edX Partnership Rounds Out Online Offerings

JASON MACHERER
INSTITUTE COMMUNICATIONS

Georgia Tech’s recent agreement with edX, a nonprofit online learning destination, means the Institute now has agreements with three of the world’s most successful online learning platforms.

Offering courses under the brand GTx, Georgia Tech joins a consortium of edX partners that has instructed more than 6 million learners since its inception. The first Georgia Tech class, Information and Communication Technology Accessibility, is open for enrollment and will address the importance of developing an inclusive workplace for employees and customers with disabilities. Georgia Tech’s Accessibility Solutions and Research Center, AMAC, is launching the course in partnership with the United Nations Global Initiative on Inclusion. Additional Tech courses will be announced later in 2016. GTx will also explore credit programs on edX and innovative ways of making traditional Tech programs available to more learners.

The Institute also has partnerships with Udacity and Coursera and offered its first Massive Open Online Course in 2012. Since then, more than 1 million students have enrolled in Georgia Tech online courses.

Planning Begins for Living Building

RACHAEL POCKLINGTON
INSTITUTE COMMUNICATIONS

Last fall, a $30 million commitment from The Kendeda Fund initiated a project that will create the most environmentally advanced education and research building ever constructed in the Southeast.

Since then, there has been a flurry of planning activities that have involved a variety of stakeholders on campus and beyond to help ensure the success of this transformative Living Building project. “This is unlike any other project we have embarked upon here at Tech,” said Steve Swant, executive vice president for Administration and Finance. “It is more than an opportunity to create a one-of-a-kind net positive facility in the Southeast. It is also an opportunity to learn how to leverage and integrate all of our resources — people and technologies — and build a project that will help keep Tech at the forefront of education innovation.”

The goals of the Commission on Creating the Next in Education include exploration of new ideas in content delivery and nurturing a culture of lifelong learning for undergraduate, graduate, and professional education learners.

“If we are to continue to live up to our vision of defining the 21st century technological research university, then we must be nimble and lead in creating and adapting new pedagogy and technology,” Bras said. “That will make Georgia Tech and our learners the very best and an example for all.”

The 40-member education commission is co-chaired by Bonnie Ferri, associate chair for undergraduate affairs in the School of Electrical and Computer Engineering, and Rich DeMillo, executive director, Center for 21st Century Universities (C21U). Under their direction, the commission will meet over the next 18 months. Through discovery, ideation, and design phases, the members will take a look at the Institute’s current methodologies and benchmark best practices in higher education, including issues of delivery and accessibility.

“This commission brings together a group of Georgia Tech individuals from across disciplines and educational perspectives,” Ferri said. “That approach allows for innovative ideas that span interdisciplinary, co-curricular, and design perspectives that we know will bring new, innovative ideas about the educational landscape at Georgia Tech.”

The commission discovery groups will explore future learning needs, demographics and populations, peer institutions, partners and competitors, societal and economic influences, and future pedagogy considerations. Throughout the 18-month period, activities and events for the campus community will include town halls, featured speakers, surveys, and focus groups.
EVENTS

ARTS & CULTURE

Feb. 5
DramaTech’s improv comedy group, “Let’s Try This!”, performs at 8 p.m. at DramaTech Theater (back side of Forst Center for the Arts). Tickets are $5. dramaTech.org

Feb. 6
“PostSecret: The Show” guides the audience through a narrative of stories shared on the online platform by anonymous and artful secrets mailed on postcards. Purchase tickets at arts.gatech.edu

Feb. 11
The international sensation “Blaze” takes the raw energy and athleticism of street dance and combines it with high-end production values for a show that’s perfect for the whole family. The show begins at 8 p.m. at the Forst Center for the Arts. Georgia Tech discounts are available. arts.gatech.edu

HEALTH & WELLNESS

Feb. 2
The Healthy Places Research Group meets monthly to discuss and network among various disciplines working to create healthy places and improve the relationship between health and the built environment. Participation is open to all. The February meeting is from 7:30 to 9 a.m. in Room 258, Economic Development Building, 760 Spring St. e.gatech.edu/hpg

TRAINING

Feb. 2
Ann Frank, a national higher-education consultant on child abuse detection and prevention, will share information on recognizing child abuse and predatory behavior. The session takes place from 2 to 3 p.m. in the Student Center Theater. learn.gatech.edu

Feb. 3
The Center for the Enhancement of Teaching and Learning hosts a session on Teaching Transformations in Response to Student Feedback. Faculty members will share how they have used student feedback to transform their approach to teaching. The session takes place from noon to 1 p.m. in the Crescent Room, Student Center. cetl.gatech.edu

EDUCATION, from page 1

“An institution, we find ourselves with an exciting opportunity as the traditions of higher education are quickly resolved by both philosophically and pedagogically,” said DeMillo. “Georgia Tech is well positioned to be a leader among our peers and define what innovation truly means to the educational experience.”

