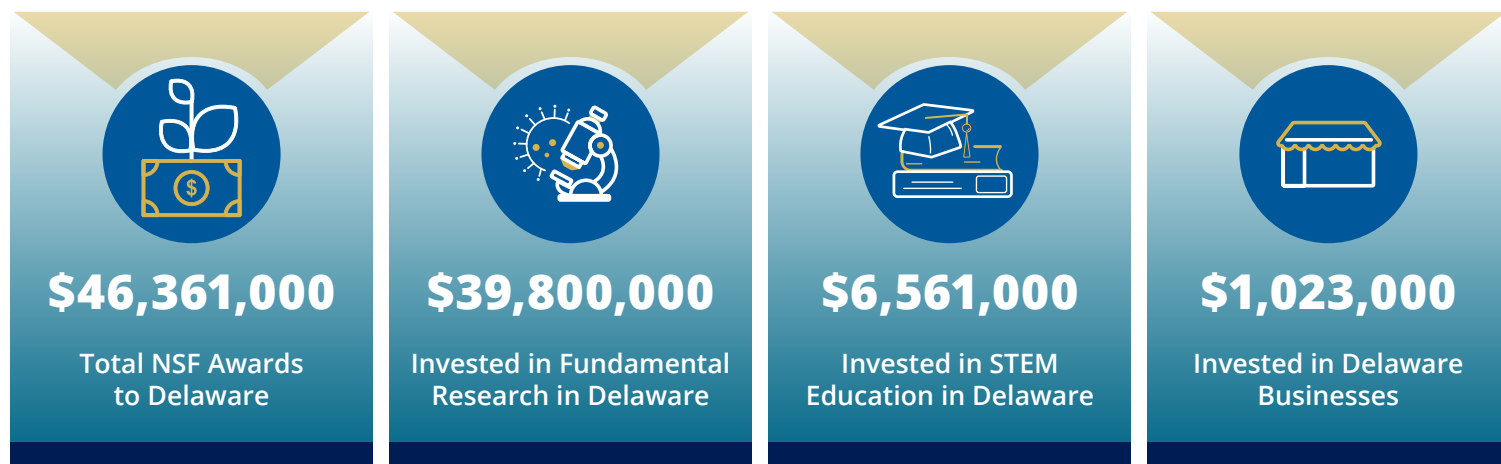




DELAWARE

FY 2022 Fast Facts

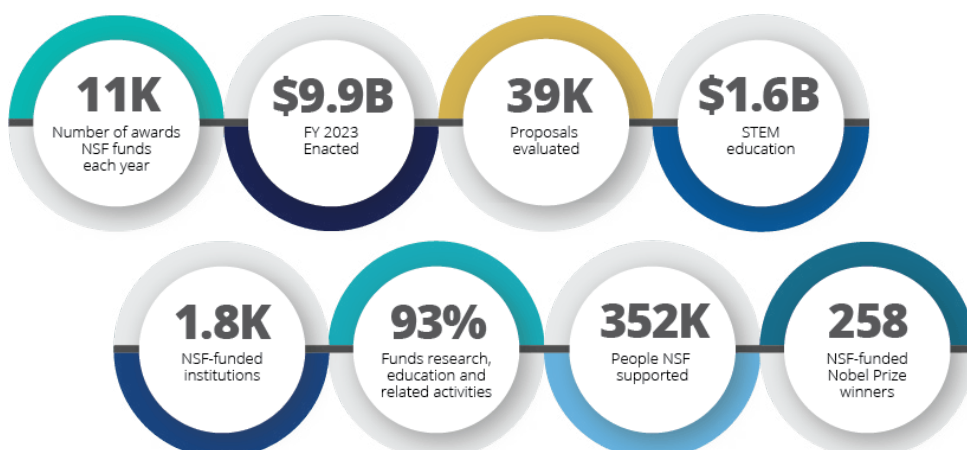


Top NSF-funded Academic Institutions for FY 2022



NSF By The Numbers

The National Science Foundation (NSF) is a [\\$9.5 billion](#) independent federal agency created by Congress in 1950 to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense. NSF's vital role is to support basic research and researchers who create knowledge that transforms the future.



