Intensive training ahead

Education and improvement the mission of Tech's Training Services

Robert Nesmith  
Communications & Marketing

A s the Institute provides instruction and avenues for its students to excel in their chosen fields, Georgia Tech Training Services assists staff and faculty members in personal improvement.

Through Georgia Tech Training Services, a part of the Office of Organizational Development (OOD), the Institute offers professional development programs to the Tech community, from the department level to the individual. More than 350 core classes are offered in areas such as professional development, technical writing, customer service and financial services. Attendees can earn certificates by taking classes in larger courses—Emergency Preparedness, Professional Development and Departmental Financial Management—or they can attend classes à la carte.

"In order for Georgia Tech to be greater, it won’t happen with just research or faculty,” said Lanous Wright, director of Training and Leadership Development. “It requires everyone working here every day. Unless people are growing with the Institute, it won’t happen. You must develop the people—they are what make this place go.”

Part of a four-member staff, Wright manages the Supervisor Development and Management Development certificate programs, as well as the Institute’s Master Training certificate programs.

Observatory provides out-of-this-world outreach

Robert Nesmith  
Communications & Marketing

W hile primarily used by astronomy students and members of the Astronomy Club, the Georgia Tech Observatory is also an instrument for expanded public outreach, according to Director James Sowell.

"I want to bring in school kids and their parents,” Sowell said, adding that he wants to arrange for private visits to the observatory from school, scouting and adult groups, as well as campus fraternities and sororities. According to the instructor, two options exist for picking an observatory site: either a location that is dark, or convenient.

"We went with convenient,” he said. “We can’t see quasars or galaxies, but for many students, this is their first taste of astronomy.”

Once or twice a month during the academic year, Sowell holds a public night at the observatory, where members of the Tech community can make the trek to the top of the Howey Physics building and gaze into the night sky. “The best time for viewing is October, November and December,” he said. “There are many clear nights.” Sept. 4 marks the next public night.

Samsung expands wireless research facility at Tech

Rick Robinson  
Research News

S amsung Electro-Mechanics Co. has significantly increased its research presence here, opening a new wireless-technology laboratory and expanding its working relationship with Tech.

Hoomoon Kang, CEO of Korea-based Samsung Electro-Mechanics Co., led a recent dedication ceremony that marked the expansion of the company’s North American Design Center on campus. The Samsung Design Center focuses on research and development of mixed-noma- nal integrated circuits, primarily for use in wireless applications.

The new Samsung facility, located in the Centergy One Building at 75 Fifth St. NW, houses 5,400 square feet of laboratory and office space. The new center is located close to its Tech research partner, the Georgia Electronic Design Center (GEDC), which is headquartered in the Technology Square Research Building at 85 Fifth St. NW.

GTRI wins contract to support test, evaluation of unmanned systems

Rick Robinson  
Research News

T he Georgia Tech Research Institute (GTRI) has won a contract to support development of a roadmap designed to improve the testing and evaluation of unmanned and autonomous systems for the U.S. Office of the Secretary of Defense (OSD).

"The field of unmanned and autonomous systems is evolving rapidly, and new techniques are needed to effectively test and evaluate the capabilities that are being inserted into these systems,” said Lora Weiss, a GTRI principal research engineer. "Our task is to develop a roadmap that identifies new approaches to testing autonomous systems and details what needs to be tested, how the autonomous technologies can be tested, and when the testing needs to occur. Known as the Roadmap Development and Technology Insertion Plan (RD-TIP), the one-year award is funded through the U.S. Army at White Sands Missile Range. The initiative is headed by Derrick Hinton, T&E/S&T program manager with the Test Resources Management Center in the U.S. Department of Defense.

Unmanned continued, page 2

Unmanned continued, page 2
Center to transform health care on multiple fronts

Tech and Texas A&M will share in funding from the National Science Foundation (NSF) to form a center focused on researching changes in health organizations.

The NSF awarded funding to the H. Milton Stewart School of Industrial and Systems Engineering and A&M’s Health Science Center (HSC) School of Rural Public Health to establish the Center for Health Organization Transformation (CHOT). The center will focus on transformational changes in health organizations on issues related to information technology implementation, quality and safety management, chronic disease management, clinical change initiatives and other evidence-based management approaches similar to Six Sigma and Total Quality Management.

CHOT brings together the top U.S. school of systems engineering and the nation’s only school of rural public health with a shared goal of transforming health care. The unique partnership will ensure that innovative knowledge produced by the center will reach both large urban areas, as well as rural and underserved areas.

