

New 2-Year Degree Promises Gen-Ed Basics and Fast-Track Career Skills



Dustin Chambers for The Chronicle

Tasse Marie graduated from Columbus State U. with a degree in theater education and completed the Georgia Film Academy's certification over the summer. Now she works for a studio as a client representative and hopes to get into film editing.

What if an associate degree had a fling with a certification? Their progeny might look like the "nexus degree."

Created by the 26-institution University System of Georgia, the new credential will make its debut in January at Columbus State University, with programs in financial cybersecurity and film production. It will produce work-

ready graduates with skills that are in high demand, and will give employers an early shot at hiring them. A dozen other state university systems are monitoring the results of Georgia's experiment, says Tristan Denley, the Georgia system's executive vice chancellor for academic affairs, whom colleagues credit with the idea.

The nexus is similar to an associate degree in that it is a two-year, 60-credit-hour commitment that includes 42 credit hours of general-education requirements. But it differs from an associate degree in that its remaining credit hours include 12 in specialized, upper-level coursework and six more in a paid professional internship.

"It's a new, modern, nimble kind of credential," says Denley. The nexus, the first new degree type in the United States in more than 100 years, Denley believes, is a hybrid that is intended to compete with certifications and other so-called microcredentials by efficiently combining academic fundamentals with advanced niche skills that employers need now.

The nexus is "stackable" in that, in addition to being a stand-alone degree, it can be nested within a bachelor's program or used to supplement bachelor's or higher degrees for career advancement or change. But certifications can also be nested within it. For instance, the cybersecurity program will include at least five industry-standard certifications.

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That means, says Michael Barker, director of Columbus State's TSYS Center for Cybersecurity, that students in the cybersecurity nexus could conceivably include recent high-school graduates who want a fast track to a job with one of the area's financial-technology firms, personnel at nearby Fort Benning who need to learn specialized cyberdefense skills, or midcareer executives or retirees with business acumen who want to add computer

expertise to their résumés.

Denley says the model is adaptable to lots of subjects. According to Christopher L. Markwood, president of Columbus State, the university is also considering criminal-justice nexus degrees such as training for corrections officers. Albany State University, also part of the University System of Georgia, plans nexus degrees in blockchain analysis and machine learning. Denley says that emergency-room and oncology nursing are among a variety of other nexus programs that institutions in the system are considering as well.

Each nexus-degree program needs to be approved not just by the faculty but also by the system's Board of Regents and then the regional accrediting agency. Belle S. Wheelan, president of that agency, the Southern Association of Colleges and Schools' Commission on Colleges, says that process usually takes about six months. Criteria include, she says, whether the college can afford the program, whether it has an adequate number of qualified faculty members, and whether there are a sufficient number of general-education courses built into it.

Cyberjobs Are Waiting

When administrators say that companies are hungry for nexus graduates, they aren't exaggerating. A website for the cybersecurity industry shows that Georgia has 11,377 job openings in a field that already employs 25,418.

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Robert Skiba, executive vice president for regulatory and government affairs at InComm, a payment-processing company headquartered in Atlanta, says the nexus degrees "are a great thing for us" because graduates will have not

just proven specialized skills but also some grounding in general education. InComm and what he calls its “frenemy” companies in Georgia’s financial-services sector are growing like mad and have “an insatiable appetite” for talented cybersecurity and other tech-specialized graduates, he says. InComm sells its products in 35 countries and produces a billion gift cards a year, and it is just one player in a state that handles 80 percent of the world’s payment processing.

The company TSYS, a Columbus-headquartered giant in the industry, has made a series of gifts to the university, says Linda U. Hadley, dean of the university’s D. Abbott Turner College of Business. The latest, in 2015, was \$5 million, most of which was designated for the TSYS School of Computer Science to create the TSYS Center for Cybersecurity and to acquire a cyberrange, a centerpiece of the nexus and other cybersecurity degrees.

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The cyberrange, explains Barker, the center’s director, is the computer equivalent of a shooting range for infantry training. It is an isolated “sandbox,” unattached to other networks, but it can be configured to operate just like a partner company’s systems. Then it can be infected with any of 50,000 types of the latest malware — a software nightmare and a training dream. The range’s capacity limits the program’s cohort to about 20, Barker says, but new students can begin every eight weeks because of the curriculum’s boot-camp module design.

The university’s cyberrange, Hadley says, is only the second in Georgia — the other is at Fort Gordon, in Augusta.

Albany State has beta-tested its blockchain and machine-learning nexus degrees by offering them as academic minors, says Robert S. Owor, the computer-science professor who is designing the programs. Companies like

IBM, he says, "cannot get enough of these students."

