# Georgia Tech

# Fact Book



1993



# Fact Book 1993

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Georgia Institute of Technology is committed to a comprehensive program of affirmative action to ensure access, equity, and fairness in educational programs, related activities, and employment for minorities, women, handicapped persons, disabled veterans, and veterans of the Vietnam era. The Institute provides equal opportunities and promotes the full realization of equal opportunity through positive, continuing programs in each unit.

# **PREFACE**

This fact book, an annual publication of the Office of Institutional Research and Planning (IRP), includes a wide range of information about the Georgia Institute of Technology for reference purposes. Data in the 1993 Fact Book have been updated as of the fiscal year ending June 30, 1993 and the Fall 1993 academic quarter. Selected items have been updated to the time of publication, May 1994.

Some data sets show trends for the ten years 1984 through 1993. Others cover a five year period or provide the latest year's update. Data and information come from Institute sources shown in the lower left hand corner of each page, and they are assumed to be recent and accurate. Pages without a source entry were prepared in IRP. The reader may wish to contact a source office if there is a concern with the timeliness of specific data.

Credit for the production work on the 1993 Fact Book goes to IRP staff Don Steinberger and Theresa Grams. Other IRP staff have contributed by reviewing the contents and formats. Additional credit is extended to the publications department for providing the final review for printing.

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a Lawrence Fincher

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Georgia Tech is an equal employment/education opportunity institution.

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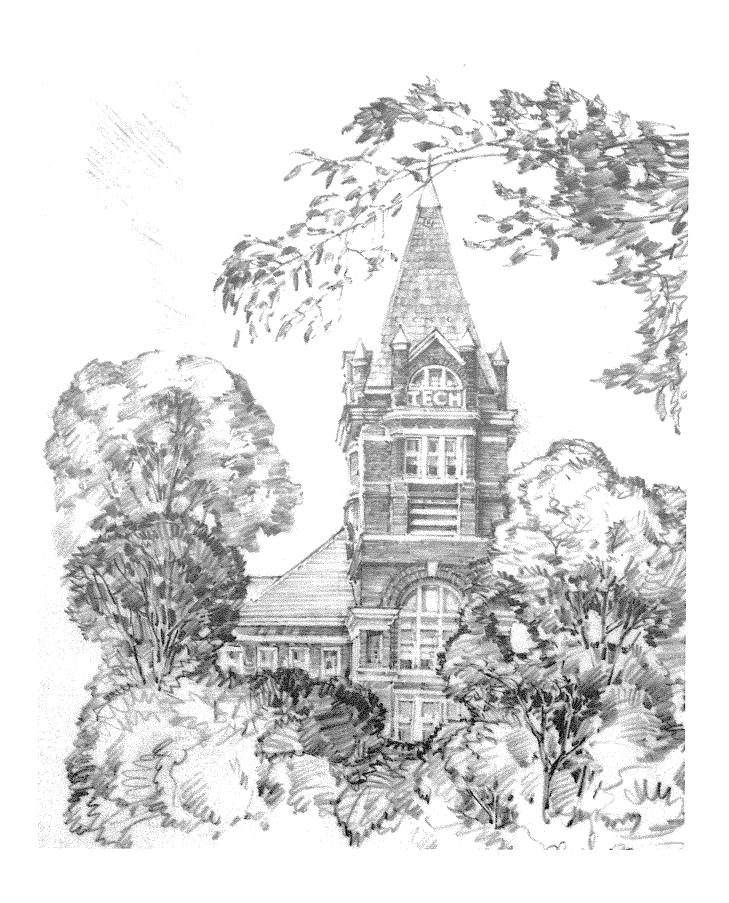
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# Introduction

Georgia Institute of Technology

# **QUICK FACTS**

# The Georgia School of Technology

- The Georgia School of Technology opened for classes October 8, 1888
- 129 students were registered to work towards the first degree offered, the Bachelor of Science in Mechanical Engineering
- The first academic building was the distinctive Tech Tower
- The Georgia School of Technology's first staff and faculty included five professors and five shop supervisors
- The first official motto was, "To Know, To Do, To Be"
- The Technologian, the first student publication, appeared March 1891

# The Georgia Institute of Technology

- In 1948, the Board of Regents authorized The Georgia School of Technology to be renamed The Georgia Institute of Technology
- The first women students enrolled fall quarter 1952
- Institutional accreditation is by the Southern Association of Colleges and Schools
- · Professional accreditations:

Accreditation Board for Engineering and Technology American Chemical Society Industrial Designers Society of America National Architectural Accrediting Board Planning Accreditation Board American Assembly of Collegiate Schools of Business

- · Georgia Tech operates on the quarter system
- Georgia Tech offers educational opportunities from 23 schools and colleges
- Degrees are offered in the following:

