



H. MILTON STEWART SCHOOL OF INDUSTRIAL AND SYSTEMS ENGINEERING

SPRING 2025 NEWSLETTER

Celebrating the End of a Remarkable School Year

As the academic year ends, we reflect on a season filled with innovation, collaboration, and meaningful connections. The H. Milton Stewart School of Industrial and Systems Engineering (ISyE) is proud to share highlights from our outreach efforts across Georgia. From high school visits and speaker series to community festivals, educator summits, and immersive research programs, we've continued to empower students and educators through the lens of Industrial Engineering and Data Science.

This year, we've experienced strong participation from Georgia Tech's community. We engaged with nearly five hundred underserved high school students across seven different schools, hosted six field trips, participated in several college fairs, and welcomed dedicated support from 12 faculty members and 5 undergraduate students. These efforts highlight how our outreach truly reflects a collective effort to inspire and mentor the next generation, and we look forward to the coming semester of expanded efforts with great appreciation.

Our mission has remained steadfast: to expose young minds to the exciting and impactful world of ISyE while fostering long-term partnerships with schools and educators. With each program, we aim to reduce barriers to access and provide real opportunities for students from all backgrounds to explore STEM pathways at Georgia Tech.

Fall 2024 High School Visits

In our ongoing commitment to education and outreach, we're dedicated to strengthening connections with local high schools, particularly those in underserved areas. By introducing students to the scholarships, internships, and summer camps we offer, we aim to open doors and inspire future engineers.



3+ CAMPUS VISITS

5 HIGH SCHOOL VISITS

17 FACULTY MEMBERSENGAGED

500+ OUTREACH STUDENT ENGAGEMENT

Outreach Highlights

Jonesboro High School Visit

We welcomed 55 students from Jonesboro High to campus for an engaging session led by Jon Lowe, an alumnus and the current Director of Student Services, alongside Dr. Tuba Ketenci, our Director of Outreach. Special thanks to Michael Biehler for an incredible 3D printing session and to Kevin Pham for coordinating an insightful tour of the Makerspace.

Gwinnett School of Mathematics Speaker Series

AAs GSMST's first speaker series of the semester on February 4, our undergraduate teaching assistants presented to 60 students, offering a unique perspective of Georgia Tech. The session highlighted Industrial and Systems Engineering and showcased senior design projects to inspire the next generation of problem-solvers.

Banneker High School Visit

Undergraduate students visited Banneker High School to introduce our spring initiatives, the emerging opportunities in data science at Georgia Tech, such as the Seth Bonder Program, and highlight many of the other programs we offer. This visit facilitated meaningful one-on-one engagement with approximately 50 students, fostering exposure and awareness in data science.

Midtown High School Visit

On April 3rd, undergraduates visited Midtown High School to engage with over 65 students introducing Industrial Engineering applications and summer programs at GT.

Cedar Grove HS Visit on GT Campus

On February 28th, 60 students joined us on campus for an IE day consisting of an introduction of IE by faculty and undergraduate students, a demo, "Introduction to Aerospace," led by Georgia Tech Ph.D. students, a presentation led by the Georgia Tech Admissions team, and campus tour.



Georgia Tech Discover Day

GT Discover Day brought departments together to showcase hands-on learning opportunities for young students. ISyE engaged elementary schoolers in building LEGO homes, teaching them about optimization, cost efficiency, and resource allocation from an industrial engineering perspective. Students loved working together to strategize and bring their designs to life!

Math Teachers' Day

Educators participated in the Restaurant Optimization Activity and sessions on "Types of AI and Its Use" and "Incorporating AI in the Classroom" led by Dr. Vincent Spezzo and Ashwin Pananjady Martin. Georgia Tech Admissions Counselor Leri Argueta also delivered a presentation on supporting students' college pathways. This year, we welcomed 52 teachers, which is an outstanding turnout. Teachers represented schools across the spectrum, from elementary to high school, creating a diverse and collaborative environment.

Highlights from this year include:

Industrial Systems and Engineering High School Research Internship

Curated by Dr. Tuba Ketenci, this program allows high school students to dive into research while learning industrial engineering principles. Last fall, we hosted four incredible students: Makaylah Deshield, Thihini Nagendran, Rana Kalayci, and Hansika Yerramseti. This Spring, we extended our cohort to 20 high school students across Banneker High School, Columbia High School, and Clarkston High School. The internship included three courses and two data science projects, ending with the students publishing research papers on education factors. We interview and accept students of all skill levels; however, the rigor of the curriculum requires a persistent student willing to dedicate 2 to 3 hours of research and work. One of these papers has now been accepted for presentation at the SITE 2025 Conference and will also be published, marking an incredible accomplishment for our students from the internship and the skills that they've gained. This milestone not only validates their hard work but also demonstrates the power of personalized mentorship and educational resources in preparing them for college success.

We are excited to continue expanding this program!

Probability and Statistics High School Competition

One of ISyE's flagship programs, this annual competition consists of two stages: the first (Feb 21) being an online round that engages over 100 students globally, and the second (April 25) taking place on Georgia Tech's campus, gathering finalists from across the world. This year, nearly 200 students participated in the first round alone, reflecting its rapid growth and impact as the competition now advertises itself.

For the top 40 finalists, the second stage provides a dynamic, hands-on experience, allowing them to showcase their statistical skills while learning new ones. Held at the Scheller College of Business, this round offered engaging activities such as workshops, hands-on demos, discussions with graduate students and professionals, and an on-campus tour.



3+ CAMPUS VISITS

5 HIGH SCHOOL VISITS

Atlanta Science Festival

At this community-wide event, ISyE hosted a LEGO engineering demo, challenging students to optimize designs under resource constraints while building and budgeting for their creations.

Principal and STEM Coordinators Day

With keynote speakers Damon Williams and Georgia Tech K–12 staff, the day highlighted collaborative strategies to expand student access to STEM programming and resources. School leaders participated in sessions on partnership development, outreach planning, and best practices for creating long-term engagement with Georgia Tech. This year, four school administrators attended, and through this group we built strong partnerships with each school represented.

Georgia Tech Math Day

We facilitated the Burrito Optimization Game and the Innovation Showdown, encouraging high school students to use logic, creativity, and communication to solve real-world problems.



Join Us in the Year Ahead!

As we wrap up a year of accomplishments, we extend our heartfelt gratitude to our volunteers, partners, student assistants, and educators who make these outreach initiatives possible. If you're interested in supporting our programs or learning more about future events, please reach out to Dr. Tuba Ketenci or Tsion Fitsum. Let's continue inspiring the next generation of problem-solvers together!

Warm regards,

H. Milton Stewart School of Industrial and Systems Engineering