Data represents FY 2022 Actuals unless otherwise indicated.



Expanding the Frontiers of Science

Future manufacturing needs to be sustainable. Through a \$3 million NSF Future Manufacturing Research Grant, the **University of Delaware** launched an EcoManufacturing project which impacts the way chemical manufacturing of emerging technologies is developed and practiced. The goal of the project is to develop a blueprint for sustainable chemical manufacturing in emerging technologies by integrating computer science with mechanistic modeling and experimental data within a unified systems approach. This approach will consider market trends, account for process and product economics, and incorporate environmental, market and policy impacts. Through this work, the project moves a predominant raw material base for chemical manufacturing from non-renewable to renewable substrates. Education is also integral to the project and involves training undergraduate and graduate students in convergence research and sustainable manufacturing. The project also trains undergraduates in interdisciplinary product development through Internet-of-Things design projects and chemical operators on future manufacturing across the U.S. in collaboration with RAPID/AICHe, a Manufacturing USA Institute, as a manufacturing partner.



STEM Education and Broadening Participation

Through NSF funding, **Delaware State University** aims to serve the national interest by improving the preparation of K-12 teachers to teach mathematics. K-8 pre-service teachers often struggle to deeply understand the mathematics that they will teach. Additionally, both mathematics and secondary mathematics education majors sometimes lack the deep understanding of foundational mathematics that is necessary for success in upper-level courses. For students historically underrepresented in mathematics, mathematics learning may seem disconnected from real life experiences. This NSF-funded project helps students at a minority serving institution deepen their mathematics understanding and performance so that they can be successful in their math courses and future careers. The project transforms mathematics learning by connecting students' personal identities and cultural understandings of the world to their mathematics understanding. The lessons are student-centered so that students can use their prerequisite knowledge and discuss their ideas freely as they solve authentic problems individually or through group work.



Regional Innovation Engines

The NSF Engines program envisions fostering flourishing regional innovation ecosystems across the country, providing a unique opportunity to spur economic growth in regions that have not fully participated in the technology boom of the past few decades. The NSF Engines program uniquely harnesses the nation's science and technology research and development enterprise and regional-level resources. NSF Engines can catalyze robust partnerships rooted in scientific and technological innovation to positively impact the economy within a geographic region, address societal challenges, and advance national competitiveness. [Find potential NSF engines in your state.](#)

EPSCoR

COMPETITIVE RESEARCH | Delaware is one of 28 U.S. states or territories under [NSF's Established Program to Stimulate Competitive Research \(EPSCoR\)](#). Over **\$7,100,000** in awards have been made to Delaware academic institutions through EPSCoR in FY 2022. For more information, [visit Delaware's EPSCoR state web page.](#)

NCSES

According to the [National Center for Science and Engineering Statistics \(NCSES\)](#), which is housed in NSF, 29% of science, engineering and health doctorates conferred in Delaware are made in engineering. Visit Delaware's science and engineering state profile to learn more!

33.79% of Delaware's [higher education degrees are concentrated in S&E fields.](#)

5.45% of Delaware's [workforce are employed in S&E occupations.](#)

6.28% of Delaware's [total employment is attributable to knowledge - and technology - intensive industries.](#)

Learn More

CHIPS & SCIENCE – The CHIPS and Science Act's investments in the U.S. National Science Foundation will help the United States remain a global leader in innovation. Implementation of this legislation will be key to ensuring that ideas, talent and prosperity are unleashed across all corners of the nation. [For more information, please visit NSF's CHIPS and Science website.](#)

RESEARCH SECURITY – NSF is committed to safeguarding the integrity and security of science and engineering while also keeping fundamental research open and collaborative. NSF seeks to address an age of new threats and challenges through close work with our partners in academia, law enforcement, intelligence and other federal agencies. By fostering transparency, disclosure and other practices that reflect the values of research integrity, NSF is helping to lead the way in ensuring taxpayer-funded research remains secure. [To learn more, please visit NSF's Research Security website.](#)

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