College of Architecture
College of Computing
College of Engineering
Ivan Allen College of Management, Policy, and International Affairs
College of Sciences

# Georgia Tech National Rankings

• As reported in 1993 by U.S. News and World Report, Georgia Tech is nationally ranked:

1st in the industrial and manufacturing program; 4th in the School of Aerospace Engineering; 5th in the listing of most efficient institution; 7th in the School of Mechanical Engineering; 9th in overall top graduate schools of engineering; and a top 25 best value

- The Gourman Report ranks Georgia Tech's Architecture Program 8th in the nation
- The National Science Foundation ranks Georgia Tech 5th in industry-sponsored research
- Black Issues in Higher Education ranks Georgia Tech as 2nd in the number of master's degrees in engineering, computer science, and mathematics conferred to African Americans

# STATEMENT OF PURPOSE

This Statement of Purpose for the Institute was prepared by the Georgia Tech Academic Senate and approved by the Board of Regents in June 1983. It is presented here with modest changes to reflect the 1989 academic reorganization of the Institute.

The purpose of the Georgia Institute of Technology is to contribute to the fulfillment of the scientific and technical needs of the state of Georgia through education, research, and service. The Institute provides to well-prepared students instruction and research experience that will equip them to perform to their maximum potential in a society with a technological base.

Areas of special emphasis for professional careers are in the fields of engineering, the sciences, architecture, computing, management, public policy, and international affairs. Also of major importance for all students is a thorough foundation in the humanities and social sciences in order to provide a liberal education sensitive to the total human condition.

To sustain a leadership position in the national academic community and to serve the technical education needs of the state of Georgia, the Georgia Institute of Technology shall:

- Maintain a faculty of recognized excellence;
- Pursue a balanced offering of instruction, research, and service;
- Provide a broad, relevant background in the fundamental disciplines, thorough instruction in special areas of emphasis, and an intellectual environment for discovery through research and innovation;
- Promote a partnership between public and private sectors for the transfer of technology into the economic base of the state of Georgia; and,
- Serve as the standard for excellence in the state, national, and international academic community in areas of special emphasis.



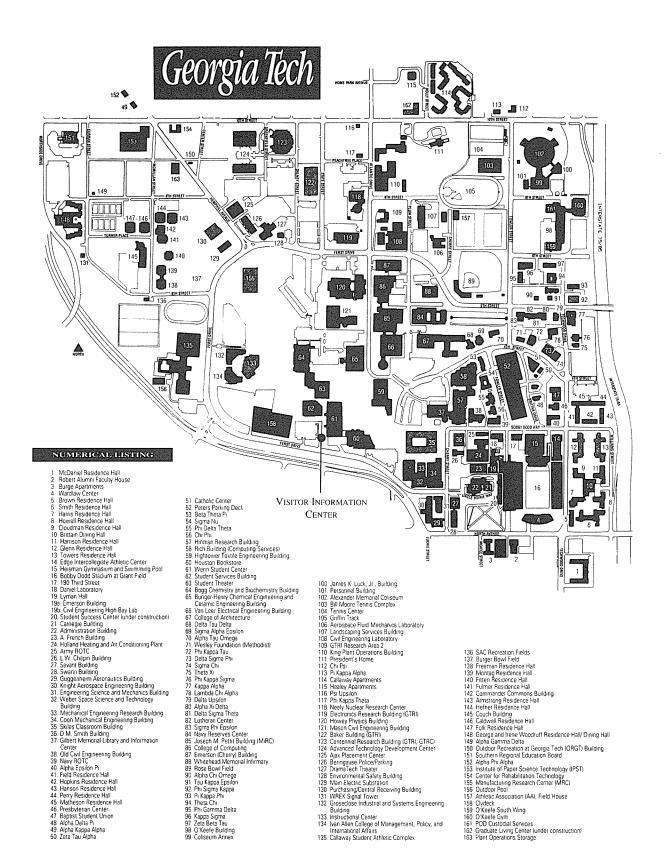
Source: Office of the President



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# **CAMPUS MAP**

Fig. 1.1. Campus Map



# **CAMPUS MAP**

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External Affairs, Wardlaw Center, 4		

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# PROFILE OF ATLANTA

# Metropolitan Area

6,150 square miles

20 counties

111 incorporated cities and towns

### Population

1990: 2,960,030

1993 estimated: 3,136,600

Median age: 31.8

Average household after-tax income: \$42,897

26.9 percent of the population 25 years and older have completed four or more years of college

### Education

Twenty-seven public school systems operate 592 elementary and middle high schools and 115 high schools with a combined enrollment of approximately 500,000 students

Thirty-six degree granting colleges, universities, and seminaries offer more than 350 programs of study to more than 95,700 students

### Business and Industry

Home to representative offices for more than 730 of the Fortune 1,000 companies

Atlanta added more than 500,000 net new jobs during the 1980's

Ranked in the top five every year for Fortune Magazine's "Best Cities for Business"

Fourth largest convention center in the U.S.

