HCC receives $1 million grant to build new engineer program

HOLYOKE – Holyoke Community College (HCC) has been awarded nearly $1 million from the National Science Foundation to create a new engineering pathways program to help boost the numbers of Latinx and women engineers working in the field.

The grant – $956,458 over four years – will allow HCC to design an accelerated, one-year engineering certificate program that will culminate in paid internships with high-tech research organizations such as the renowned Brookhaven National Laboratory in New York.

The money comes from the NSF’s program for Hispanic Serving Institutions and is intended to improve undergraduate education in STEM (Science, Technology, Engineering and Math). HCC has been a federally designated Hispanic Serving Institution, or HSI, since 2016. Colleges and universities are recognized as HSIs when their Hispanic/Latinx enrollment exceeds 25 percent.

HCC’s partners in the grant include Holyoke High School, Westfield High School, Western New England University, the University of Massachusetts Amherst, the Northampton-based Collaborative for Educational Services, a national association called the 50K Coalition, and the Society for Women Engineers.

The main goals of HCC’s new Western Massachusetts Engineering Pathways Program are to increase participation in engineering by members of groups historically underrepresented in the field, to revitalize HCC’s engineering programs to be more responsive to a diverse student body, and to ensure the program meets the needs of regional employers.

“The grant gives us the funding to create a new curriculum,” said Adrienne Smith, HCC’s dean of STEM and one of the grant managers.

Through the grant, HCC will hire an Engineering Pathways coordinator to recruit high school students for the program. “The coordinator will also be an ongoing resource for the students,” said Smith. “We don’t want to just get students into the program; we want them to get through it and succeed.”

After students complete their coursework they will be placed in paid internships.

“The internship is built into the curriculum,” said Smith. “We already have some things set up with Brookhaven Labs. They want our students. They’re going to pay for their housing and a healthy salary. We’re working to find other companies to do exactly the same thing.”

As a further incentive, each student in their final program course will receive a $1,000 stipend.

“At the end, after receiving their certificates, students can either go directly into the workforce or they can continue on at HCC for another year to complete their associate degree in engineering,” Smith said.

The grant also calls for a review of HCC’s associate degree program in engineering in consultation with HCC’s partners to increase employer engagement and improve transfer pathways to four-year institutions.

In addition, the grant will facilitate the creation of a chapter of the Society of Women Engineers at HCC.

Also in conjunction with the grant, HCC has joined the 50K Coalition, a national consortium of professional engineering societies whose goal is graduate 50,000 women engineers and engineers of color by 2025.

“Our engineering graduates typically go on to Western New England and the UMass Amherst and other institutions with highly regarded engineering programs, so we are helping to build that base,” Smith said.