Along with the co-chairs, Georgia Tech President Emeritus G. Wayne Clough and C21U visiting scholar Jeff Selingo will serve as advisors for the commission.

The commission was first suggested at an October 2013 town hall on Georgia Tech’s Educational Innovation Education and the report was defined by the efforts of C21U, the Center for the Enhancement of Teaching and Learning, Georgia Tech Professional Education, and the Office of Information Technology.

BUILDING, from page 1

use Tech’s campus as a living-learning laboratory to educate others. But with these unique opportunities, come challenges.”

The Inherent Challenges of a Living Building

Advancing the C21U Campus Master Plan, the Living Building at Georgia Tech will demonstrate the most advanced measures of sustainability possible in the current built environment. Meeting that challenge requires close adherence to some of the world’s most stringent building performance standards. This includes meeting obvious requirements like managing water and energy but also the not-so-obvious specifications like supporting health, happiness, equity, and beauty. To achieve full certification, a Living Building must meet all the program requirements established by the International Living Future Institute over a full 12-month period of continued operations and full occupancy.

“This project requires us to rethink how we approach the process of planning, designing, building, and even occupying this facility,” stated Scott Jones, director for Design and Construction in Facilities Management. “To meet this criteria, you have to define the end product before you even break ground. This requires a considerable amount of investment in time and resources upfront but creates efficiencies in the long run.”

But adherence to building standards is just a part of the challenge. Fundamentally, Living Buildings serve as a catalyst to help reshape how we think about our built environment and its interaction with our immediate surroundings through innovations and adaptations in technology, education, policy, and cultural beliefs.

To this end, one of the primary objectives is to ensure that the project is replicable, in terms of cost, materials, and technologies, so that others in the Southeast and around the world will be able to learn from Georgia Tech and build their own Living Buildings.

Steps to Building a Platform for Success

Since last fall when the Board of Regents gave its final approval to move forward with this project, an internal work group has been involved in an intensive planning phase to ensure long-term success.

With an anticipated groundbreaking in 2017 and occupancy slated for 2018, teams from across campus, including Capital Planning and Space Management, Facilities Management, Office of Campus Sustainability, College of Architecture, and Administration and Finance are working to define how Tech will thoughtfully engage and integrate design and construction teams, students, faculty, and researchers.

In November, Georgia Tech’s Planning, Design Commission and representatives from The Kendeda Fund agreed upon the planned location — in the northwest vicinity of campus — for the project. This recommendation was based upon several factors including:

• Proximity to the Eco-Commons and, consequently, its ability to support the stormwater and landscape master plans.
• Ability to leverage natural resources including solar energy.
• Accessibility to the Greater Tech community.

Currently, three integrated design teams (architects, engineers, and landscape architects) are competing to win the project bid. These teams will generate ideas to present to Georgia Tech’s Planning and Design Commission in March, when the winning team will be announced.

In addition, Professor Michael Gamble from the College of Architecture will lead an effort with faculty this spring semester to conduct four team-based, graduate-level design studios to generate additional ideas and excitement around this project.

“The Living Building-certified facility at Georgia Tech will positively impact the university and have the potential to transform our environment into a social movement. More recently, he has served as an advocate for the family of Michael Brown. RSVP to attend at www.c.gatech.edu/crumpleecture.

Library Launches New Search Service

JASON WRIGHT
GEORGIA TECH LIBRARY

With the December closure of Crosland Tower and opening of the Joint Library Service Center, the Library Renewal Project is continuing full speed into its second year.

As a result, a new search interface is now available for the Tech community to view and request materials. PRIMO from Ex Libris is an all-encompassing, user-friendly catalog and discovery engine that allows for discovery and search of print materials. Delivery of print materials to the Library and faculty offices is scheduled online in PRIMO via the “Request for pick-up or office delivery” option.

The PRIMO migration gives Georgia Tech users access to the integrated Emory University collection housed off-site at the Library Service Center. The rest of the University System of Georgia will join Tech in PRIMO migration in 2017.

The Library maintains 24/7 operations during the Renewal project. Study spaces, computer resources, expertise, and a core collection of print materials will continue to be available. Learn more at renewal.library.gatech.edu.
Severe Weather Demands Early Planning

KRISTEN BAILEY
INSTITUTE COMMUNICATIONS

Georgia recently had its first snow flurries of the season and managed to avoid another Snowpocalypse. But are you ready for the next bout of weather?

Feb. 1–5 is Georgia’s Severe Weather Awareness Week, when there will be an education focus on high winds, hail, and excessive precipitation.