Over 1,200 international businesses operate out of Atlanta and 48 countries have representation through consular and trade offices, and foreign chambers of commerce

# Communications

Home to award-winning cable stations

Home to BellSouth, the nation's largest communications holding company which provides Atlantans with the world's largest toll-free calling area-3,300 miles

Seven daily newspapers and 31 weekly newspapers

Eight television stations

38 FCC licensed radio stations

31 regional bureaus of national and international broadcast and printing news operations

# Transportation

### Aviation

Hartsfield Atlanta International Airport, served by 23 passenger carriers (12 domestic and 11 international).

1,700 flights carry over 100,000 passengers daily to more than 180 domestic destinations

Nearly 100 international flights a week to two dozen destinations across the globe

Nine all-cargo and express airlines

# Highways

Three major interstate highways (I-75, I-85 and I-20) converge near the central business district and are connected by the perimeter highway I-285

### Rail

CSX Transportation and Norfolk Southern each operate 80 freight trains daily

# Mass Transportation

MARTA (Metropolitan Atlanta Rapid Transit Authority) includes a 35-mile rail system with 31 stations and 150 bus routes covering more than 1,500 miles

AMTRAK has overnight and daytime service

Greyhound/Trailways and Southeastern Stages have more than 200 buses arriving and departing daily

### Research

National Headquarters for the Centers for Disease Control

National Headquarters for the American Cancer Society

Yerkes Regional Primate Research Center

Source: Atlanta Chamber of Commerce; A Look at Atlanta 1993

# PROFILE OF ATLANTA

### Research (continued)

Emory University (medical research)

Georgia Tech Research Institute

Advanced Technology Development Center at Georgia Tech

Georgia Research Consortium

Georgia Biomedical Partnership

Institute of Paper Science and Technology

### Attractions

### Entertainment

Martin Luther King, Jr. Historic Site

Carter Presidential Center

Fernbank Museum of Natural History

Stone Mountain Memorial Park

Six Flags Over Georgia

Zoo Atlanta

Cyclorama

Underground Atlanta

The Coca-Cola Pavilion

CNN Center

The Swan House

The Wren's Nest

Atlanta History Museum

# The Arts

High Museum of Art

Atlanta Symphony Orchestra

Alliance Theatre

Annual Arts Festival

Atlanta Ballet

Atlanta Children's Theatre

Center for Puppetry Arts

Company Kaye (the Southeast's only dance/mime group)

Cultural festivals from every corner of the globe

National Black Arts Festival (biennial)

### Sports and Recreation

Atlanta Braves-National League Baseball

Atlanta Falcons-National Football League

Atlanta Hawks-National Basketball Association

Atlanta Knights-International Hockey League Peach Bowl-New Year's Day NCAA football bowl

Georgia Tech-NCAA Atlantic Coast Conference

Auto racing at Road Atlanta and Atlanta International Speedway

Major professional tennis (AT&T Challenge) and golf (BellSouth Classic) tournaments

Annual steeplechase and hunter-jumper horse show

Lake Lanier and Lake Allatoona

Chattahoochee River

More than 100 public and private golf courses in the metro area

Nearby beaches, mountains, ski resorts, Appalachian Trail, Okeefenokee Wildlife Refuge, and Cohutta Wilderness Area

Source: Atlanta Chamber of Commerce; A Look at Atlanta 1993



INTRODUCTION Page 7

# UNIVERSITY SYSTEM OF GEORGIA

The University System of Georgia, which began operation in 1932, is among the oldest unified statewide systems of public higher education in the United States and includes all state-operated universities, four-year colleges, and two-year colleges in Georgia. The system, now in its seventh decade of operation, offers programs of instruction, research, and public service designed to benefit the entire population of the state. These programs are conducted through the various institutions and institution-related agencies.

