# ENERGIZING THE FUTURE OF ENGINEERING



## New Facility Crucial to Meeting the High-Tech Needs of Tomorrow's Engineers

Artificial intelligence...self-driving cars...3D-printed human organs as lifesaving transplants...nanobots repairing cell damage...never before have engineers had such a profound impact on humanity on a global scale. To keep advancing and improving the human condition, new engineers and applied scientists will be needed to invent, produce and oversee our technology-driven future.

But how will academia produce the next generation of innovators? By offering modern facilities, forward-thinking faculty and an inventive approach to educate and best prepare engineers and applied scientists for the challenges that await them.

Stony Brook University's College of Engineering and Applied Sciences will use \$25 million in New York State SAM funding to begin the planning phase of a \$100 million, 100,000-gross-square-foot building that will enable the College to do all this and more, providing our students with the tools, opportunities and experiences to make a real difference in transforming our world.

This advanced laboratory facility will help drive global and regional economic development while supplying much needed space for the College's growing engineering departments, where enrollment has increased by more than 60 percent since 2012. With this expansion, the College will be able to attract an additional 500 of the brightest engineering students to its programs.

# UNPRECEDENTED STUDENT GROWTH 60%

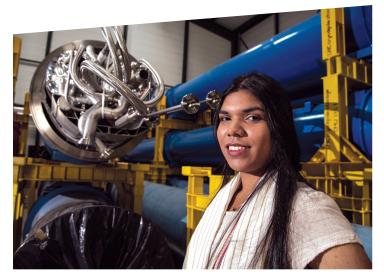
Increase Over 5-Year Period

**2,599**Students in 2012

**4,136**Students in 2017











### The Building

The building will be cleverly designed to promote active learning, inspire creativity and emphasize entrepreneurship. It will potentially offer:

- Student project prototyping/manufacturing shops
- Industrial-quality labs and project assembly bays
- Opportunities for student start-ups
- A hub for partnerships between students, faculty and industry leaders
- Collaborative space for experiential learning
- Increased focus on engineering-driven medicine, energy systems for sustainability and AI-driven discovery
- Cross-cutting educational programs integrating data and computational science, engineering, medicine, humanities and social sciences





#### Long Island Advantage

Long Island is home to many globally recognized technology-based companies and start-ups that need a locally trained, high-quality and well-educated workforce. This new building and the programs it will inspire will help create a technology hub in New York that will foster continued economic growth, cementing Stony Brook's role as one of the leading engineering schools in the region.

#### **ENGINEERING HOT SPOT**

Between 2014 and 2024:

16% is the rate by which engineering jobs in the Long Island/New York City region is projected to grow — four times faster than the national average.

**43%** of all engineering job openings in New York State will be in the Long Island/New York City area.

Source: The United States Bureau of Labor Statistics and the New York State Department of Labor

#### For more information, contact:

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