Blockchain, a digital-ledger technology that allows a system's owners and guest users to record, step by step, who did what with each modification to a file, was developed for cryptocurrencies like Bitcoin. But its control and privacy strengths give it wide potential applications, explains Norman E. Walton, an Albany State alumnus who now works for IBM in Research Triangle Park, N.C., as a software developer. For example, Walmart is experimenting with an IBM blockchain program to track food sources from farm to processing to distribution. That enables better, faster responses to contamination scares.

As a student at Albany State, Julious L. King worked under Owor on a group blockchain project to create a secure financial-aid app. Now King too is at IBM in North Carolina, debugging code defects. In hot areas like blockchain and machine learning, he says, "the options and opportunities are so vast, I don't know where to start."



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Sarah Waldrop, a recent graduate of Columbus State U., is a production assistant for *The Walking Dead*. "I get to see everything that goes into imagining, designing, and building a set," she says, not to mention what zombies do on their downtime.

Rigging and Zombies

Opportunities are vast, too, in the Georgia film and television industry, and Columbus State's nexus degree in film production will fit tidily into an already vibrant college-to-industry pipeline.

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As with the cybersecurity program, the film-production nexus will include an existing certification offered in conjunction with the Georgia Film Academy, which is part of the University System of Georgia. That certification includes

a six-credit-hour introduction to on-set film production; six credit hours of specialized craft training in lighting and electric, grip and rigging, special makeup effects, or other skills; then six more in an internship on a professional production.

There are 94 Columbus State students now in film-academy courses. Deborah E. Bordelon, the university's provost, expects that number to grow when the nexus degree starts in January. And those students will head into a receptive market for their skills.

That is because, thanks in part to [production tax credits](#), the Georgia film and TV industry has been on a wild ride, says Jeffrey Stepakoff, executive director of the academy, an accomplished screenwriter and producer, and a professor of film and television writing at Kennesaw State University. In 2007, he says, the state saw \$240 million in activity in film and TV production. A decade later, that figure was \$9.5 billion.

Georgia has become the third-largest production center in the country, he says, and the fifth in the world, with 455 productions last year. [Tyler Perry's new studios](#), Turner Studios, EUE/Screen Gems, and Pinewood Studios are among key production centers.

Around 2014 there was real concern, Stepakoff says, about whether the state could produce a work force sufficient to keep up with the rising demand. Georgia could have spent a decade trying to build the equivalent of New York University's Tisch School or the University of Southern California's School of Cinematic Arts, he says. But it couldn't afford to wait that long. Productions had immediate needs for experienced hands who knew how to rig a set or lay down camera dolly tracks.

So Georgia established the academy, in 2015, and within several months it developed, approved, and adopted classes to be taught by union

craftspeople trained in pedagogy.

In 2017, thanks in part to tax credits, Georgia saw \$9.5 billion in film and TV production activity, up from only \$240 million a decade earlier.

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Beginning with 194 students in the spring of 2016, the academy now teaches about 2,000 students a year. They go on to get union craft jobs averaging \$84,000 in salary, Stepakoff says, and their training, at \$125 per credit hour, comes to about \$2,250, but really costs less because their internships are paid.

Danna M. Gibson, chair of Columbus State's department of communication, says the city of Columbus (population: 194,000) has made a recent push, with subsidies to production companies, to become a third hub for film and TV production in the state, after Atlanta and Savannah. That should mean that an increasing number of students there, including in the film nexus-degree program, will find internships close to home.

As with the cybersecurity program, nexus film students will vary in experience. Nolan Jenkins had worked for seven years on the sets of New York independent films as a grip — a technician who primarily rigs for lighting, camera support, and general safety. But he recently earned a film-production certificate from Columbus State to get on set, employed, and eligible to join a Georgia union in his craft.

Academy graduates "are dedicated and ready — that hunger is definitely

there," says Tasse Marie, who graduated from Columbus State in the spring with a degree in theater education and completed the film academy's certification over the summer. Her area of specialization was the AVID media-editing system, and after interning at an Atlanta production company, she's working there as a client-services representative and hoping to move into an editing job.

For some graduates, the film training is a ticket not just to a job but to the world of the undead. Sarah Waldrop graduated from Columbus State in the spring with a bachelor's in business administration and a film-academy certification with emphasis on production design. Now she's a production assistant for the 10th season of the AMC zombie franchise *The Walking Dead*, filmed around Senoia, Ga., and other Atlanta environs.

In the course of her office work, scheduling, and helping to create graphics, she explains, "I get to see everything that goes into imagining, designing, and building a set."

Waldrop has discovered that, in their off hours, the zombies — or "walkers," in the show's lexicon — are just like you and me, "doing normal everyday things, but in full makeup and costume. My favorite thing is to see a random walker drinking a soda or texting in their spare time."

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