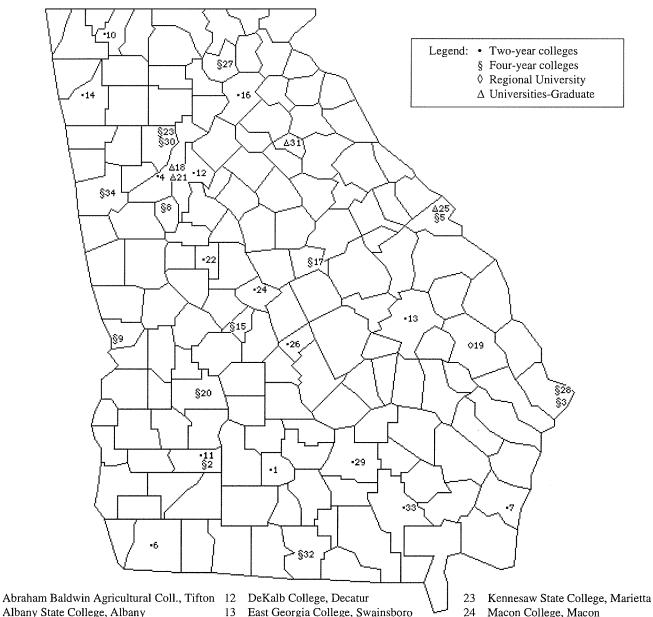


Fig. 1.2. University System of Georgia Institutions by Location and Type

- 1
- 2 Albany State College, Albany
- Armstrong State College, Savannah 3
- 4 Atlanta Metropolitan College, Atlanta

Source: Office of the Board of Regents

- 5 Augusta College, Augusta
- Bainbridge College, Bainbridge 6
- Brunswick College, Brunswick 7
- Clayton State College, Morrow 8
- 9 Columbus College, Columbus
- Dalton College, Dalton 10
- Darton College, Albany 11

- East Georgia College, Swainsboro
- 14 Floyd College, Rome
- 15 Fort Valley State College, Fort Valley
- Gainesville College, Gainesville
- Georgia College, Milledgeville 17
- Georgia Institute of Technology, Atlanta 18
- 19 Georgia Southern University, Statesboro
- 20 Georgia Southwestern College, Americus
- 21 Georgia State University, Atlanta
- Gordon College, Barnesville

- Macon College, Macon
- Medical College of Georgia, Augusta
- Middle Georgia College, Cochran
- North Georgia College, Dahlonega
- Savannah State College, Savannah
- South Georgia College, Douglas
- 30 Southern Coll. of Technology, Marietta
- 31 University of Georgia, Athens
  - Valdosta State College, Valdosta
- Waycross College, Waycross 33
- West Georgia College, Carrollton

# **BOARD OF REGENTS**

The Board of Regents of the University System of Georgia is composed of 16 members appointed by the Governor and confirmed by the Senate for seven-year terms. One member is appointed from each of the 11 congressional districts, and five are appointed from the state-at-large. The Board of Regents exercises broad jurisdiction over all institutions of the University System of Georgia and establishes policies and procedures under which they operate. The Board receives all state appropriations for the University System and allocates these appropriations to the institutions and institution-related agencies. While the Board engages in both policy-making and administrative functions, each unit of the System has a high degree of academic and administrative autonomy.

The Chancellor of the University system, the chief administrative officer of the System, is appointed by the Board as its chief executive officer and serves at the Board's request. The chancellor has broad discretionary power for executing the resolutions, policies and rules, and regulations adopted by the Board for the operation of the University System.

The System currently includes 34 institutions: four universities, two regional universities, 13 four-year colleges, and 15 two-year colleges. These institutions are both individually distinctive and interrelated. They are geographically dispersed so that approximately 96 percent of the people in Georgia reside within 35 miles of at least one university or college.

Table 1.1 Staff of the Board of Regents

Staff Member	Title
Harry S. Downs	Acting Chancellor (until July 1)
Stephen R. Portch	Chancellor (as of July 1)
Art Dunning	Acting Executive Vice Chancellor
Henry G. Neal	Executive Secretary
Joan Elifson	Acting Vice Chancellor–Academic Affairs
Thomas E. Daniel	Vice Chancellor–External Affairs
Douglas H. Rewerts	Vice Chancellor–Facilities
James Cofer	Vice Chancellor–Fiscal Affairs and Treasurer
James B. Mathews	Vice Chancellor–Information Technology
Haskin R. Pounds	Vice Chancellor–Research and Planning
Vacant	Vice Chancellor–Services and Minority Affairs
Barry A. Fullerton	Vice Chancellor–Student Services
David M. Morgan	Assistant Vice Chancellor-Academic Affairs
Joseph H. Silver	Assistant Vice Chancellor-Academic Affairs
Mary Ann Hickman	Assistant Vice Chancellor–Affirmative Action
Thomas E. Mann	Assistant Vice Chancellor–Facilities
Vacant	Assistant Vice Chancellor–Facilities
T. Don Davis	Assistant Vice Chancellor-Fiscal Affairs/Personnel
Vacant	Assistant Vice Chancellor-Fiscal Affairs/Accounting Systems and Procedures
Roger Mosshart	Assistant Vice Chancellor–Fiscal Affairs/Budgets
Cathie Mayes Hudson	Assistant Vice Chancellor–Planning
Joseph J. Szutz	Assistant Vice Chancellor–Planning
Kay Miller	Assistant to the Chancellor–Public Relations and Information Services

