Managing success
Magazine lists Tech in top 50 undergraduate business programs

MATT NAGEL
COMMUNICATIONS & MARKETING

Tech’s College of Management is ranked one of the nation’s Top 50 undergraduate programs in business, according to the latest rankings of Bloomberg BusinessWeek. The Institute rose to 50th, a one-point jump over 2009, and is 19th among public universities. The rankings are based on surveys of recruiters and student satisfaction as well as job placement statistics and measures of academic quality. Of the 400 accredited business schools in the nation, 139 were eligible for ranking in 2010.

In the recruiter category, Tech rose from 45th to 21st. “We consistently hear from recruiters that they are impressed with how exceptionally well our graduates perform within their organizations, so it is nice to see this recognized in the ranking,” said Nancy Gimbel, director of the College of Management’s Undergraduate Program. Students surveyed awarded the College an “A+” grade in Job Placement and a “A” for Teaching Quality.

Although I am happy to see continuous improvement in the BusinessWeek rankings, I know that no ranking is truly representative of the many exceptional facets of our undergraduate program,” she said. “We have greatly enhanced advising services and dramatically expanded career services and freshman recruiting.”

Dean Steve Salbu adds “I am extremely proud of the excellent quality of the business school’s undergraduate program. We’re gratified that the rankings are increasingly reflecting all we have to offer students.”

For more information
www.mgt.gatech.edu

Bon anniversaire
2010 marks 20 years for Georgia Tech–Lorraine

ROBERT NESMITH
COMMUNICATIONS & MARKETING

As Georgia Tech approaches its 125th anniversary in October, the Institute’s campus in Metz, France, is already marking a distinctive milestone: 20 years of technological education and research in an international setting.

Georgia Tech-Lorraine (GTL), established as Tech’s first international campus in 1990, started as a master’s degree program in the School of Electrical and Computer Engineering.

In two decades, it has grown into much more than just a study-abroad experience and an enhancement to the Institute’s International Plan, says GTL President Yves Berthelot.

“[It] is a full-fledged Georgia Tech campus, with fully integrated activities in undergraduate and graduate education, research and technology transfer, including multi-million dollar research contracts and state-of-the-art facilities,” said Berthelot, also a professor in the School of Mechanical Engineering. “GTL is a full-fledged partnership between French and American institutions, and between Lorraine and Georgia, which helps create opportunities for transatlantic R&D funding and business development.”

The campus shares a technology park with several research agencies, enabling both graduate and undergraduate students to have research opportunities. Mechanical engineering, electrical and computer engineering and computer science students can work on their capstone projects.

“There are great opportunities for students to work and conduct research in a multidisciplinary field,” said GTL

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March 28
School of Music Chair and Professor Frank Clark presents “Gradus ad Imaginatiam,” part of the College of Architecture Research Forum, from 11 a.m. to noon, in the Architecture Library.
www.ceg.gatech.edu

March 29
The American Chemical Society’s National Meeting presents “Path Toward a World Free of Nuclear Weapons: The Euro-Atlantic Challenge,” from 8 a.m. to 5:15 p.m., in the Global Learning Center.
www.inta.gatech.edu

The Georgia Tech Information Security Center (GTISC) will hold GTISC Demo Day from 3 to 5 p.m. in the Klaus Advanced Computing Building.
www.gtisc.gatech.edu

March 30
Cornell University Professor Pen Chen presents “Synthesis of Single-Molecule Nanocatalysts and Bioorganic Chemistry,” at 3 p.m. in room 3201A of the Molecular Science and Engineering Building.
www.chemistry.gatech.edu

March 31
The IMPACT Speaker Series presents Greg Papadopoulos, chief technology officer with Sun Microsystems and co-author of “Citizen Engineers,” at 4:30 p.m. in the LeCraw Auditorium.
www.ite.gatech.edu

April 1
Dan Poux from the American Association for the Advancement of Science presents a Science and Technology Policy Fellows Information Session, from 4:30 to 5:30 p.m., in room 104 of the Smith Building.
www.fellowships.aaas.org

April 5
University of Wisconsin-Madison Professor Ben Shen presents “How Much Do We Know About Polyethylene Blowsynthesis—A Journey of Constant Surprises,” at 3 p.m. in room G011 of the Molecular Science and Engineering Building.
www.chemistry.gatech.edu

FACULTY/STAFF DEVELOPMENT

March 18
The Office of Environmnetal Health and Safety presents “What is in Your Basement? Radon Awareness,” from 1 to 3 p.m. in the Neely Nuclear Research Center.
www.ehs.gatech.edu

March 25
The Office of Environmental Health and Safety presents Fire Safety I and II, from 1 to 3 p.m. in the Piedmont Room of the Student Center Commons.
www.ehs.gatech.edu

March 25–26
The National Science Foundation (NSF) invites Georgia Tech faculty and staff to attend NSF 101 and Beyond: A Half-Day Training Event, from 8 a.m. to 12:30 p.m., in room 4088 of the Advanced Computing Building.
www.nsf.gov

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Research

Bit by bit
Tech establishes Institute for Data and High Performance Computing Research

MICHAEL TERRAZAS
COLLEGE OF COMPUTING

On March 1, the Office of the Provost announced the formation of the Georgia Tech Institute for Data and High Performance Computing (IDH) in recognition of the need to advance and coordinate Institute research and education activities in this discipline.

