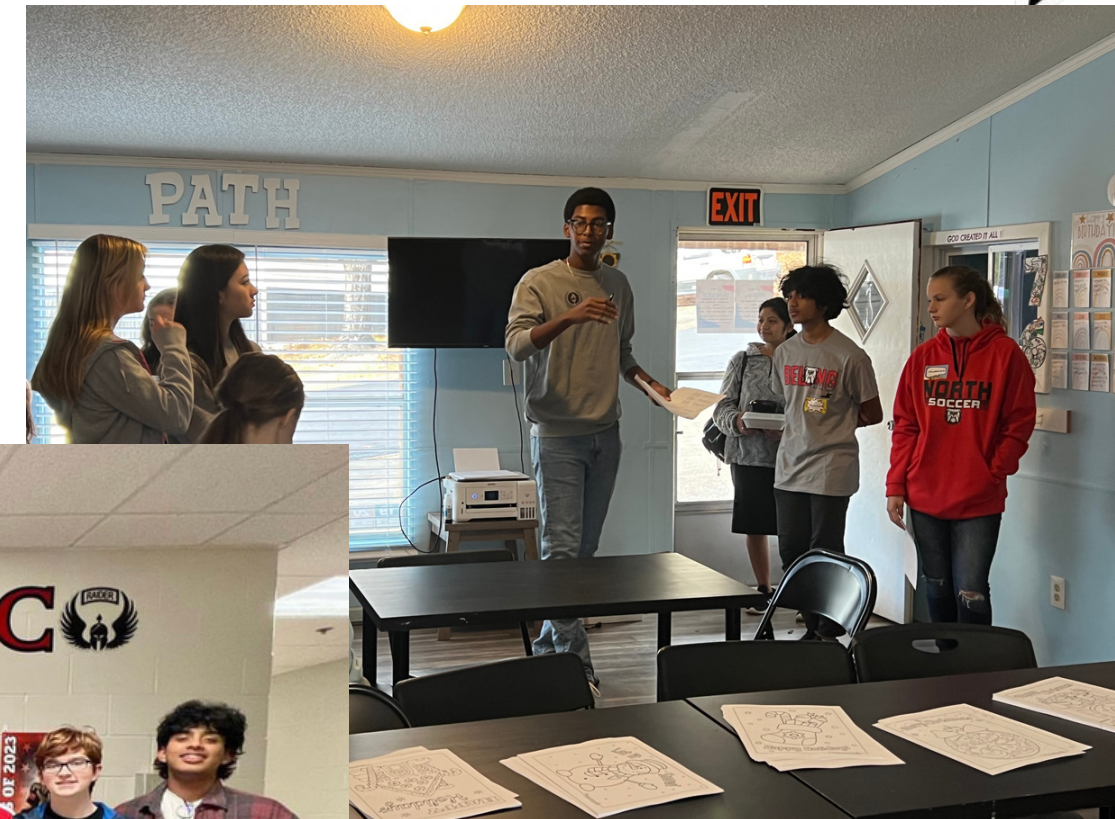


The Senior CHARGE Experience

Senior Pathways

On Campus Internship:

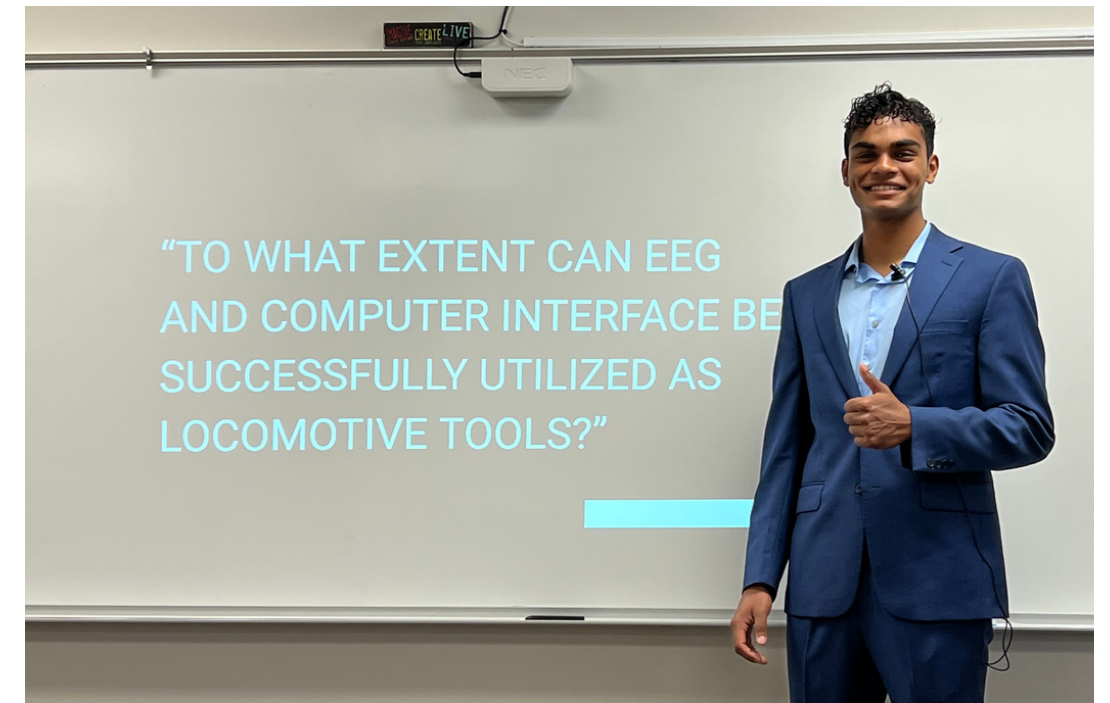
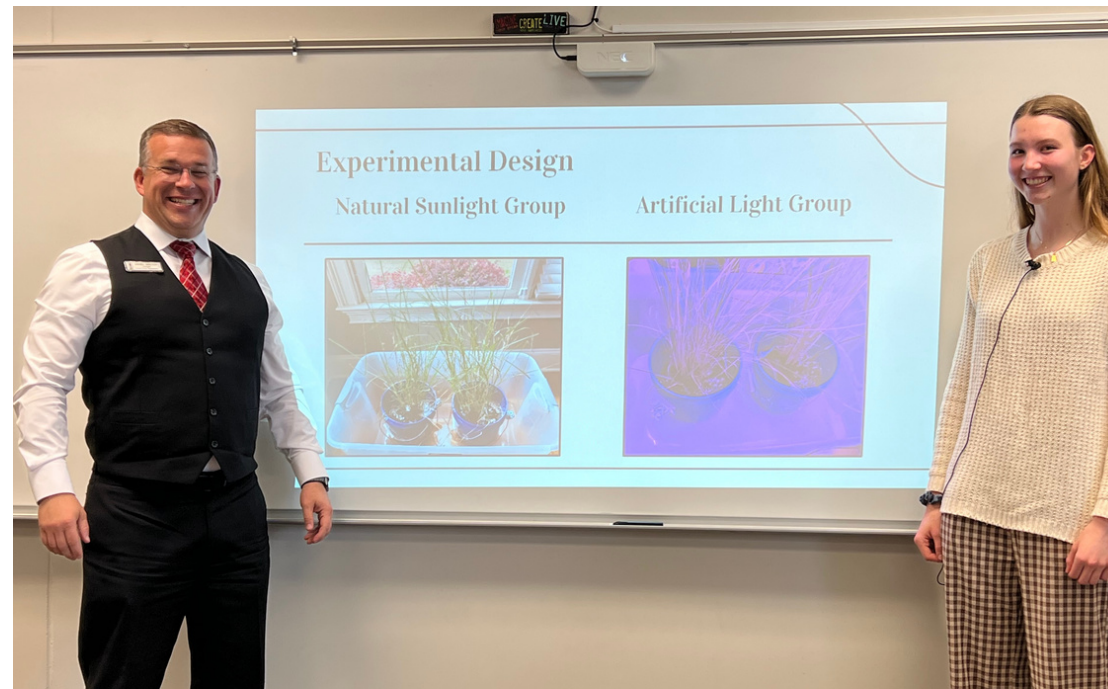
- Community Outreach
- Marketing
- Makerspace Lab Techs
- CHARGEco Entrepreneurs



The Senior CHARGE Experience

Senior Pathways

AP Research:
Part of AP Capstone
What is AP Capstone?

