Student Qualifications Keep Rising

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>1999</th>
<th>1994</th>
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<tbody>
<tr>
<td>Average SAT</td>
<td>1330</td>
<td>1304</td>
<td>1275</td>
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<tr>
<td>Perfect SATs</td>
<td>12</td>
<td>6</td>
<td>4</td>
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<tr>
<td>Nat’l Merit</td>
<td>124</td>
<td>100</td>
<td>108</td>
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</tbody>
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First year retention reaches an all-time high of 90%.
Georgia Tech Regional Engineering Program

Dr. J. David Frost, Director
Athletic Achievements

Academic All Americans
Carolyn Clevenger, volleyball
Dan Dyke, football
Bryce Molder, golf
Mark Teixeira, baseball

Mark Teixeira, National College Baseball Player of the Year

Bryce Molder, World Amateur Championship medallist

Joe Hamilton, Nation’s Best College Quarterback
Honing Administrative Talent

- Campus training participants increased from 428 to 1,611 last year.
- Number of classes increased by 276%.
- Cancellation rate dropped from 54% to 15%.
- 98% rated the quality as high.
Faculty Excel

C. P. Wong, Regents Professor
Materials & Science Engineering,
is elected to the NAE.

Dick Lipton, NAE member
from Princeton, accepts the Frederick G.
Storey Chair in Computing.
From Virtual Identities

The Turing Game tests the ability to recognize false online identities.

to Virtual Factories

Computer models enable manufacturers to explore the implications of changes before making them.
Graduate student Rebecca Snyder moved from China to Zoo Atlanta with Lun Lun and Yang Yang.

GT’s three-screen visualization system in use for gorilla habitat in Rwanda.

Preserving Endangered Species
The August 18 issue of *Science* featured Dr. Uzi Landman’s work to develop a tiny jet nozzle with a diameter of six nanometers (six-billionth of a meter). Potential uses: injecting genes into cells or fuel into nanoengines, and producing micro-electronic circuitry.
Campus Transformation Continues

Now Open
Love Manufacturing Building
Combustion Lab
Adv Wood Prod Lab
GTRC, OIT in new homes

Coming Soon
State Street Deck
Environmental Science and Technology

On the Drawing Board
Advanced Computing Technology
Fifth Street Project
SAC-II
Baseball/Football Stadia
Molecular Science & Engineering
Biomedical Engineering
Campaign Hits the Home Stretch

- Increased the goal to $600 million by Dec 31.
- Raised $567 million to date.
- $107 million in donated income last year set a record.
- Investments already making a difference.
USN&WWR: #8 among national public universities

- Graduate programs:
  - College of Engineering # 4
  - College of Computing # 13
  - College of Architecture # 15
- All ranked engineering programs in the top 15
- College of Sciences Nonlinear Dynamics #5

DuPree College ranked # 30 overall, # 15 by corporate sector in Business Week.
Buzz Named Best College Mascot in the Nation
The Challenges Ahead

Defining the Technological University of the 21st Century
Undergraduate Teaching and Learning

Our retention and graduation rates do not live up to the quality of our students.
The qualifications of our 10,000+ undergraduates are rising, and they deserve our best efforts.
From the Undergraduate Student Handbook, Woodruff School of Mechanical Engineering:

The students and faculty of the Woodruff School of Mechanical Engineering are committed to continuous improvement in the quality of undergraduate education...

Faculty Expectations of Students:
• review prerequisite course materials.
• read handout materials provided in class.
• complete out-of-class assignments on time.
• come prepared for class. Participate in the classroom by asking questions and contributing to any discussion.
• get help/feedback from professor as needed.
• follow the Woodruff School Honor Code.
“It is really the undergraduate who makes a university, gives it its lasting character, smell, feel, quality, tradition... whose presence creates it and whose memories preserve it.”

Sean O’Faolain

*Harvard Alumni Bulletin*
The Student Government Association’s Joint Commission on Enhancing Undergraduate Learning brought students, faculty and staff together to discuss ideas.
Undergraduate Initiative

- Create $250,000 fund for undergraduate research.
- Recognize faculty efforts with undergraduates and provide core curriculum oversight.
- Increase graduate and undergraduate TAs; provide more training for TAs.
- Document, reinforce, and share best practices.
We have a firm foundation on which to build.
The College of Architecture created a common first-year curriculum:

- Exposes freshmen to the big picture to see the integration of design and construction.
- Reflects professional practice by emphasizing teamwork and collaboration.
The distinguishing characteristic that sets the research university apart from other institutions of higher education is the integration of all of its people – students, faculty, and staff – into all of its missions – education, research, and service.
Jeremy Farris developed a fungus that kills kudzu and was an American delegate to the Asian Pacific Economic Cooperation Conference in Singapore before he arrived on campus this fall as a freshman and President’s Scholar.
“We do all of our research as teams. Undergraduates usually work with a PhD student as a mentor. If they’ve been with us for a couple of years, they become full partners, taking data, analyzing data, presenting papers, and co-authoring literature.”

Dr. Charles Eckert
Students float through their experiment aboard the “Vomit Comet.”

Student Teams

Rise to Research Challenges

Student prepares an aerial robot for lift-off.
Broadband Institute’s Aware Home

Cory Kidd poses with Dr. Gregory Abowd and Dr. Irfan Essa
Jessica Shearer checks decibel levels inside the “Quiet Curtains.”

Matthew Bennett adjusts a clock pendulum in the replication of a 1665 physics experiment.
Undergraduate Initiative

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“The ability to interact with really bright students is one of the major attractions here at Tech.”

Dr. William S. Rees, Jr.
Director, Molecular Design Institute
Dr. Bill Chameides, Smithgall Institute Chair of Earth and Atmospheric Sciences, teaches an introductory course.

Vice Provost of Undergraduate Studies Bob McMath teaches southern history.
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CETL videotapes lectures and offers helpful suggestions to improve presentation techniques.
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Griffith in Context

Multimedia teaching tools like Griffith in Context, developed by Assistant Professors Greg VanHoosier-Carey and Ellen Strain with funding from the National Endowment for the Humanities, help make Tech an appealing destination for Brittain Fellows.
The students are better; the curriculum is still rigorous.

Last year the Office of Success Programs increased tutoring and academic counseling sessions by 70%.
Promoting Diversity

Diversity is the key to our institutional credibility.
“Diversity is not an end unto itself. It is a dynamic foundation, a springboard that offers unlimited possibilities for innovation and growth.”

Paul Halata, President & CEO
Mercedes-Benz USA
Student Diversity

White Males: 48%

Women: 28%

Minorities: 34%
Achieving Faculty Diversity

Minorities: 20%

Women: 15%

Minorities: 20%
The Women’s Resource Center makes campus more supportive and inclusive for women.

OMED promotes a culture of “quality diversity” that celebrates outstanding achievements by minorities.
Last year the Counseling Center increased its outreach to international students, and the Office of Diversity Programs conducted diversity training for 1,200 students, faculty, and staff.
Institute Diversity Management Group

Council on Diversity

Diversity Forum

Pearl Alexander
director, Equal Opportunity Diversity Programs

State-of-the Institute Diversity Update
Engineering Diversity at Georgia Tech

This report was prepared in consultation with the Campus Diversity Council for the purpose of raising awareness of global diversity management challenges and opportunities. The report is not intended as an EEO compliance tool or report, but as a working document from which to build baselines for diversity measurement that exceed EEO compliance requirements.
“Nothing on earth is more gladdening than knowing we must roll up our sleeves and move back the boundaries of the humanly possible once more.”

Annie Dillard

*The Writing Life*
“There are lots of good ideas out there, but having a good idea is only 5 percent of the way to realizing it. The other 95 percent is dogged pursuit.”

Dr. Stephen Dickerson, professor emeritus of mechanical engineering, started a company in 1991 to market his robotic vision invention. DVT Corporation became one of Tech’s best faculty start-up success stories.
More Faculty Innovations Find their Way to the Marketplace

The smart T-shirt, which reads its wearer’s vital signs, has been licensed for manufacture by start-up SensaTex Inc.

Technology developed at Georgia Tech was licensed to MicroCoating Technologies, a start-up company.

Two Tech faculty were partners in starting Digital Furnace, which recently sold for $136 million in a stock exchange.
FOB Synthetics, Inc. is one of the first companies at EmTech Bio.

A second client is NuTec Sciences, one of the nation’s leading companies in the new field of bioinformatics.
“There is a transition going on in Georgia’s economy from an industrial and manufacturing economy to a high-tech economy. Georgia Tech is at ground zero in re-making that economy.”

Roy Barnes
Governor of Georgia
Strategic Communications

What do we want to be known for?

Who are our audiences?

How do we communicate our message?
Giving our communications a “family feel” will help to establish an image and brand identity for Georgia Tech.
“Destiny is not a matter of chance, it is a matter of choice; it is not a thing to be waited for, it is a thing to be achieved.”

William Jennings Bryan
State of the Institute 2000
Defining the Technological University of the 21st Century