High performance computing (HPC) continues to grow as a strategically important area for Georgia Tech, both in its application to key areas of science and engineering as well as in the advancement of the technology itself.

“As we look to high performance computing to drive advanced breakthroughs in science, health, energy and other industries, leveraging Georgia Tech’s strongest assets—world-class researchers in computing, experts across nearly every problem domain and low barrier to collaboration—is what will set us apart,” said Mark Allen, senior vice provost for Research and Innovation.

“The creation of the Institute for Data and High Performance Computing provides the organizational foundation to harness our strategic capabilities and attack the most challenging problems that face society today.”

A key mission of IDH will be to enhance Georgia Tech’s scientific contributions, reputation and impact, focusing on the exploration of HPC technology, coupled with the development of novel computational methods.

The institute will promote the development of software and tools to enhance multidisciplinary research and enable discovery and innovation.

In addition, it will work closely with the Office of Information Technology to ensure effective, faculty-driven governance concerning the acquisition and use of HPC resources on campus.

The institute’s interim director will be Richard Fujimoto, Regents’ Professor and head of Computational Science and Engineering in the College of Computing. One important objective, according to Fujimoto, will be to focus on developing new innovations in computational methods into useable tools and software to advance research in the application domain.

Creating computational artifacts that provide value to application researchers and can be exported beyond the Tech campus provides a critical avenue to maximize the impact of Georgia Tech research innovations.

“Georgia Tech has made substantial infrastructure and personnel investments in high performance computing, and achieved many important successes, over the last five years,” Fujimoto said.

“I fully anticipate that IDH will enable us to advance beyond prototypes to new levels of accomplishment in the high performance computing area.”

Key participants in the preliminary groundwork leading to the creation of the institute include College of Computing Professor David Bader and Chief Technology Officer Ron Hutchins. Their expertise and community-building activities helped bring together the various Georgia Tech constituencies with interests in the HPC area, and they will remain key players in IDH as it develops and grows.

The Institute for Data and High Performance Computing will begin operation immediately.

For more information
http://hpc.gatech.edu

Michael Terrazas
College of Computing

Richard Fujimoto

Yves Berthelot

GTL, continued from page 1

Communications Officer John Schuman.

GTL kicked off its 20th anniversary celebration with prizes and giveaways at the Feb. 26 Georgia Tech women’s basketball game against the University of North Carolina.

The French campus had a banner year in 2009, receiving a record number of applications—a four-year contract for the GT-CNRS UMI International Research Laboratory.

“We are also working closely with French authorities on the La Fayette Institute, a large-scale project—a new building, clean room and research equipment—for innovation and technology transfer in the area of optoelectronics, in cooperation with the Nanotechnology Research Center and the Enterprise Innovation Institute,” Berthelot said.

Starting in the fall, students will have entry into China through GTL. “We’ve also just launched a master’s program for ECE students in conjunction with the Atlanta campus and GT-Shanghai,” Schuman said. “Students would spend fall in Atlanta, spring in Lorraine and the summer in Shanghai. At the conclusion of the 12-month program, the students would not only earn a master’s degree from Tech, but also enjoy a truly global educational experience.”

The program cost is anywhere from 20 to 49 percent less than if the students had earned their master’s degree on the Atlanta campus alone. In fact, one of the big draws for GTL is its affordability.

In June, President Bud Peterson will visit the Metz campus for the first time, and in December the French consul-general in Atlanta will partner with Georgia Tech to host a two-week event in conjunction with fall commencement.

The campus started as a School of Electrical and Computer Engineering master’s degree program in 1990. Since then, the campus has expanded to provide master’s degrees in mechanical engineering and computer science. Students attending French institutions can also earn a dual degree through GTL.

In 2001, GTL began offering an undergraduate program. Today, more than 3,000 undergraduate and graduate students and 100 faculty members have spent at least one semester on the Metz campus.

For the immediate future, Berthelot says, GTL remains well-positioned for continued growth and success in innovation, research and global education opportunities.

“Many consider GTL as the model of what a U.S. technological research university presence in Europe should be,” Berthelot said. “We have created a node in the heart of Europe where Georgia Tech is plugged into a network of excellence in education and R&D.”

For more information
www.georgia-tech-metz.fr

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Photos: Rob Prill, unless noted

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Archived issues of The Whistle can be accessed electronically through the Georgia Tech Web page, or directly at whistle.gatech.edu.

Georgia Tech is a unit of the University System of Georgia.
of GTRI. “We’ve given support not only to the state, but to the military across the board,” shop manager Dennis Brown said.

“I’ve been in this building for over 31 years. It will be strange to move out of this area into another location. I’ll definitely take some pictures before I go.”

Capital Planning and Space Management is renovating the Hinman Building to house design studios for the College of Architecture. The new location will be at 676 Marietta St., in a space next to the College of Architecture’s Advanced Wood Products Laboratory. While not centrally located on campus, Brown says the new location will allow better access for materials delivery. The shop reopens April 9.