"Health care organizations need to continue innovation in management and clinical practices to address critical issues related to care that is safe, effective, patient-centered, timely, and equitable in addition to offering the latest clinical technologies to remain competitive," said Dr. Ratihinda DasGupta, NSF program director.

"CHOT links excellent faculty and student talent to advance research and practice in health systems management, information systems, and systems. We are delighted to welcome this new center and its partners."

Larry Gamm, professor and head of health policy and management at HSC/School of Rural Public Health, will serve as the CHOT director joined by CHOT co-director, Eva K Lee, associate professor and director of the Center for Operations Research in Medicine and HealthCare in the School of Industrial and Systems Engineering.

"The ability to directly inject innovative concepts into health systems, and to validate and refine them for actual usage is very exciting work, and is critical to the transformation process," said Lee. "The chain of events in patient care, from diagnosis to treatment to delivery, as well as the entire finance and organizational infrastructure, offers much room for systems advances and innovation."

"The faculty and students from these great universities look forward to developing even stronger working relationships with visionary health systems, urban and rural, that share a commitment to transformation in health care," Gamm said. "All of us seek to ensure that the center adds value for all participants taking health care research and education to the next level."

The center’s total research budget is funded by the NSF, along with a number of technology companies and progressive health-focused organizations including health systems composed of multiple hospitals and outpatient clinics in Georgia, Texas and several other states. Health system leaders and their staff will collaborate with the universities in guiding and conducting the center’s research.

"We applaud our industrial partners for their foresight in supporting this research and are grateful for their participation and support in the transformation effort," said Lee.

A listing of health systems and their transformation leaders who are participating in CHOT can be found online (www.isye.gatech.edu/NSF-CHOT/) beginning Sept. 4.

For more information...

School of Industrial and Systems Engineering
www.isye.gatech.edu

Institute seeks the LEED

Tech’s Office of Capital Planning and Space Management has registered eight upcoming campus projects with the U.S. Green Building Council (USGBC) to pursue Leadership in Energy and Environmental Design (LEED) certification.

Registration of the projects, ranging from new designs to renovations of existing spaces, come on the heels of the USGBC’s awarding Gold LEED status to the Christopher W. Klaus Advanced Computing building.

According to Capital Planning and Space Management Director Howard Wertheimer, LEED qualifications can change over time. By registering projects now, the USGBC will consider the projects under existing requirements.

Projects registered include the Van Leer addition for the School of Electrical and Computer Engineering; Bioengineered Systems Building; second/floor Robotics Lab fill-out for the College of Computing; Basketball Practice Facility; Challenge Course on West Campus; renovations to the Hinnan building for the College of Architecture; Navy ROTC renovation for the Writing Center of the School of Literature, Communication and Culture; and operations and maintenance for North Avenue Apartments.

For more information...

Capital Planning and Space Management
www.space.gatech.edu

Samsung, cont’d from page 1

“This is a very satisfying day for us at Samsung,” said Kang. “We are proud of our research work in Georgia, and we look forward to ongoing success in our partnership with the Georgia Electronic Design Center.”

The Software Design Center first opened in 2005 in the Technology Square Research Building and has now grown to more than 50 full- and part-time employees, and Samsung has announced its intention to have 100 full-time and 50 part-time people working for the center within two years. Among the dignitaries on hand at the opening ceremonies was Ken Stewart, commissioner of the Georgia Department of Economic Development.

“The expansion of the Samsung design center is a true win-win event for both Samsung and the State of Georgia,” he said. “This successful center can be expected to serve as an ongoing economic asset for the city and the state, as well as a beacon to other top international microelectronics players.”

For more information...

Georgian Electronic Design Center
www.gedcenter.org

Unmanned, cont’d from page 1

“Many new technologies are being developed for unmanned and autonomous systems that must be tested and evaluated before they can be deployed,” Weiss noted.

The effort will address five major unmanned and autonomous systems domains, including systems that operate in the air, on the ground, underwater, on the sea surface and in space.

For more information...

Georgia Tech Research Institute
www.gtri.gatech.edu

Leadership Development.

Training classes run the gamut, from management and supervisory development to professional office classes and Defining Customer Service certificate courses. Computer training courses and free Brown Bag sessions—informal lunchtime seminars—also are offered. And in November 2007, Training Services partnered with the Office of Human Resources to deliver new faculty and staff orientation classes, combining the benefits seminarily with a general “welcome to Georgia Tech” orientation. “Most are related specifically to the environment at Georgia Tech,” he said.