In a climate that experiences weather of all varieties, it’s important to prepare for how these events could affect you and your safety. Right now, El Niño is greatly influencing the weather across the U.S. The National Oceanic and Atmospheric Administration (NOAA) predicts an increase in precipitation, combined with below-average temperatures, across the southern tier of the U.S. from January to March. “Active El Niño winters and springs often support severe weather outbreaks across the southeastern U.S.,” said William Smith, director of the Office of Emergency Preparedness. “At a minimum, we should expect an active weather pattern to continue through this spring.”

The Office of Emergency Preparedness offers a few general tips to help you be ready for severe weather emergencies:

• Sign up to receive emergency alerts through the Georgia Tech Emergency Notification System (GTENS). You can register your cellphone number at www.passport.gatech.edu. Emails are received by default, but you should ensure you have also opted in to both voice calls and text alerts.

• Monitor weather conditions when the possibility of threatening storms emerges. Follow Emergency Preparedness on Facebook (www.facebook.com/GTEmergency) and Twitter (www.twitter.com/GTPalerts) for updates on weather threats.

• Know where you will shelter during a tornado warning, both at home and at work. Seek shelter indoors and away from windows on the lowest level possible, preferably a basement. Look for shelter signs in buildings around campus to seek protection during a tornado.

Get Notified

The Georgia Tech Emergency Notification System (GTENS) is Tech’s mechanism for notifying the campus community of emergencies, including those related to weather. To get information as soon as it’s available, be sure you have opted in to receive phone and text alerts. Check your GTENS settings at www.passport.gatech.edu.

Weather the Cold

Beyond severe weather, winter can present other unique challenges, particularly in a place that sees relatively few winter storms. The Office of Emergency Preparedness advises the Tech community to prepare for winter weather in homes and in vehicles.

### At Home

**Maintain your home:**
- Insulate pipes and let water drip.
- Bring plants and pets indoors.
- Know how to turn off water valves.
- Know how to use electrical panel.
- Have furnace cleaned and maintained (change filters regularly).
- Test smoke and carbon monoxide detectors.

**Prepare a home-ready kit with:**
- Rock salt or ice melt.
- Sand or non-clumping cat litter.
- Wood for fireplace or woodburning stove.
- Snow shovel.
- Alternate cooking source (such as a butane stove).
- NOAA weather radio (as well as a weather radio cellphone app).

**Maintain your vehicle:**
- Check and monitor all systems.
- Make sure fluids are topped off, including antifreeze, brake fluid, and wiper fluid.
- Change the oil – use appropriate heavier gauge.
- Check the battery, brakes, exhaust system, heater/defroster, lights, thermostat, wipers.
- Check tires for adequate tread.

**Prepare a car-ready kit with:**
- Non-perishable food and water.
- Medicine.
- Blankets and warm clothing, including hat and gloves.
- Phone charger.
- sturdy shoes.
- Small shovel.
- Ice scraper.
- Cat litter, sand, or ice melt.
- Flashlights and tools.
- Battery-powered radio.
- Extra batteries.
- Tow rope or chain.
- Emergency flare/distress flag.
- First-aid kit with pocketknife.

### In the Car

Beyond severe weather, winter can present other unique challenges, particularly in a place that sees relatively few winter storms. The Office of Emergency Preparedness advises the Tech community to prepare for winter weather in homes and in vehicles.

**Maintain your home:**
- Insulate pipes and let water drip.
- Bring plants and pets indoors.
- Know how to turn off water valves.
- Know how to use electrical panel.
- Have furnace cleaned and maintained (change filters regularly).
- Test smoke and carbon monoxide detectors.

**Prepare a home-ready kit with:**
- Rock salt or ice melt.
- Sand or non-clumping cat litter.
- Wood for fireplace or woodburning stove.
- Snow shovel.
- Alternate cooking source (such as a butane stove).
- NOAA weather radio (as well as a weather radio cellphone app).

**Maintain your vehicle:**
- Check and monitor all systems.
- Make sure fluids are topped off, including antifreeze, brake fluid, and wiper fluid.
- Change the oil – use appropriate heavier gauge.
- Check the battery, brakes, exhaust system, heater/defroster, lights, thermostat, wipers.
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- Cat litter, sand, or ice melt.
- Flashlights and tools.
- Battery-powered radio.
- Extra batteries.
- Tow rope or chain.
- Emergency flare/distress flag.
- First-aid kit with pocketknife.

For a more comprehensive listing of events, or to add your own, visit calendar.gatech.edu.
Professor Excels in Mathematics and Magic

KRISTEN BAILEY
INSTITUTE COMMUNICATIONS

The subject of mathematics is most often associated with logic, rules, and reason. Sometimes, though, it’s best served with a side of magic.

Matt Baker, an award-winning professor in Tech’s School of Mathematics, also happens to be an award-winning magician. Baker recently won his second major honor in the magic world, being named the 2015 Greater Atlanta Mage of the Year by the Atlanta Society of Magicians and Georgia Magic Club. Recipients are chosen by a combined peer vote in both organizations.