Table 1.2 Members and Terms of Appointment of the Board of Regents

Regent	Term	District
John H. Anderson, Jr.	(1990-1997)	State at Large
Joel H. Cowan	(1990-1995)	State at Large
Suzanne G. Elson	(1993-1999)	State at Large
Donald M. Leebern, Jr., Vice Chairman	(1991-1998)	State at Large
Barry Phillips, Chairman	(1988-1995)	State at Large
S. William Clark, Jr., M.D.	(1992-1999)	First
Elsie P. Hand	(1993-1997)	Second
William B. Turner	(1993-2000)	Third
Dwight H. Evans	(1993-2000)	Fourth
Elridge W. McMillan	(1989-1996)	Fifth
W. Lamar Cousins, M.D.	(1987-1994)	Sixth
Edgar L. Rhodes	(1992-1999)	Seventh
John Howard Clark	(1989-1996)	Eighth
James E. Brown	(1987-1994)	Ninth
Thomas F. Allgood, Sr.	(1993-2000)	Tenth
Juanita Powell Baranco	(1991-1998)	Eleventh

Source: Office of the Board of Regents



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# HIGHLIGHTS OF TECH HISTORY

Table 1.3 Selected Events from Georgia Tech's History

Year	Event
1885	On October 13 the Georgia Legislature passes a bill appropriating \$65,000 to found a technical school.
1886	Atlanta is chosen as the location for the Georgia School of Technology.
1887	Developer Richard Peters donates four acres of land known as Peters Park to the new school.
1888	The Academic Building (in use today as the Administration Building) is completed. Georgia Tech opens for classes on October 8, with the School of Mechanical Engineering and Departments of Chemistry, Mathematics, and English. By January 1889, 129 students register to work toward the only degree offered, the Bachelor of Science in Mechanical Engineering.
1890	Tech graduates its first two students.
1892	Tech fields its first football team.
1896	The Schools of Civil Engineering and Electrical Engineering are established.
1899	The A. French Textile School is established.
1901	The School of Chemical Engineering is established. The Athletic Association is organized.
1903	John Heisman becomes the school's first full-time football coach.
1904	The Department of Modern Languages is established.
1906	The School of Chemistry is established. Andrew Carnegie donates \$20,000 to build a library.
1907	The Carnegie Library opens.
1908	Tech's Night School opens. Fulton County grants an organizational charter to the Georgia Tech Alumni Association. The first edition of the annual, the <i>Blue Print</i> , appears. The Department of Architecture is established.
1910	The first official band is formed.
1911	The Technique, the weekly student newspaper, begins publication.
1912	The Cooperative Education Department is established to coordinate work-study programs.
1913	The School of Commerce, forerunner of the College of Management, is established.
1916	The Georgia Tech Student Association is established.
1917	The Department of Military Science is established. The Evening School of Commerce admits its first woman student.
1918	Tech joins the National Collegiate Athletic Association (NCAA). Senior units of the Coast Artillery and Signal Corps of the Reserve Officer Training Corps (ROTC) are established. The school and alumni launch the Greater Georgia Tech fund-raising campaign.
1919	The Legislature authorizes the Engineering Experiment Station.
1920	The national Alumni Association convenes its first meeting. George P. Burdell, Tech's long-lived mythical student, begins "attending" class.
1921	Tech becomes a charter member of the Southern Intercollegiate Conference.
1923	The Georgia Tech Alumnus magazine begins publication. The Alumni Association begins an alumni placement service. Tech is elected to the Southern Association of Colleges and Universities.
1924	The School of Ceramics is established. Tech receives an FCC license to operate radio station WGST.
1925	Tech awards its first Master of Science degrees.
1926	Tech establishes a Naval ROTC unit. The Department of Naval Science is established.
Source	: Office of the Executive Vice President
Page 1	O INTRODUCTION CT

