Cybersecurity is one of the fastest growing and in-demand industries across the nation. In response leading global security corporation Northrop Grumman has strategically aligned its philanthropic efforts with its core business needs to address the shortage of cyber workers. Through a partnership with the University of Maryland, College Park (UMD), Northrop Grumman went directly to the source to fix its cybersecurity needs, creating the nation’s first cybersecurity honors program for undergraduate students.

The program, Advanced Cybersecurity Experience for Students (ACES), is designed to stimulate future STEM leaders as well as meet the growing cybersecurity needs of Maryland and the nation. Launched in fall 2013 with 57 undergraduate college students, ACES is a four-year living-learning program that provides students an intensive, interdisciplinary, accelerated curriculum in key technical, policy, behavioral, and social science components of cybersecurity. It’s an “innovation… a step forward,” said Northrop Grumman CEO Wes Bush about the program model, highlighting its ability to connect businesses with postsecondary education institutions.1

To launch this program, an effective partnership was critical. Northrop Grumman provided a $1.1 million grant to UMD that resulted in a state-of-the-art laboratory and the living-learning community for ACES students.

Northrop Grumman’s involvement does not end with funding; the company engages in curriculum development, guest lectures, and an industry advisory board. The company also provides work-based learning opportunities to students that include posing real-world problems for students to solve, advising and mentoring capstone projects, and offering internship opportunities.

Nearly doubling their anticipated number of students from 30 to 60, and in its third year increasing that number to 80, ACES is experiencing a great deal of demand. Parsons, an engineering and construction organization, offers scholarships to ACES students with the hope that these students will consider future employment opportunities at the company after college. Organizations that get involved earlier have the opportunity to make substantial connections and promote loyalty that will benefit them when searching for employees in the future.

Overall, Northrop Grumman’s program model provides businesses with a better-trained labor pool that’s prepared and eager to tackle growing workforce problems.