Baker discovered magic around the age of 10 through an older cousin, who gave him his first magic book (Harry Lorayne’s Close Up Card Magic). The interest led him to doing kids’ birthday parties and shows for friends as a teenager, and it remained a hobby.

After earning degrees at the University of Maryland and University of California–Berkeley, Baker was a professor at Harvard University and the University of Georgia before coming to Tech in 2004. When he moved to Atlanta, he began to get involved with the local magic community. He and his wife were expecting their first child around the same time, so he decided to whittle his various hobbies down to just magic. He learned from both the professional magicians and dedicated amateurs in the club, as well as from DVDs and books.

“With so many resources available, I realized I could actually think about becoming good at it,” he said.

Baker enjoys performing close-up and parlor-style magic, and has a special fondness for card tricks, which allow him to combine his passions for magic and mathematics. His academic interests are in number theory, algebraic geometry, and combinatorics, with a particular interest in how those different fields are linked to each other. His expertise sometimes lets him take a different approach to magic than other magicians.

“There’s a lot of math in card magic,” he said. “Just like with a recipe, you might be able to follow the recipe and execute it, but you might not know enough about how it works to vary it. With card magic, I know enough to be able to combine principles in new ways and jazz around with existing effects.”

Baker performs mostly original material when he does shows and has published three books. He also has an interest in how these different fields are linked to each other. His expertise sometimes lets him take a different approach to magic than other magicians.

Baker performs a few times a month for various groups. He entertains patients at the Shepherd Center through a local chapter of Project Magic, originally founded by David Copperfield. He has performed for campus groups including the Honors Program and the Student Alumni Association’s Dinner Jackets, and is the faculty sponsor for the Georgia Tech student magic club. He has also done fundraising shows for his children’s schools, and, in 2015, he performed at the Atlanta Science Festival, the Atlanta Science Tavern, a Princeton University freshman seminar on mathematics and magic, and his dad’s 75th birthday. He has a broad range.

As a professor, perhaps his most important audience is his own students. He takes teaching seriously — he has been honored with a University System of Georgia Regents Teaching Excellence Award and, earlier in his career, the Georgia Tech CETL/BP Junior Faculty Teaching Award — but not so seriously that he can’t find a place for magic in the classroom. He likes to incorporate tricks into his teaching and surprise students with magic in class.

“I pretty much always have a deck of cards on me,” he said.

Also he brings the magic of mathematics to high school students by teaching a distance learning course on number theory and cryptography. The course, in its second year, was developed to give high school students who have completed Tech’s Distance Calculus sequence a way to continue their math education with Tech.

“Some of these students are only juniors in high school, but they’ve already completed multivariable calculus,” said Baker, who also designed the number theory course.

“We could have done differential equations or something else that would continue the calculus series, but I wanted to do something different to show them that math is more than just calculus.”

Baker enjoys performing, of course, but he incorporates magic into his classes with students in mind, striving to make his videos on mathematics as stimulating as those he once used to learn magic.

“As professors, it’s good for us to look at how we can be more engaged in the classroom,” he said. “Students like it. Ideally, the word will get out that Tech is a fun place to be, and maybe I can have something to do with that.”

Matt Baker, professor and director of undergraduate studies in the School of Mathematics, uses card magic to teach mathematical principles.

MISCELLANEOUS

Looking for a carpool partner for daily commute from East Cobb to Tech campus. Email bdespy@hotmail.com.


Wanted: Family downhill ski equipment, to purchase or borrow. Preferred sizes: 95cm (kids); 165cm (telemetry); 165cm (men’s); 185cm (men’s); 200cm (men’s). Boots: 11.5 (kids); 9.5 (woman’s); 10-11 (men’s). Contact: susanne.bock@gatech.edu.

For rent: 2BR/1BA bungalow, minutes to Tech, quiet intown neighborhood (NW ATL). Hill floors, renovated, central HVAC, DW, disposal, screened back porch, fenced backyard, W/D, carport, pets OK. $975/mo. Contact: susanne.bock@gatech.edu.

Looking for a carpool partner for daily commute from East Cobb to Tech campus. Email bdespy@hotmail.com.

For rent: 3BR/2BA home on 0.7 acres inside perimeter near 285, Hwy. 78. Decatur, and Emory. Renovated w/ hardwood floors, new appliances, washer/dryer. Druid Hills High School district. $1,400/mo. Call 706-369-3848.

Wanted: Family downhill ski equipment, to purchase or borrow. Preferred sizes: 95cm (kids); 165cm (telemetry); 165cm (men’s); 185cm (men’s); 200cm (men’s). Boots: 11.5 (kids); 9.5 (woman’s); 10-11 (men’s). Contact: susanne.bock@gatech.edu.

CLASSIFIEDS