# HIGHLIGHTS OF TECH HISTORY

Year	1.3 Selected Events from Georgia Tech's History–Continued  Event
1930	The Daniel Guggenheim School of Aeronautics is established.
1931	The Georgia Legislature creates the University System of Georgia.
1932	The Board of Regents of the University System assumes control of all state public schools, including Tech. The Georgia Tech Alumni Foundation holds its first meeting.
1934	The Department of Management is established. The Engineering Experiment Station begins engineering research projects.
1938	The Industrial Development Council (forerunner of the Georgia Tech Research Corporation) is created to be the contractual agency for the Engineering Experiment Station.
1939	The School of Physics is established.
1942	The Department of Physical Education and Recreation is established.
1945	Tech becomes the first institution to provide low-cost married housing to GI Bill students. The School of Industrial and Systems Engineering is established.
1946	Tech adopts the quarter system.
1948	The Board of Regents authorizes Tech to change its name to the Georgia Institute of Technology. Southern Technical Institute opens as a branch of Tech. The Department of Architecture becomes the School of Architecture; the Department of Management becomes the School of Industrial Management; the School of Social Sciences is established.
1949	The YMCA-sponsored, student-maintained World Student Fund is created to support a foreign student program.
1950	The  Department  of  Air  Science  (now  Air  Force  Aerospace  Studies)  is  established.  Tech  awards  its  first  Doctor  of  Philosophy  degree.
1952	The School of Mathematics is established. The Board of Regents votes to make Tech coeducational. The first two women students enroll in the fall quarter.
1954	The Georgia Tech Alumni Foundation becomes the Georgia Tech Foundation.
1955	The Rich Electronic Computer Center begins operation.
1956	Tech's first two women graduates receive their degrees.
1957	The Georgia Legislature grants Tech \$2.5 million for a nuclear reactor.
1959	The School of Engineering Science and Mechanics and the School of Psychology are established.
1960	The School of Applied Biology is established.
1961	Tech is the first major state university in the Deep South to desegregate without a court order. The new Southern Tech campus in Marietta is opened.
1962	The School of Nuclear Engineering is established.
1963	The School of Information and Computer Science is established. Tech is the first institution in the United States to offer the master's degree in information science. The Water Resources Center is created. Renamed the Environmental Resources Center in 1970, it now functions as the Water Resources Research Institute of Georgia.
1964	Tech leaves the Southeastern Conference (SEC).
1965	Compulsory ROTC ends.
1969	The School of Industrial Management becomes the College of Management. The Bioengineering Center is established in conjunction with Emory University.
1970	Southern Tech is authorized to grant four-year degrees. The School of Geophysical Sciences is established.

Source: Office of the Executive Vice President

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# HIGHLIGHTS OF TECH HISTORY

Tabla 12	Selected Events from	Coordia Tookla	History Continued
Table 1.5	Selected Events from	Georgia Tech S	misiory-Communuea

Year	Event
1975	The name of the General College is changed to the College of Sciences and Liberal Studies (COSALS), and the School of Architecture becomes the College of Architecture. The Georgia Legislature designates the Engineering Experiment Station as the Georgia Productivity Center. Tech joins the Metro-6 athletic conference.
1977	The Center of Radiological Research is formed to coordinate research in health physics.
1978	Georgia Tech joins the Atlantic Coast Conference (ACC). The Georgia Mining Resources Institute, linked to the U.S. Bureau of Mines, is formed. The Fracture and Fatigue Research Laboratory is established.
1979	The Computational Mechanics Center is established.
1980	Southern Tech becomes an independent four-year college of engineering technology. The Center for Rehabilitation Technology is formed. The Higher Education Management Institute study is established.
1981	The Advanced Technology Development Center, the Technology Policy and Assessment Center, and the Microelectronics Research Center are established.
1982	The Materials Handling Research Center, Center for Architecture Conservation, Center for Excellence in Rotary Wing Aircraft, and Communication Research Center are established.
1983	The Research Center for Biotechnology is established. The Long Range Plan is begun.
1984	The Engineering Experiment Station changes its name to the Georgia Tech Research Institute. Georgia Tech's contract corporation changes its name from the Georgia Tech Research Institute to the Georgia Tech Research Corporation. The Graduate Cooperative Program is formed to include graduate students in Tech's work-study program.
1985	The School of Ceramic Engineering incorporates the metallurgy program to form the School of Materials Engineering. The Georgia Legislature authorizes \$15 million to fund the Center for Excellence in Microelectronics. The Centennial Campaign begins.
1986	The Center for the Enhancement of Teaching and Learning and the College of Architecture Construction Research Center are established.
1987	The Georgia Tech/Emory University Biomedical Technology Research Center is established. The School of Engineering Science and Mechanics is incorporated into the School of Civil Engineering.
1988	Dr. John P. Crecine, Tech's ninth president, proposes a restructuring of Tech to meet the technological needs of the 21st century.
1989	The proposal for academic restructuring wins approval in a poll of both the academic faculty and the general faculty and receives the unanimous support of the Board of Regents of the University System of Georgia. Establishment of the College of Computing and the Ivan Allen College of Management, Policy, and International Affairs.
1990	The Georgia Tech men's basketball team wins the ACC Championship and goes to the NCAA Final Four. Atlanta's "High-Tech Southern Hospitality" wide-screen presentation, developed by the Georgia Tech Multimedia Laboratory, helps the city attract the 1996 Olympic Games. Georgia Tech is selected as the Olympic Village site. The Georgia Tech football team is named 1990 National Champions by the UPI Coaches Poll after also winning the ACC Championship and the Citrus Bowl.
1991	Despite economic hard times, Tech achieves an all-time high in fund-raising. Ground is broken for the Student Success Center, which along with the T.E.C.H. Expo mobile recruitment facility, inaugurates a new concept in student services and recruitment. Tech's first foreign campus, GT Lorraine, in Metz, France, is opened. The Fuller E. Callaway, Jr., Manufacturing Research Center is opened, setting the hallmark for corporate research cooperation with Tech.
1992	Tech hosted the only vice presidential candidates debate held in election year '92, then later hosted the 6th Annual Report of the former Secretaries of Defense. Bill Lewis was named head football coach as the Yellow Jackets celebrated their l00th anniversary. Tech established the first University Center of Excellence for Photovoltaic Research and Education.
1993	The Georgia Institute of Technology lands U.S. Swim, Inc. National Development Center. Tech is listed as the nation's ninth best graduate engineering program by <i>U.S. News and World Report</i> and ranked number two by practicing engineers. Tech's bioengineering program (in collaboration with the Emory University School of Medicine) wins \$3 million grant from the Whitaker Foundation. Three Ivan Allen faculty earn National Endowment for the Humanities fellowships (only ones awarded in Georgia).

