



ASME
FOUNDATION

Empowering Next Generation Engineers

Background on ASME's Philanthropic Programs




Vision

Engineers make our lives safer, more productive, and more enriching. The American Society of Mechanical Engineers (ASME) is dedicated to sparking a lifelong passion for engineering while nurturing brilliant, innovative solutions. We believe that the talent needed to create a better world must be harnessed from the full diversity of humanity.

History

ASME, founded in 1880 as a professional community for engineers, sets the global standards for excellence and public safety across mechanical engineering and related disciplines.

The Society's people, programs, forums, conferences, research and rich digital ecosystem accelerate engineering innovations for the greater good.



Engineers are visionaries and problem-solvers.

The most effective way to solve humanity's most pressing challenges is by building a diverse and inclusive workforce — and giving them the tools to succeed.

ASME is dedicated to equipping a new generation of engineers, armed with education and technology. Together we can make sure that tomorrow's problem-solvers will have the skills to address the challenges to come.

Opportunity Creates Innovation



██████████

So many problems can't wait.

Climate change, poor sanitation, COVID-19 and other diseases are among the critical challenges that pose urgent threats to billions around the world. Engineers can deliver powerful solutions to humanity's most pressing needs.

The possibilities are infinite.

██████████

A woman with curly hair and glasses is shown in a close-up, focused on working on a white architectural model. She is wearing a red and white striped shirt. The background is a blurred cityscape. A vertical dotted line runs down the center of the image, separating the text on the left from the image on the right.

The world needs more qualified engineers.

More diversity, because too few women and people of color are encouraged to join the global engineering profession.

More interdisciplinary training to address complex global challenges.

More early-career support for socially conscious innovators advancing ideas that help underserved communities.

But engineers alone cannot save the world. It takes all of us.



██████████

Campaign for Next Generation Engineers Who Change the World

The Campaign for Next Generation Engineers will support a scalable arc of programs that enhance learning and foster equity at every stage of an engineer's journey, from early inspiration to career engagement and leadership.

Three Pillars of Support



Education That Inspires

Igniting a lifelong passion for engineering in K-12 through college and graduate school



Ideas That Innovate

Nurturing breakthrough ideas to improve quality of life in underserved communities



Careers That Matter

Propelling early-career engineers toward a lifetime of meaningful work and engagement



A photograph of three diverse students (two girls and one boy) looking intently at a project on a table. The girl in the center is wearing a white t-shirt with the text 'CRAZY FRIEND NIYA'. The boy on the left is wearing a grey baseball cap. The girl on the right is wearing a grey hoodie. The background is slightly blurred, showing a classroom setting with a chair.

Education That
Inspires

Expanding Young Minds
ASME INSPIRE
STEM Readiness

Offered free to schools, ASME INSPIRE is a K-12 STEM education program that teaches students to become problem-solvers for good, opening a window to the opportunities in engineering.

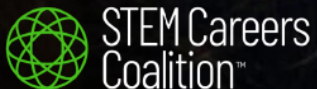


Education that Inspires

The Wonders of Engineering

Illuminating the “E” in STEM for all students

- Engineering is the only STEM discipline not typically included in the K-12 curriculum
- Reaching **750,000 students annually** through alliance with Discovery Education, delivering engineering-related STEM curriculum
- 77% of participating schools are Title I qualified; program champions a **more inclusive, better prepared pipeline of K-12 students** energized to pursue STEM



Education That Inspires



DHL for moon deliveries?

At E-Fest, aspiring engineers met the people building it. Now they want careers in space.



A student with glasses is focused on working on a project, possibly a 3D printed part, in a workshop or lab setting. The background is slightly blurred, showing other equipment and a person in a blue shirt. The overall tone is professional and educational.

Education That Inspires

ASME E-Fests® and ASME EFx® are hands-on interdisciplinary engineering experiences offering college students opportunities to participate in skill-building workshops and competitions in areas such as Human-Powered Vehicles, Robotics, and 3D Printing while meeting with professional engineers. E-Fest is held four times a year (currently virtual) across the United States, India, and South America.

// The competitions enhance our skills and push us to put our knowledge to maximum utility. It's a room full of broad and bold ideas. It was an amazing experience."

- ASME E-Fests® Participant



Education That Inspires

Scholarships are awarded to deserving students in two-year, four-year and graduate degree programs in the U.S. and abroad helping aspiring engineers achieve their full potential.

“ The thought of delaying my senior year indefinitely was heartbreaking. Thanks to the ASME Foundation Scholar Award, I was able to graduate with my B.S. in mechanical engineering.”

- Meredith Campbell, ASME Foundation Scholar

152

scholarships given in 2021 totaling more than \$500,000

45%

awarded to students of color

40%

awarded to female students



Education That Inspires
Opening New Roads
to Technical Careers

ASMECCEP

Community College Engineering Pathways

ASME is **launching a breakthrough initiative** with community colleges to create new career pathways for engineering technicians with two-year degrees or other certifications.

3.4 million technical positions will be open in the US by 2022, according to an estimate by The National Academies of Sciences, Engineering, and Medicine

Aligning

community college curriculum with rapidly changing technology

Building

community college resources for career development support

Cultivating

an employer network accessible to community college students



Education That Inspires

ASME & HBCUs

Enhanced Support & Engagement Initiatives

Historically Black Colleges and Universities

Through a new pilot program underway, ASME partners with HBCUs to:

- Connect students to internships, apprenticeships, and jobs with best-in-class organizations and companies
- Establish ASME student chapters with access to ASME events and competitions that provide hands-on learning, and opportunities to volunteer; Enable participation in ASME's member network on regional, national and global levels
- Illuminate career pathways via a new digital platform and guidance from seasoned engineers
- Highlight availability of ASME scholarships
- Help administrators and faculty align engineering curriculum more closely with market needs

A woman with long dark hair, wearing a black lace dress and high heels, stands at a wooden podium with a microphone, addressing an audience. The background shows a conference room with people seated at tables.

