

overview: *Extraordinary Engineering Impacts on Society* – a National Academy of Engineering symposium

Thursday August 18

[early session](#)

Welcoming presentations

Session I – NSF and its Role in Fostering Extraordinary Engineering Impacts on Society

The symposium's first session will lay the groundwork for the event by providing background and insight on NSF's history of funding engineering research, the establishment of the Directorate for Engineering as the home of this support, and how NSF engineering research and education funding affect not just technological innovation but our society and culture.

[late session](#)

Session II – People Who Bring About Extraordinary Engineering Impacts on Society

This session will feature talks from the people who have applied engineering principles to some of society's most challenging problems and have brought about far-reaching changes to technology, the economy, and society.

Friday, August 19

[early session](#)

Keynote – Engineering's Role in Creating Extraordinary Impacts on Society [working title and content]

Engineers and the work they perform have had profound effects that range far beyond technological advancement. The proposed opening keynote of the symposium will highlight how these contributions affect such diverse issues as individual quality of life, national security, population health, manufacturing services, infrastructure resilience, public policy, and society at large.

Keynote – Engineering Education – The Key to Creating the Next Generation of Extraordinary Impacts [working title and content]

This keynote address will address the role of engineering education—a pillar of the Directorate for Engineering's efforts—in building and sustaining the pipeline of researchers and practitioners who bring about innovations that change society.

Session III – NSF Centers that Catalyze Extraordinary Engineering Impacts on Society

NSF Centers—in particular, their Engineering Research Centers—have played a central role in producing breakthroughs that address national challenges and open new opportunities. This session will bring these contributions to center stage through presentations by engineers who have been an integral part of these Centers' many achievements.

[late session](#)

Session IV – NSF Processes that Foster Extraordinary Engineering Impacts on Society

NSF has established a number of funding processes that support engineering research and education over the years. These include the Small Business Innovation Research (SBIR), Industry-University Cooperative Research Center (IUCRC), Innovation Corps (I-Corps), Small Grants for Exploratory Research (SGER), Organizational Change for Gender Equity in STEM Academic Professions (ADVANCE), Faculty Early Career Development Program (CAREER), and Graduate Research Fellowships Program (GRFP) support mechanisms. The final session of the symposium will feature talks by engineers whose extraordinary impacts were made possible with such support.

Symposium event timing [Eastern Time]

day	early session	late session
Thursday August 18	10:00am – noon	12:30pm – 5:00pm
Friday, August 19	10:00am – 2:30pm	2:40 – 6:20pm