Source: Office of the Executive Vice President

# **ACCREDITATION**

### **Table 1.4 Accreditation Information**

# Professional Accreditation

### Institutional Accreditation

# Architecture

In the College of Architecture, the program leading to the Bachelor of Science in Industrial Design has been reviewed and recognized by the Industrial Designers Society of America. The National Architectural Accrediting Board has accredited the curriculum leading to the Master of Architecture. The Master of City Planning degree program has been accredited by the Planning Accreditation

# Chemistry

The American Chemical Society has certified the curriculum leading to the bachelor's degree in chemistry.

# Computing

The program leading to the Bachelor of Science in Computer Science is accredited by the Computing Sciences Accreditation Board.

# Engineering

The Accreditation Board for Engineering and Technology has accredited the four-year engineering curricula leading to bachelor's degrees in the following fields: aerospace engineering; ceramic engineering; electrical engineering; engineering science and mechanics; industrial engineering; materials engineering; mechanical engineering; nuclear engineering; and textile engineering; and to a graduate program leading to a master's degree in the field of environmental engineering.

### <u>Management</u>

All of the degree programs of the School of Management subject to the review of the American Assembly of Collegiate Schools of Business have been accredited by that organization. These programs include Bachelor of Science in Management, Bachelor of Science in Management Science, and Master of Science in Management.

Georgia Tech is accredited by the Southern Association of Colleges and Schools (SACS). A self-study was conducted, and reaffirmation was awarded in 1984. A SACS Reaffirmation Committee visited the campus on May 2-5, 1994.