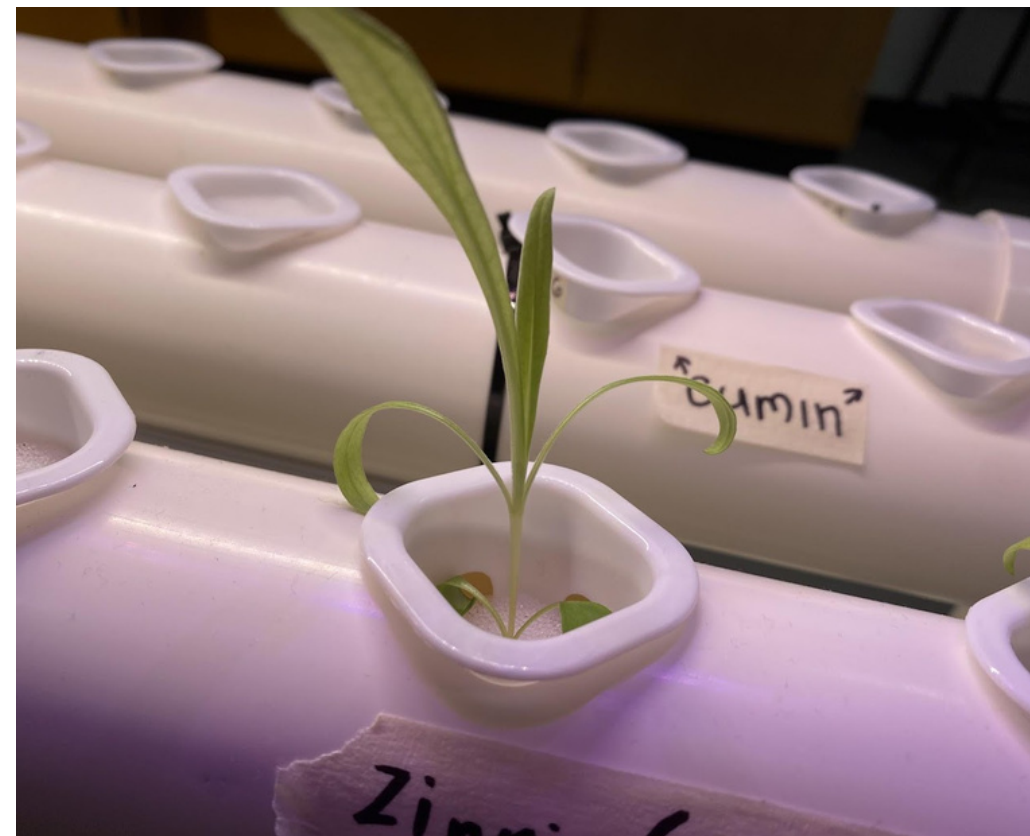


The Senior CHARGE Experience

Senior Pathways

Aquaponics:

Aquaponics students are using nitrogen-containing fish waste to grow organic, food-grade crops. Crops such as sage, cilantro, parsley, and basil will be used by the NGHS culinary department.



VOLTS



New!

What is it?

Volunteers
Organizations
Leaders
Teachers
Students

VOLTS is a parent-led initiative to effectively leverage our parents and businesses to help "power up" our program through:

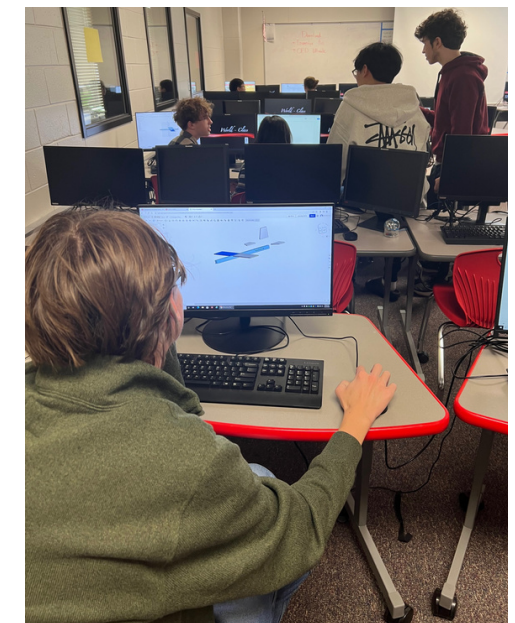
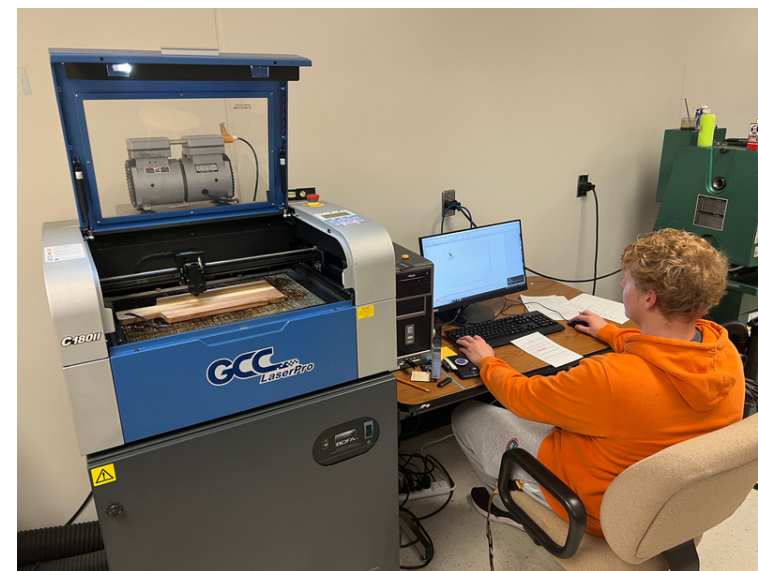
- speaker series
- parent volunteers for events or project-specific help
- site visit connections
- internships
- business partnerships
- item donations

Why Choose CHARGEnorth?



Cutting Edge Facilities

- Makerspace:
Woodworking,
Metalworking, 3D
Printing, Laser Cutting,
Electronics
- CAD Labs: Digital
Creation and Design
- Designated work &
collaboration areas



Why Choose CHARGEnorth?



Unique Opportunities

- CHARGEExperience: speaker series, industry site visits, senior pathways
- Independent & collaborative research, builds each year to science fair, AP Research, and other possibilities
- One counselor assigned to the program
- 7-8 credits earned per year (compared to 6)

Significant Outcomes

- Competitive advantage for college & career
- High number of AP classes & well-rounded high school experience
- Strong leadership & soft skills development
- Presentation design & delivery development

Why Choose CHARGEnorth?



Most importantly, this program allows students to:

- utilize creative skills
- build community
- learn real-world problem solving & critical thinking skills
- get hands-on experience in fields of individual interest
- tie learning to future aspirations
- see the connections between skills in different classes & the applications to real world situations
- positively impact our community



Why choose CHARGEnorth?

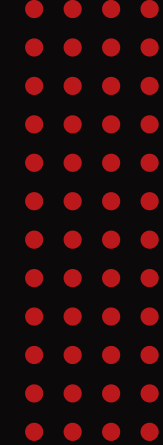


Important Dates



- November 28 Virtual Informational Session
- Nov 30 at 8 am Lottery application available online
- Jan 26 at 3 pm
- January 27 CHARGE^d Up! Rising 9th Activity Day
8:30 am - 12:00 pm
- January 31 Lottery results will be emailed
- February 8 Rising 9th Night at NGHS
- February 14 Commitment deadline





Questions?

**"WE CANNOT SOLVE OUR PROBLEMS WITH
THE SAME THINKING WE USED WHEN WE
CREATED THEM."**

- ALBERT EINSTEIN -