Open from 6 a.m. to 4:30 p.m., the shop supports more than just GTRI. According to Brown, only half of the shop’s workload is attributed to GTRI. “The other half is from Georgia Tech and other universities, including Emory [University], Georgia State [University], the University of Georgia and even Wake Forest [University]. We also support Georgia Tech-Savannah, and NOAA [the National Oceanic and Atmospheric Administration].”

In past years, the shop has constructed a large aircraft radar array for the Sierra Project, as well as satellite parts for the Department of Defense. Recently, the tallest order was a wind tunnel constructed for Eglin Air Force Base nearly three years ago. “It was nearly as tall as the [three-story] ceiling, and we used 40-foot I-beams to build it,” he said. “The whole frame had to be accurate down to an eighth of an inch. It took three semi trucks to haul it out in several pieces.”

In support of Georgia Tech, the shop works with faculty and students, often helping move ideas from sketches into a fully realized physical object. “In a year, we’ll maybe work with 300 projects [brought to us] by students and professors,” Brown said. He said the shop supports Aerospace Engineering and Mechanical Engineering, as well as Biomedical Engineering and the College of Sciences.

It’s always rewarding, Brown says, when students or researchers come back and let him know that something fabricated in the shop helped bring in more research grants to the university or to GTRI.

“If we help boost research, then we’ve done our jobs.”

With about 10,000 square feet in Hinman, the shop will move into a space of about 7,000 square feet. A 10-ton crane bought used from a steel mill in 1946 will not be making the move. But, Brown says, the crane may be incorporated in the renovation, possibly to support a walkway to connect an interior mezzanine side of the building. The new location has a five-ton crane, and one very important amenity: conditioned air.

The three-story bay in the Hinman Building has no air conditioning, which makes more of a difference than just comfort, as it can affect object construction. “It’s not only uncomfortable, but those really hot days require additional calculations so a piece built in 100-degree heat will fit into the tolerances required in a 70-degree room,” Brown said. When Brown started in 1978, the shop had 22 employees in it. With improved efficiency, including computer-aided design and programmable machines, the shop employs five people. “We pride ourselves on our speed,” he said. “Some of the smaller jobs we can turn around and have it ready after lunch when people drop them off.”

Much of this efficiency and speed is attributable to the electrical discharge machines. Through the use of an electrical brass wire or a brass electrode, the machines can cut metal to an extremely fine tolerance of .0002 inches. “We have the only four-axis machine on campus,” he said. Another, the water jet machine, is only about three years old. As the name implies, the machine uses high-pressured water jets to make extremely fine cuts into metal—some less than a millimeter wide. Many of the older milling and lathing machines have been upgraded to use computer numerical control (CNC).

A cost center, the shop charges an hourly rate for its work, both a labor rate and machine rate. In some cases, the CNC machines can work without anyone in the office. “If we have a project that needs eight hours in the machine, we can program it, put the material in and let it run overnight,” Brown said. “That way we can save clients some money by charging only the machine rate for that time.”

Moving operations begin March 22, which Brown says will allow the shop to provide limited support through March 24. From April 8 to 16, the shop will be able to provide limited support at the Marietta Street location.

To initiate jobs, contact Jimmy Ross at 770-528-7008 or by e-mail at jimmy.ross@gtrl.gatech.edu.

For more information

www.gtri.gatech.edu/atlanta/machine
Improving the employment cycle
Institute ushers in new performance management system

ROBERT NESMITH
COMMUNICATIONS & MARKETING

As March performance reviews for managers and employees ensue across the Institute, Human Resources (HR) is implementing a change in the annual employee evaluation process. Managers are now tasked with establishing a continuous cycle of performance management, instead of a linear, start-and-finish model. The cycle includes planning, managing, reviewing and rewarding performance.

Employee performance evaluations for 2009-2010 will be conducted using the existing tools the Institute has in place. Managers will discuss performance with employees, allowing for feedback and questions, as in years past. After this month’s evaluations are completed for 2010, managers and employees should meet to establish performance goals for the 2010-2011 evaluation period. Beginning in April, supervising, reviewing and rewarding performance.

Employee performance evaluations will play a prominent part in the 2011 performance reviews, which will be conducted online. With a deadline of June 30, all classified employees it needs,” said President Bud Peterson. “This new methodology will empower employees to have greater input to their personal career progression and will enable managers to better identify, recognize and, as resources become available, reward individuals based upon an agreed set of criteria.”

Goal-setting resources and frequently asked questions are available online for supervisors and employees. HR is also offering a free Performance Management Essential brown bag session, “The Power of Goal Setting,” through the Office of Organizational Development.

For more information
www.ohr.gatech.edu/performance

Students, faculty and staff gathered to Take Back the Night

Students, faculty and staff attended the annual Take Back the Night as part of Women’s Awareness Month. The candlelight vigil is to remember victims of sexual assault and educate on sexual violence. Attendees listened as people read poems, gave testimony and spoke about campus safety. For more information, visit www.womenscenter.gatech.edu.