Source: Office of the President



INTRODUCTION

# PRESIDENTS OF GEORGIA TECH

Issac S. Hopkins 1888-1896

Lyman Hall 1896-1905

Kenneth G. Matheson 1906-1922

Marion L. Brittain 1922-1944

Colonel Blake R. Van Leer 1944-1956

Paul Weber Acting President 1956-1957

Edwin D. Harrison 1957-1969

Vernon Crawford Acting President 1969

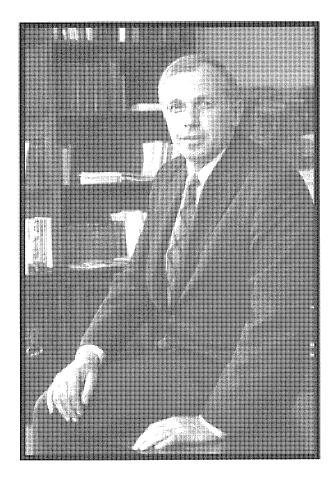
Arthur G. Hansen 1969-1971

James E. Boyd Acting President 1971-1972

Joseph M. Pettit 1972-1986

Henry C. Bourne, Jr. Acting President 1986-1987

John Patrick Crecine 1987-present

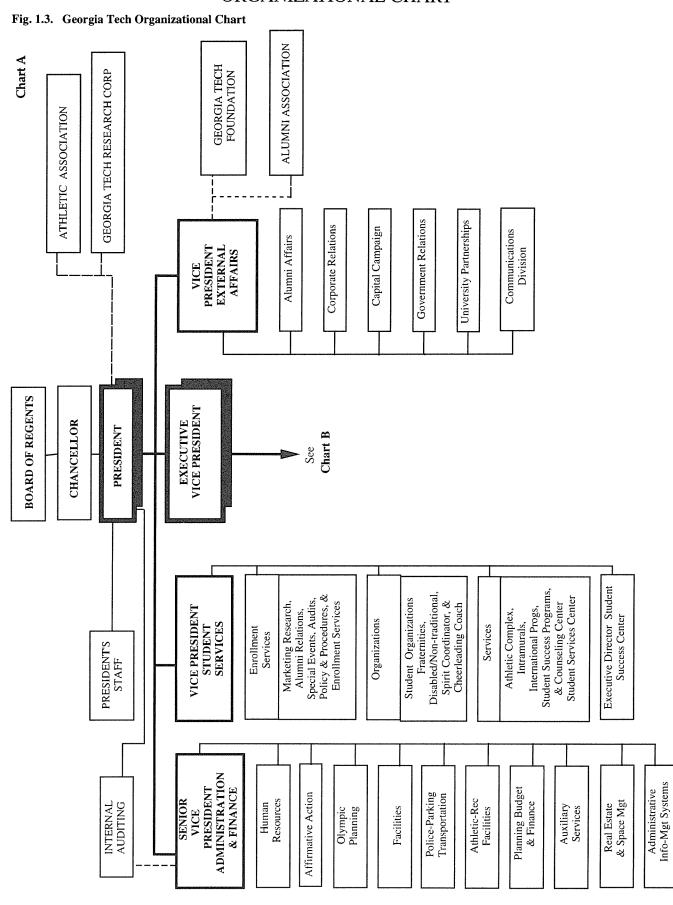


On November 1, 1987, Dr. John Patrick (Pat) Crecine assumed the leadership of the Georgia Institute of Technology as the Institute's ninth president. Dr. Crecine holds a B.S. (1961) in Industrial Management, and a M.S. (1963) and Ph.D. (1966) in Industrial Administration from Carnegie Mellon University.

After receiving his doctorate, Dr. Crecine held positions at the U.S. Department of Commerce, the U.S. Bureau of the Budget, the Rand Corporation, and the University of Michigan where he was professor of political science and sociology and founding director of the Institute of Public Policy Studies. In 1976, he became dean of the College of Humanities and Social Sciences at Carnegie Mellon and was professor of political economy. From 1983 until his appointment as Georgia Tech's president, Dr. Crecine served as Carnegie Mellon's senior vice president for Academic Affairs.

Source: Office of the President

# ORGANIZATIONAL CHART



# ORGANIZATIONAL CHART

Fig. 1.3. Georgia Tech Organizational Chart-Continued

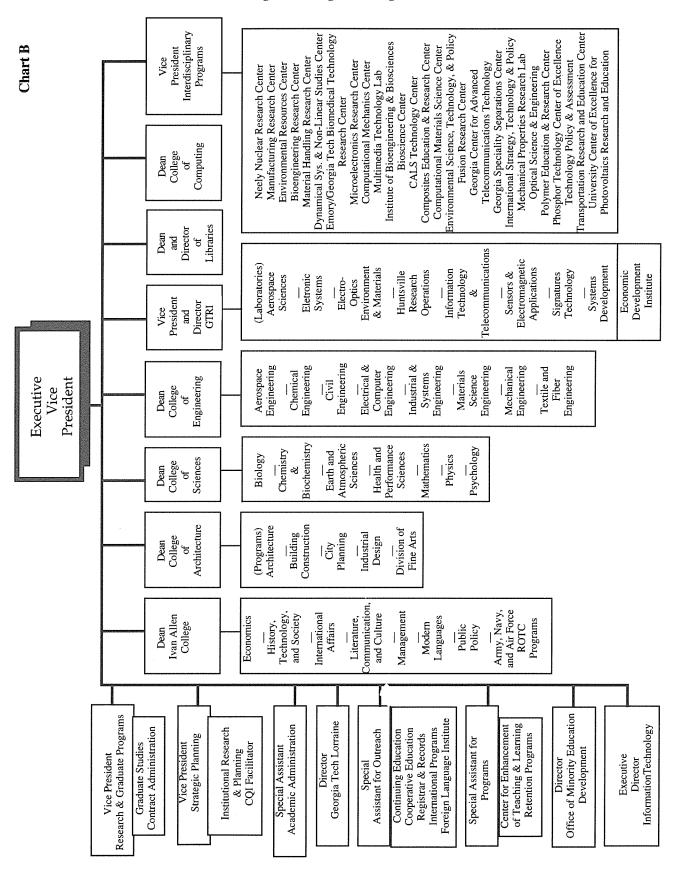


Table 1.5	Senior	Adm	inistra	ators
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Table 1.5 Senior Administr	
Ivallic	Area President's Office
	Trondont is office
John Patrick Crecine	President
Michael Salomone	Executive Assistant to the President
H. West Richards	Special Assistant to the President
W. Harris Troutman	Special Assistant to the President
Norman J. Johnson	Special Assistant to the President
H. T. Marshall	Director, Internal Auditing
Homer C. