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Virginia Goes Big on Cloud Degrees

> Amazon Web Services expands its curriculum development partnership with Virginia's community colleges and four-year universities.

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October 1, 2019

Amazon Web Services is expanding its collaboration with Virginia's community college system and several of its public universities to offer more associate and bachelor's degree programs in cloud computing.

State officials said the deepening partnership with the tech giant will create more opportunities for students who want to pursue jobs in Virginia's booming tech sector.

AWS is an Amazon subsidiary focused on cloud computing, which is one of

employers' most sought-after technical skills, according to nationwide data from LinkedIn.

"The growing demand for these skills is clear," Megan Healy, the state's chief workforce development adviser, said in a news release that announced the expansion. "Since September 2016, job postings requiring these skills in Virginia have increased from approximately 5,000 per month to 20,000 per month."

Through the partnership, AWS will work with the public institutions to help integrate cloud technology course work into curricula while also supporting student learning.

"By embedding the AWS Educate program to create a statewide cloud degree program, Virginia is providing students with an on-ramp to innovation and careers in the cloud," Teresa Carlson, vice president worldwide public sector for AWS, said in a statement.

So far, 10 Virginia community colleges and six universities (all public institutions except Hampton University) have committed to implementing the cloud degree program. Additionally, AWS is working with four K-12 districts in the state.

AWS recently introduced a similar partnership program in cloud computing in California. The Amazon subsidiary's educational arm has partnered with roughly 2,400 institutions around the world, including two-year colleges, universities and K-12 schools.

The latest move in Virginia follows several expansions of postsecondary collaborations by Amazon, Google and other large technology companies, which are becoming more involved in providing alternative credential programs and training for its employees. At the same time, higher education institutions are grappling with how to adequately prepare students to enter high-demand technology fields.

Amazon's cloud originally was created to service the company before Amazon decided to market it to businesses, individuals and organizations. Amazon currently owns about 48 percent of the public cloud service market. The company also is launching its second headquarters, in Arlington, Va. The surrounding area of Northern Virginia is home to one of the highest concentrations of IT positions in the country.

NOVA Chasing the Cloud

Northern Virginia Community College and George Mason University were two of the first institutions to implement degrees in cloud computing through a partnership with AWS, which was announced this June.

Starting in fall 2020, students can pursue a degree path in cloud computing from the two-year program at NOVA to the four-year one at George Mason.

NOVA launched its 63-credit degree program last fall. The program, which initially enrolled 30 students, since has grown to 200.

The community college built the degree to be "stackable," meaning that students can pursue further credentials -- including the cloud computing bachelor's degree from George Mason -- without having to retake courses and losing money and credits after transferring. Many students also arrive with industry certifications or credentials and want to increase their employable skills while seeking an education. The college now is able to grant these students college credits for prior industry credentials.

“One of the most fascinating things to me about this program is that these students are using the real-world tools as they train and develop their skills in cloud computing,” said Chad Knights, provost of information and engineering technologies at NOVA.

When forming the program, Knights said one of the university's goals was to target employable skills.

“AWS has been helping us understand their needs as we go through this process,” Knights said. “Ultimately that’s the perfect scenario -- where we have an industry partner and employer that’s identifying what their needs are so that our programs match what those outcomes are.”

The degree program itself was built by NOVA faculty members. But they were able to better design it and select courses based on AWS’s specified industry needs.

“We don’t like to do things for one employer, even if they’re a big employer, because things change quickly,” said Steve Partridge, vice president of workforce development for NOVA. “It really is solving a local or industry need, not specifically a company or one-employer need.”

And the degrees aren't targeted just at job openings at AWS, Partridge said, arguing that they will be portable across the tech sector.

“It really comes down to providing the infrastructure beyond Amazon,” Partridge said. “It’s really about understanding that we want to be a large player in the technology space in Virginia.”

The cloud program has “opened up other avenues to work with other partners and keep moving forward in this quickly moving IT space,” Knights said.

“I think in higher ed, often we like to create things and put them out there for students to use for years,” Partridge said. “But in IT, especially in evolving technologies, we make tweaks to the program constantly, so there’s never this idea that we’re done.”

https://www.insidehighered.com/digital-learning/article/2019/10/01/amazon-expands-cloud-degree-partnerships-virginia-colleges