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CAPITAL ASSETS

UA Little Rock Leads Way with Cybersecurity, Construction Management Initiatives

by Capital Assets

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Students at work on UA Little Rock's Expect More campaign featuring STEM and the university's Cyber Gym, which provides cloud-based cybersecurity education. (Benjamin Krain)

Threats to cybersecurity are only expected to become more numerous and sophisticated, and cybercrime is projected to cost the world more than \$10.5 trillion annually by 2025.

Through various partnerships and collaborations, UA Little Rock continues to do its part to improve cybersecurity and help produce talented experts and educators in the field.

A \$750,000 grant from the National Centers of Academic Excellence in Cybersecurity, within the National Security Agency, makes UA Little Rock one of the first universities in the country to offer a graduate certificate in cybersecurity education through the National Cybersecurity Teaching Academy.

The academy is a collaborative of 10 institutions in nine states that will offer the first credentialing program for high school cybersecurity education in the country

"Once you have the qualified teachers you can offer the curriculum and get students interested in that pathway a lot earlier," said

Associate Vice Chancellor Erin Finzer.

Teachers accepted into the National Cybersecurity Teaching Academy receive funding covering tuition for the 12-credit hour virtual graduate certificate. Teachers who complete the academy will also have the option to complete six additional credit hours that will certify them to teach dual/concurrent enrollment cybersecurity courses.

UA Little Rock is one of only three universities in the country to offer the National Cybersecurity Teaching Academy, along with the University of Louisville and DePaul University. Each university has a regional college and community college partner who will help with curriculum development and teacher recruitment.

UA Little Rock's partners are California State University, Sacramento and Estrella Mountain Community College.

https://www.arkansaspusiness.com/article/138867/ua-little-rock-leads-way-with-cybersecurity-construction-management-initiatives?oly_enc_id=657785142245A4P

Additionally, the university partners with the Forge Institute and the University of Arkansas at Pine Bluff in the Consortium for Cyber Innovation (CCI) to meet the country's growing need for skilled cybersecurity professionals.

The consortium is designed to develop and align cyber education and grow applied research capabilities throughout Arkansas. The consortium partners collaborate on workforce development, research and innovation to create a strategic industry cluster in emerging technologies that will support national defense and enhance Arkansas as a Cyber Defense State and cybersecurity hub.

There are already 1,400 open positions in Arkansas, and more than 467,000 open positions in cybersecurity in the U.S. The projected increase in cyberattacks is only expected to increase the demand.

"I think that there is such a critical need right now for a cybersecurity workforce for people with cybersecurity work sets," Finzer said. "There's a willingness among industry partners, nonprofits, government, institutions of higher ed, K-12, to work together to solve this problem."

UA Little Rock also partnered with a higher education consortium led by the University of Louisville to offer an online Cybersecurity Workforce Certificate program funded by the National Security Agency (NSA).

UA Little Rock was chosen to participate in this project because of its designation as an NSA Center for Academic Excellence in Cyber Defense.

As a part of the NSA grant, police officers, EMTs, firefighters and health care workers, as well as military veterans, can participate in the program at no cost. In addition to the certificate, participants will be able to earn industry-recognized badges from tech leaders such as Google, Microsoft and IBM.

The certificate program enhances student knowledge in the realm of cybersecurity foundational courses and uses health care data examples and use cases. Participants can complete a total of 24 modules during the six-month program.

Building the Future

A construction project needs a foundation, and a collaboration between UA Little Rock and a local high school does just that.

The school's Construction Management program boasts a 100% employment rate upon graduation and is also helping to develop the next generation of construction industry professionals.

The UA Little Rock-Vilonia High School Associate of Construction Science Partnership is a union of the university and the Vilonia Pathways Academy Conversion Charter. It created a unique charter school, the first of its kind in the state, that offers a concurrent program in which students gain an associate degree in construction science from UA Little Rock while in high school.

The degree, along with experience, is a pathway to entry level construction management jobs with general contractors and subcontractors in building construction and heavy highway construction.

Associate Vice Chancellor Erin Finzer said UA Little Rock is hoping to scale the program to other high schools. She said high school students who may not have previously considered college find themselves motivated by the chance to earn a degree

"It opened up a whole new way of looking at what their potential might be," she said.

With a state-of-the-art project management lab, the Construction Management and Civil and Construction Engineering program offers bachelor's degrees in Civil and Construction Engineering and Construction Management, a bachelor's of Professional Studies, an associate of Science and Construction Science and a minor in Construction Management.

Finzer said industry partners and UA Little Rock instructors regularly collaborate on the curriculum to ensure students have the skills and knowledge local construction firms need.

"In terms of our construction program in particular, the relationships that our program and Hank Bray, our department chair, have in place with our industry partners has made it so that it's easy to place students on work sites and ensure they have jobs when they graduate," Finzer said.