Financial management classes, for example, run from one to four hours, with a few other classes going from four to seven hours at a time. “We have very few classes that run more than one day.”

Completed certificate courses, begun in March 2007, are well-attended. Training Services awarded 61 graduation certificates to course members out of the 223 attending at last fall’s graduation luncheon. “It’s very popular,” he says. “[The classes] cover all departments, from supervisors, managers and office professionals.

Another recent course addition, the Master’s Series program is unique in higher education in the United States. Attendees are high achievers from both faculty and academic units. Masters Series class members meet for nine months, with the first half of the class consisting of round tables and class discussion. The second half is the project phase, which Wright calls “very intense.” Previous projects have included recycling projects, P-card imaging and on-boarding of new employees.

“This [latest] class was the fourth iteration of the program, and one of the few executive development programs in higher education,” Wright said. “The administration saw what was coming in [terms of] Clough’s leaving. This helps build beach strength,” retention and gives high-performers an outlet for recognition.” While programming this year will focus on previous graduates, applications for the 2009-2010 class will be accepted in spring 2009.

Departments as a whole also can take advantage of private training courses. “We had 26 private programs last year,” Wright said, adding that department heads recognize that a group of people can be trained more efficiently in either a Web-based or a hybrid format. “It also helps promote morale and demonstrate a focused commitment by units to improve the staff’s skills both professionally and personally. It demonstrates the department is committed to the future.”

The Student Center, Police Department and Health Services, as well as the Woodruff School of Mechanical Engineering and the College of Management, all have participated in full-department workshops. For Fiscal Year 2008, Training Services held more than 250 instructor-led sessions, had more than 2,700 participants and added three new certificate programs. Nearly 1,200 staff members are currently enrolled in certificate programs. “We have had great support from Tech’s administration,” Wright said. “And the [University System of Georgia Board of Regents] showed strong support from staff development.”

Fiscal year 2009’s full schedule will be completed by October. Using student assistants, the office schedules a majority of classes on Tuesdays, Wednesdays and Thursdays. Although 25 to 30 percent of course offerings are free, the office is self-sustaining, generating its own revenue.

And though the training staff has more than enough to keep their hands full, Wright says the office has several plans in the works for improving its delivery of services. “We’re trying to get at least 10 percent of our offerings in either a Web-based or online format.” Wright also would like to provide more distance learning opportunities within the Tech community, enabling Institute members outside of Atlanta to take advantage of training and professional development classes.

In fall 2008, the office will launch a pilot program to reach Tech’s satellite campuses. In addition, OOD will partner with Distance Learning and Professional Education to deliver a management development certificate program in spring 2009 to compete with similar offerings at places such as Emory University.

Other items offered in Fiscal Year 2009 include online refresher courses, which allow certificate holders to brush up on what they have learned; an increase in video and Web-based learning courses offered; and what Wright calls “Pop-Free” courses— which allow for a certain number of attendees to sign up for paid courses at no charge—starting in the spring. Also, the Departmental Financial Management Committee will be split into two different courses, the Financial Fundamentals and the Financial Specialist, for spring 2009.

Wright also said he wants to add classes that will focus on supervisor and management development beyond the already offered certificate programs.

“We do have room to grow,” Wright said. “Even with all the courses offered, we have only touched 20 to 25 percent of Tech’s staff.”

Wright, a Tech alumna from the College of Management, has 13 years of experience with AT&T, where he spearheaded the company’s travel card network and the corporate card center’s technical and process training. He reached the Institute for four years ago and has been in his present position for more than two years.

Other members of the Training Services team include Program Coordinator Rebecca Bollinger and training specialists Reginald Chambers and Shannon Scott. Outside trainers conduct most sessions, with Training Services instructors leading some classes.

Observatory, cont’d from page 1

Another example is the Schmidt-Cassegrain telescope—possible through the generosity of the Physics and the College of Sciences—is situated atop a computer-controlled equatorial mount. Construction of the observatory was a gift from Northrop Grumman Corp.

Prior to becoming an extension of the Physics building, the space on the roof previously was the site for a crane.

While the observatory does not have the prototypical dome, the center section of the roof is installed on tracks, allowing for a large viewing area when opened up. The 600-square-foot space allows for a large group of people. “The roll-off roof enables a group of people to point the telescope to specific areas,” Sowell said.

