



Shaping the future of engineering

IMPACT REPORT
2023-24 ACADEMIC YEAR

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If we have to meet the future demand of our industry we really have to engage at the high school level. And there is nothing better that I've seen than Engineering Tomorrow to engage at the high school level.

— WALTER PINTO, EXECUTIVE VICE
PRESIDENT AND CHIEF OPERATING OFFICER,
ENLINK MIDSTREAM

Letter from our founder



William Woodburn

Founder and Chairman of the Board,
A Founding Partner, Global
Infrastructure Partners

The world needs more — and more diverse — engineers.

As threats like climate change, water scarcity and the depletion of natural resources continue to evolve, engineers will be on the front lines of ensuring our planet remains a sustainable place to live. We need more students studying engineering, ready to enter the workforce at a critical moment in history. But an increase in numbers alone won't be enough. We need a greater diversity of perspectives to ensure more informed decision-making.

When we started Engineering Tomorrow, we had two objectives: Bring engineering to more female and low-income students, and address the shortage of engineers in this country to ensure we can continue to solve the world's most pressing challenges.

We had no idea the organization would grow to reach more than 750,000 students. This growth has been through the dedication of our team, the enthusiasm of the teachers who invite us into their classrooms, the expertise of the engineers who deliver our labs, and the foresight of the organizations who partner

with us to bring a greater diversity of perspectives into the workforce.

Engineering Tomorrow succeeds because we operate according to business principles: a small, expert team, driven by our mission, placed where they excel so that the whole can function with maximum efficiency. It's this principle which has both led to the past year's immense growth, and also allowed us to scale quickly and capitalize on that growth. We have reached more teachers, students and schools and made our labs easier than ever to access and teach. Our Lab Day events bring some of the biggest names in engineering to tens of thousands of students at a time.

Our world may be facing unprecedented challenges, but we are also on the cusp of unprecedented opportunity: a generation of young minds who are more diverse and yet more connected to each other than ever before. If we can harness that power today, who knows what kind of solutions we'll be engineering tomorrow.

Here's to the future,

A handwritten signature in blue ink that reads "William Woodburn". The signature is fluid and cursive, written in a professional style.

William Woodburn

INTRODUCTION

Bringing engineering to students and students to engineering.

Engineering Tomorrow is a nonprofit founded in 2014 to bring the diverse world of engineering to high school students who might not otherwise have access.

We provide no-cost, virtual engineering and STEM labs, delivered by professional engineers. Students work together to build electric cars, bridges, circuits and more, connecting what they learn in the classroom to real-world engineering challenges.

2014

Engineering Tomorrow founded

No Cost

To students, teachers or schools

2.2M+

Individual labs completed

Engineering topics offered

We have developed 20+ labs covering a broad range of engineering topics, so that teachers can choose the lab that best fits their curriculum, and so that students can experience the vast opportunities in the field of engineering.

As groundbreaking technologies gain traction or challenges emerge, we develop new labs to ensure we're preparing the next generation for the realities of tomorrow.

Aerodynamics

Algorithms & AI

Astrodynamics

Biomedical Systems

Biomedical Engineering

Bridges

Clean Water

Cybersecurity

Electric Vehicles

Genetics

Green Hydrogen

Medical Devices

Optimizing Networks

Pharmaceuticals

Product Engineering

Renewable Energy

Robotics

Smart Circuits

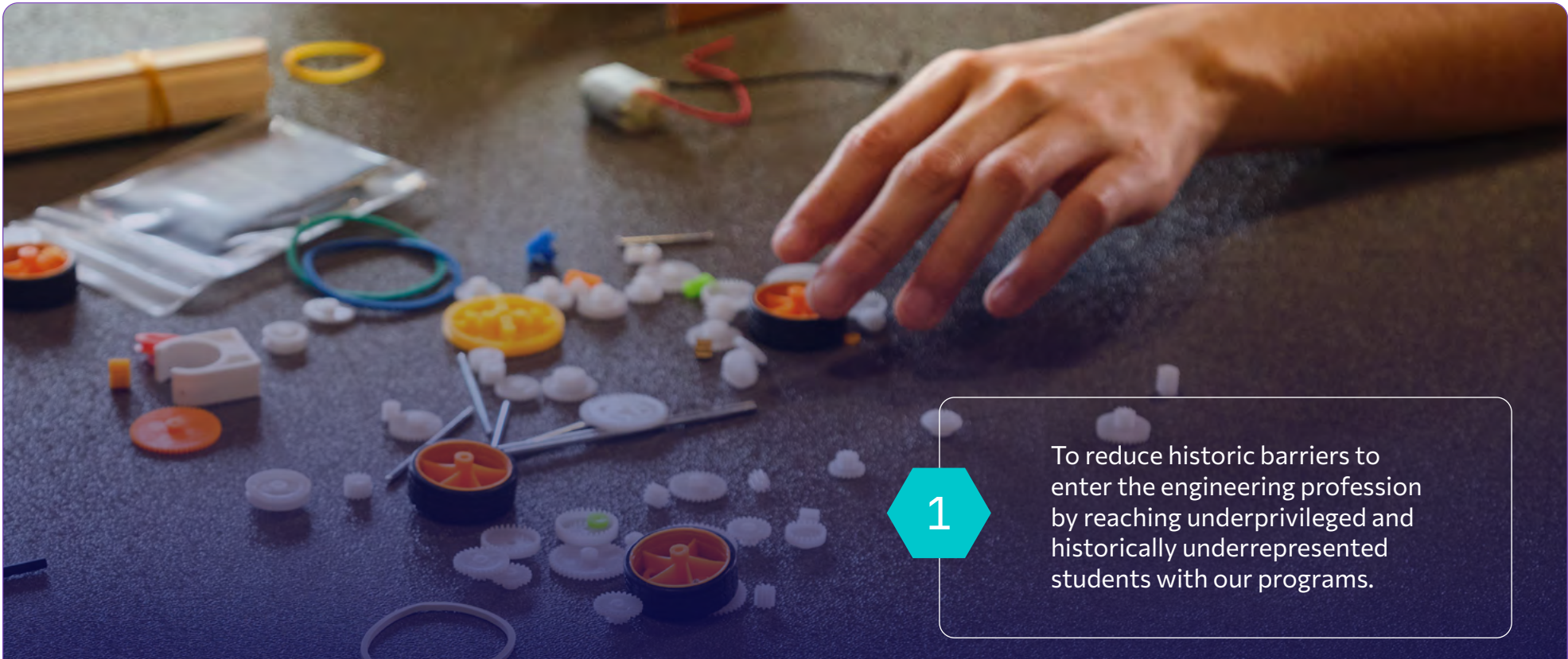
Software Engineering

Sound & Acoustics



I feel like I'm gaining opportunities that normal Bronx kids wouldn't be able to access... Engineering Tomorrow gives me access to a community that I've never been able to explore before.

— IMANI MALITI, ACADEMY OF MOUNT ST. URSULA, CLASS OF 2018, BRONX, NY



Our mission: greater diversity in engineering.

Inspiring high school students to pursue an engineering degree in order to create a larger, more diverse engineering workforce to solve the engineering challenges of the future.

1

To reduce historic barriers to enter the engineering profession by reaching underprivileged and historically underrepresented students with our programs.

2

To increase the number of U.S. students pursuing engineering degrees to ensure that America remains the global leader in innovation and technology.

3

To develop engineers who are skilled and motivated to solve global challenges.



Our Impact

We intentionally seek out diverse student populations. Our labs inspire students to pursue engineering as a career. A significant number of students who participate in our labs enroll as engineering majors in college.

OUR STUDENTS

51%/49%

Male/Female

47%

Black/Hispanic

40%

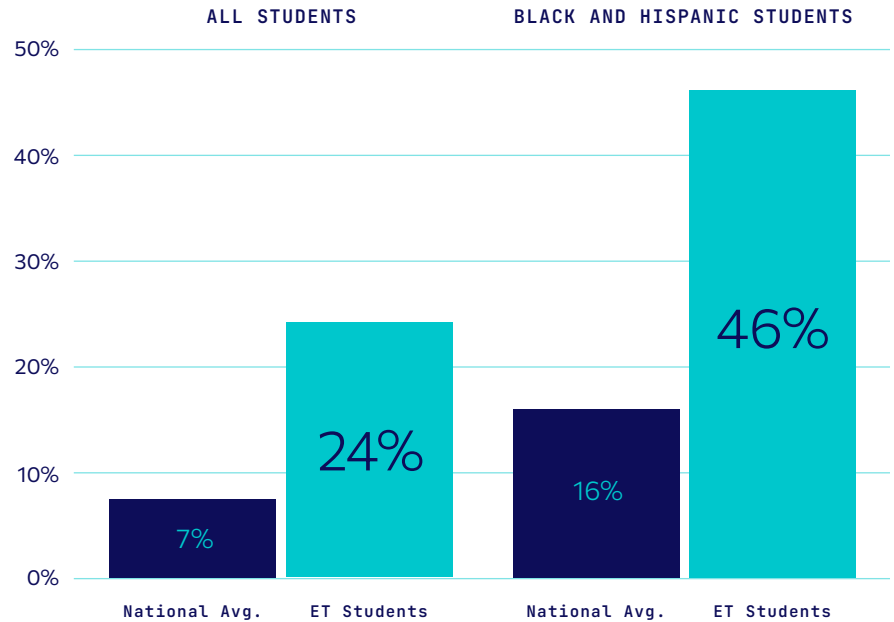
Qualify for free/reduced lunch

90%

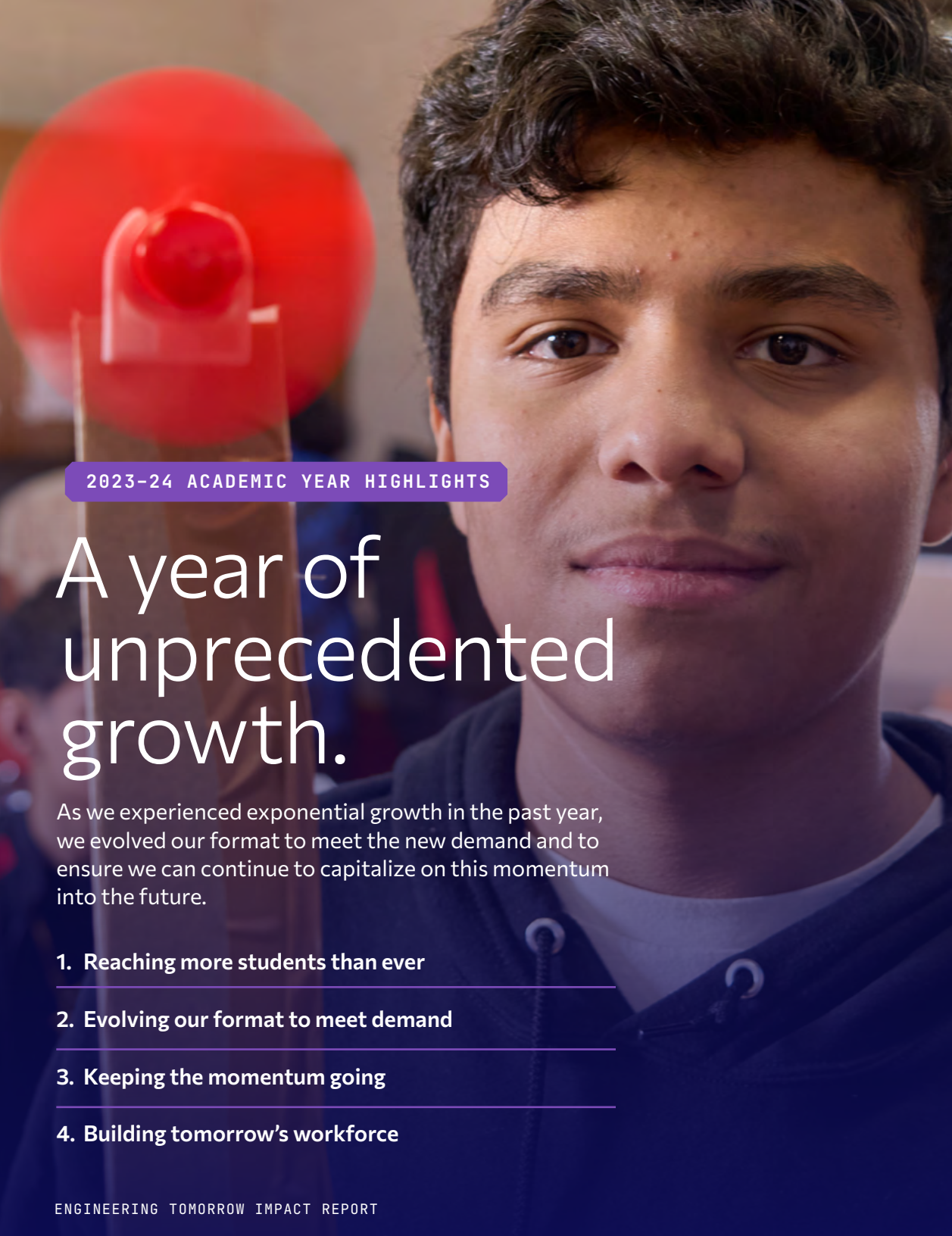
Public School

OUR IMPACT

College Freshmen Enrolled In Engineering Majors



*Sources: National Stats - "Engineering By The Numbers" by Joseph Roy and ET Stats - National Student Clearinghouse



2023-24 ACADEMIC YEAR HIGHLIGHTS

A year of unprecedented growth.

As we experienced exponential growth in the past year, we evolved our format to meet the new demand and to ensure we can continue to capitalize on this momentum into the future.

- 1. Reaching more students than ever
- 2. Evolving our format to meet demand
- 3. Keeping the momentum going
- 4. Building tomorrow's workforce

YEAR IN STATS

3,600+
participating schools

6,500+
number of teachers participated

572,000+
students engaged in 2023-24

1.8M+
individual labs completed



We can't believe how quickly Engineering Tomorrow has generated the interest in this program and the amount of students they've drawn to it... It's happened faster than we could have ever imagined and it truly shows that there is a need within our country for this type of program.

— MIKE GREENHECK, VICE PRESIDENT
CTECH MANUFACTURING



2023-24 HIGHLIGHT 1

Reaching more students than ever before.

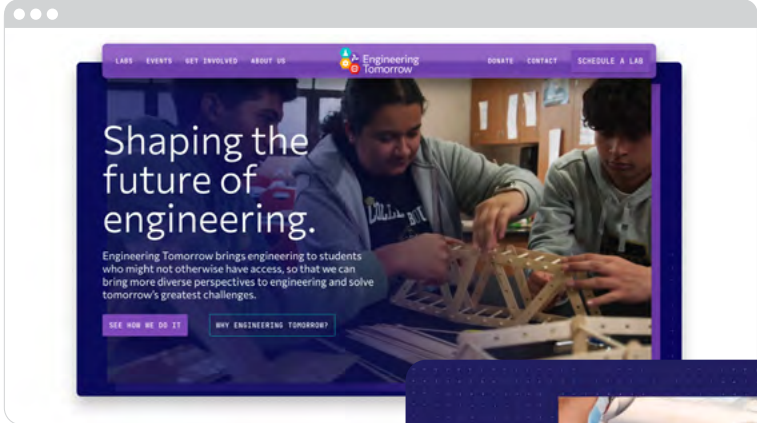
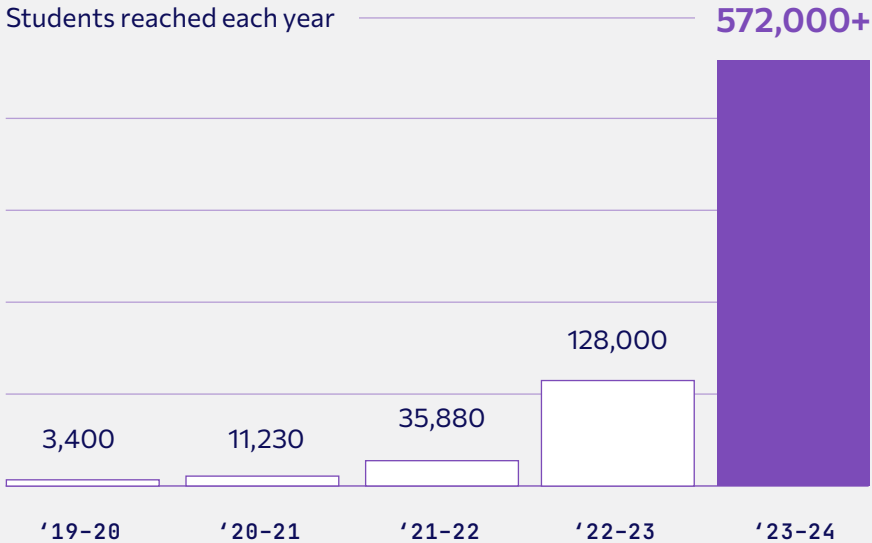
Engineering Tomorrow delivered labs to 4x more students during the 2023-24 school year than any year previously. This rapid growth was thanks to a combination of our successful Lab Day events and targeted outreach and recruiting. In addition, many teachers continued or started talking about Engineering Tomorrow on social media and in online communities, further boosting our reach.

29,500+

Average number of students attending a Lab Day event

447,000+

Lab kits sent out this year



2023-24 HIGHLIGHT 2

Evolving our format to meet demand.

In response to this rapid growth, Engineering Tomorrow quickly pivoted to make our no-cost labs and materials even easier for teachers to access. All lab intro videos and materials are now available to anyone on our website, and new integrations make it faster and more seamless than ever to answer teachers' questions as they come in.

Our live-streamed Lab Days, events that connect schools from across the country, bring some of the most prominent names in engineering to tens of thousands of students at a time through engaging keynote addresses.

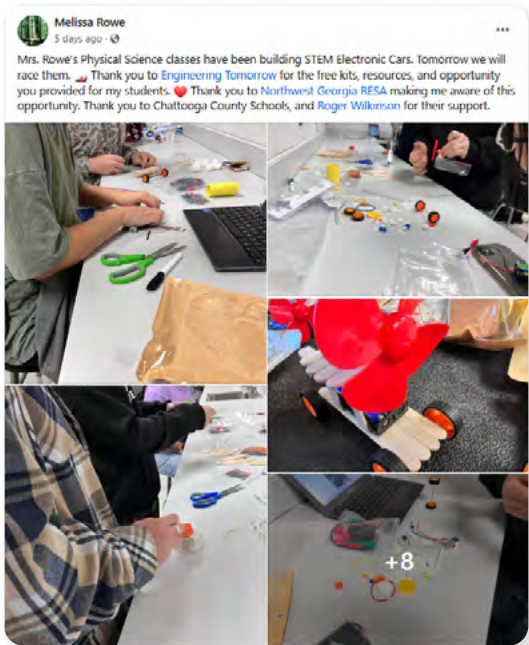
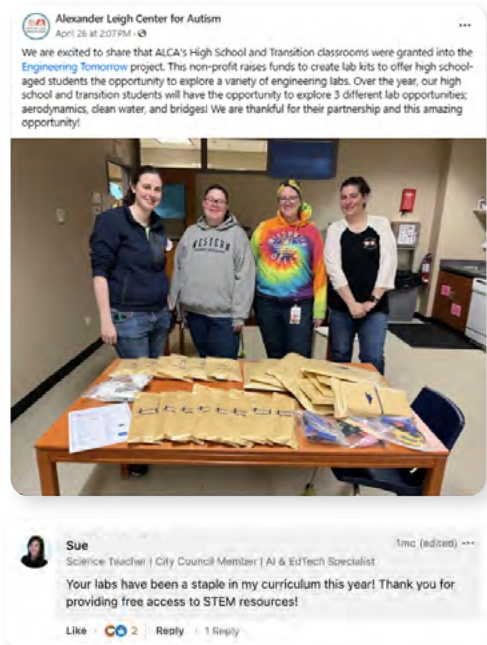
2023-24 HIGHLIGHT 3

Keeping the momentum going.

As a result of increased awareness and greater operational efficiency, we've been proactively reaching out to more teachers and schools than ever before. Our goal is to broaden access to and awareness of engineering and STEM, and the growth we experienced this year has set us up for success as we look to the future.

5,900+
teachers participated in
Engineering Tomorrow for
the first time in 2023-24

3,500+
Social media followers



2023-24 HIGHLIGHT 4

Building tomorrow's workforce.

Engineering Tomorrow is working with key donors to create a workforce development program to help ensure a reliable supply of engineers, especially in the trades professions. This program addresses an acute and chronic need experienced by our donors, and by employers across all engineering disciplines.



Engineering Tomorrow exists to ensure that our world is ready to meet tomorrow's most pressing challenges.

Fostering a love of engineering in high school students today – and bringing more diverse perspectives to the field – will enable us to think creatively and strategically about the trends we see on the horizon – and those we don't see yet.

Engineering Tomorrow is actively analyzing global engineering trends and challenges to ensure the labs we deliver prepare students for the world of tomorrow. For example, we are currently developing labs focused on semiconductors and site remediation because of the huge demand we see in those industries.

The immense growth we experienced this year – along with the changes we made in response – have positioned us to expand our reach even further over the next one, five, 10 years. We look forward to continuing our progress toward our mission.



Join us.

There are a lot of ways to engage with Engineering Tomorrow – by teaching our labs, becoming a partner, donating, or bringing our labs to your classrooms. Click one of the links below, or reach out to our team at contact@engineeringtomorrow.org.

[Teach a lab →](#)

[Partner with us →](#)

[Donate →](#)

Engineering Tomorrow team

Board of Directors



William Woodburn
Founder and Chairman of the Board, A Founding Partner, Global Infrastructure Partners



Erik O. Einset
Operating Principal, Global Infrastructure Partners



Telva M. McGruder
Executive Director, Global Body Manufacturing Engineering, General Motors



Alexandra Coleman
Head of Centrica Business Solutions North America



Jayanthi Iyengar
EVP, Chief Technology & Strategic Sourcing Officer, Oshkosh



Kristine T. Budill
Director of the Architecture, Engineering, and Design for the Common Good Program, School of the Holy Child



Cliff Spiro
Director, TTIP Consulting

Engineers



Milton Davis
Curriculum Coordinator



Joanna Caudle
Curriculum Consultant



Betsy Fortman
Staff Engineer



Gerald Dawes
Staff Engineer



Carla MacQuarrie
Staff Engineer

Administration & Operations



Dr. Timothy J. McNiff
Executive Director



Megan E. Barrett
Director of Operations



Dr. Bradley Peck
Midwest Regional Director



Constance B. Chiplock
Lead Program Coordinator



Monica San Martin
Lead Program Coordinator



Jillian Williams
Program Coordinator



Jenn Scott
Program Coordinator



Jose Centeno
Head of Technology and Distribution Operations



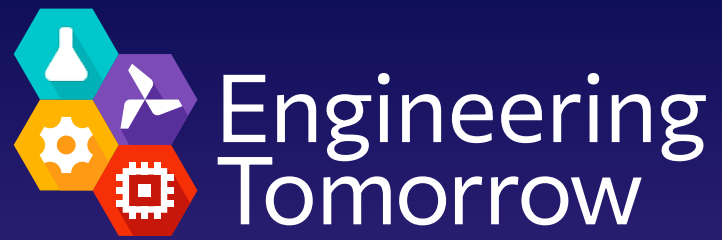
Ann Viegut
Program Coordinator



Lisa Peck
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Elizabeth Kysely
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