Careers That Matter

Nurturing the Innovators

ASME's Career Engagement Center (CEC) is a digital platform for students and early-career engineers to simulate and explore various career and volunteer pathways, define and track progress towards long-term goals, understand market trends and how they can use their skills to positively impact society.



Careers That Matter

Fellowships

ASME Federal Fellows

Fellows provide technical expertise to policymakers in the US government advising on legislation related to energy, manufacturing, research, infrastructure and technology. 130+ Fellows have been placed since the program's inception in 1973.

Career Engagement Research

Fellows provide a body of research on trends, opportunities, and requirements useful to early-career engineers seeking to deepen their engagement in the profession.

Graduate Teaching


Fellows, more than half of whom are women, are PhD candidates in mechanical engineering pursuing a career in higher education.

Engineering for Change (E4C) Research

Fellows receive support to delve into the market conditions encountered by engineers addressing critical quality-of-life challenges in underserved communities.

24 Countries Represented

Colombia | Ecuador | Peru | Uganda
| India | Argentina | Tunisia | Nigeria
| Panama | Paraguay | Kenya
Congo | Rwanda | Egypt | Canada
| Ghana | United Kingdom | Iran |
Jordan | USA | Cameroon | Sri Lanka
| Vietnam | Germany



Ideas That Innovate

engineering FOR CHANGE

The Engineering for Change (E4C) Digital Community is an open-access network and knowledge hub dedicated to sharing engineering advances in support of global development with over a million followers.

Serving a largely younger audience in the early stages of their careers, the E4C platform enables members to engage with peers, learn from experts, seek and share information, gain insights on technology successes, and connect to opportunities.

A photograph of a workshop or lab setting. In the foreground, an older man with white hair is focused on a small mechanical component. He is wearing a white shirt and a blue lanyard. To his right, a woman in a blue blazer is looking down at a laptop. Further right, a man is also looking at a laptop. The background shows other participants at tables, some working on projects. The scene is brightly lit and appears to be a collaborative learning environment.

Ideas That Innovate

From Concept To Prototype

ASME ISHOW Idea Lab

Participants are invited to learn firsthand how the most promising, socially conscious engineering ideas move from concept to prototype. Leveraging ASME's global volunteer community, the Idea Lab helps innovators address technical issues as they invent products that improve quality of life in underserved communities.


A woman in a white lab coat and glasses is looking towards a woman in a blue sari who is wearing a VR headset. They are in a workshop or office setting with various equipment and a computer monitor visible in the background.

Ideas That Innovate

Scaling World-changing Ideas

ASME ISHOW

Social entrepreneurs compete for seed grants and opportunities to connect with seasoned engineers and other experts for guidance on how to scale prototypes — that address one of the United Nations Sustainable Development Goals — into products that will be sustainable and have a positive social and environmental impact.



ASME is the launchpad for tomorrow's engineers.
The Campaign is their fuel.

The ASME Foundation invites individual, corporate, and institutional donors to inspire and advance the next generation of engineers as they build a better future for all of us.

Empowering the Next Generation of Engineers

Connect
With Us

Kathleen Lobb
Managing Director,
Philanthropy
Tel 1.212.591.8511
LobbK@asme.org

Stephanie Viola
Director, Corporate &
Foundation Relations
Tel 1.212.591.7155
ViolaS@asme.org

Keith Miles
Director,
Major Gifts
Tel 1.202.785.7384
MilesK@asme.org

Jarrett Reich
Communications
Specialist
Tel 1.917.669.9554
ReichJ@asme.org

Empowering the Next Generation of Engineers





The engineering profession will solve the world's great challenges only when it is more diverse and welcoming to more kinds of people. Building tomorrow's inclusive engineering workforce is key to accomplishing our mission to advance engineering for the benefit of humanity.

A handwritten signature in white ink, appearing to read "Keith Roe". The signature is stylized and fluid, with a long horizontal stroke at the end.

Keith Roe, P.E.
Campaign Chair
Chair, ASME Philanthropy Committee

CAMPAIGN FOR
NEXT
GENERATION
ENGINEERS
WHO TRANSFORM THE WORLD

ASME
FOUNDATION



Humanity is depending on tomorrow's multidisciplinary engineers to make the world cleaner, healthier, more productive, and more sustainable. The Campaign For Next Generation Engineers fuels programs that inspire, engage, and empower a new generation of problem-solvers to build a brighter future for all of us.

A handwritten signature in white ink that reads "Thomas Costabile". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Thomas Costabile, P.E.
ASME Executive Director/CEO

CAMPAIGN FOR
NEXT
GENERATION
ENGINEERS
WHO TRANSFORM THE WORLD

ASME
FOUNDATION

ASME Foundation
Two Park Avenue, 7th Floor
New York, NY 10016-5990
Phone: (212) 591-8040
Fax: (212) 591-7674
Email: info@asmefoundation.org
www.asmefoundation.org

CAMPAIGN FOR
NEXT
GENERATION
ENGINEERS
WHO TRANSFORM THE WORLD

ASME
FOUNDATION

Engineers build
the future.
ASME Foundation
builds engineers.

ASME Foundation
Two Park Avenue, 7th Floor
New York, NY 10016-5990
Phone: (212) 591-8040
Fax: (212) 591-7674
www.asmefoundation.org