Because of the intimate nature of the observatory, Sowell says it’s possible to let observers operate the telescope and its onboard camera, once he gives instruction.

After exiting the elevator on the fifth floor, observatory visitors use the stairwell to access the School of Physics steps—a long with handrails—outdoors lend assistance as they walk up to the observatory, located on one of the campus’s higher vantage points.

Primarily, he shows attendees the brighter objects in the sky, but upon occasion some of the more distant stellar bodies have come into view, including the Andromeda galaxy. Using the telescope’s onboard digital camera, visitors can capture and print out the distant objects they view. “One of the best things about my position is watching people look through the ‘scope, seeing craters on the moon, or seeing ‘Saturn’s rings,’ ” he said.

Sowell, who teaches several astronomy courses, allows students to conduct independent research at the observatory, provided they follow the ground rules: They can’t be alone and they must be trained. Students use the telescope and camera to measure and chart changes to the brightness of intrinsic variables and collapsing binary stars.

September marks the second academic year for the observatory, as it opened its doors in April 2007. According to Sowell, the School has established a certificate in Astrophysics for undergraduates. (The School recently has hired four astrophysicists.) “The state of astronomy (at Tech) has grown, and will become more important to the campus over time,” he said.


For more information, visit www.coa.gatech.edu.

IN BRIEF:

Allen receives award

Chemical and Biomolecular Engineering Professor Sue Ann Bidstrup Allen received the Sharon Keillor Award for Women in Engineering Education in June.

During the American Society for Engineering Education Annual Conference and Exposition in Pittsburgh, Allen was recognized for her contributions as a mentor, educational program developer and internationally known researcher.

Allen, the 2006 recipient of the Georgia Tech Women Out Front award and former associate chair of Student Initiatives, has been at Tech since 1988. For more information, visit www.coa.gatech.edu.

Planning program director named

The College of Architecture has named Bruce Stiffler the new director of the City and Regional Planning program.

Stiffler was most recently associate dean of Graduate Studies at Florida State University. He also serves as a professor of regional planning and a member of the Florida Conflict Resolution Consortium, which he co-founded.

He replaces Cheryl Contant, who was named vice chancellor for Academic Affairs and dean at the University of Minnesota/Morris. For more information, visit www.coa.gatech.edu.

WWW.WHISTLE.GATECH.EDU
CAMPUS EVENTS

August 22
Singer and pianist Jon McLaughlin will perform at the Ferst Center for the Arts from 8 to 10 p.m. Tickets are $15 and $25, or $12 and $20 with a subscription. For more information, visit www.ferstcenter.gatech.edu.

September 14
Performance artist and musician Laurie Anderson will perform at the Ferst Center for the Arts, starting at 5 p.m. Tickets are $34 and $44, or $27.20 and $35.20 with a subscription. For more information, visit www.ferstcenter.gatech.edu.

Ongoing
The School of History, Technology and Society presents the Robert C. Williams Paper Museum exhibit “How Do They Spend It?” through Sept. 2. Formed by Professor Gus Giebelhaus and students exhibit “Building Information Modeling: Revolution in Design and Construction,” from 11 a.m. to noon in the Architecture Library. The seminar kicks off the fall COA Research Forum series. For more information, visit www.coa.gatech.edu.

August 27
Atlanta architect and Georgia Tech professor John C. Portman will deliver the first Architecture Centennial Lecture, from 6 to 7:30 p.m., in the Architecture Auditorium. A series of lectures and events will celebrate 100 years of architectural education at Tech. A two-part exhibition will be held in the West Architecture Atrium. For more information, visit www.coa.gatech.edu.

August 28
Architecture Professor Charles “Chuck” Eastman presents “Building Information Modeling: Revolution in Design and Construction,” from 11 a.m. to noon in the Architecture Library. The seminar kicks off the fall COA Research Forum series. For more information, visit www.coa.gatech.edu.

Miscellaneous

Tours are available on Wednesdays for Tech’s Solar Decathlon House, located on the West Architecture lawn at the College of Architecture. Tour hours are 10 a.m. to 4 p.m. To register, visit www.solar.gatech.edu.

Technomasters, Georgia Tech’s division of Toastmasters, meets each Thursday from 7:30 to 9 a.m. in room 102 of the Petit Microelectronics Research Center. For more information, visit www.techmasters.gatech.edu.