



The Gwinnett School of Mathematics, Science, and Technology Senior Capstone Experience Executive Summary for Sponsoring Organizations

The Gwinnett School of Mathematics, Science, and Technology (GSMST)

GSMST is a theme high school operated by the Gwinnett County Public Schools serving students throughout Gwinnett County in grades nine through twelve. The focus of the curriculum is advanced studies in science, technology, engineering, and mathematics (STEM) fields. Students complete the majority of their required high school diploma coursework by the end of their sophomore year, and their junior and senior years are focused on intensive studies and experiences in students' selected areas of concentration within three principle pillars: bioscience, engineering, and emerging technologies.

Senior Capstone Experience

All junior and senior students at GSMST are required to participate in an internship, or fellowship, experience during both their junior and senior years. These fellowship experiences allow students to connect with a mentor who is a current practitioner in an applied STEM field. The Senior Capstone Experience is a culminating project that provides students with an opportunity to synthesize previous experiences for an in-depth exploration of an area of interest. The Senior Capstone Experience includes on-site collaboration with a mentor at his/her office and/or lab, as well as virtual or remote contact. The SCE is built around three experiential pathways: the Thinker, the Doer, and the Maker. These pathways allow students to highlight their strength in either research, apprenticeship, or production under the guidance and direction of a mentor in a career field of their interest.

An Internship Coordinator and Faculty Advisor at the school will work with each student and mentor to assure the optimum experience for both and to monitor student progress during the internship. Mentors and students are trained prior to the start of the fellowship in order to develop and assure a meaningful placement.

Types of Senior Experiences:

- **The Thinker** – A twenty-four week internship with a company or university, averaging five to ten contact hours per week (onsite and/or virtual); students are matched with a mentor, or continue work with a previous mentor, and together they develop a research proposal and conduct research that culminates in a final paper or article.
- **The Doer** – A twenty-four week internship with a company, university, or other partnering organization, averaging ten to fifteen contact hours per week (onsite and/or virtual); students are matched with a mentor who provides an apprenticeship-style experience for the student intern. Intern responsibilities can include daily and culminating tasks that the mentor assigns, or can be simply shadow-based.
- **The Maker** – A twenty-four week internship with a company or other partnering organization, averaging five to ten contact hours per week (onsite and/or virtual); students are matched with a mentor to design a solution to a real-world problem and see that solution through to creation. Development of a business plan or entrepreneurial project is also an option.

Sponsoring Organization

The sponsoring organization will provide mentors for the student mentees, allow for the time needed by mentors to attend training and to meet with and host student mentees, support the proposal development, and the ongoing monitoring of the capstone experience. Mentors should have a personal commitment to making the experience a success for both the sponsoring organization and the student mentees. Mentors are not responsible for grading or other academic responsibilities included in the program.

To express an interest in becoming a sponsoring organization, please contact::

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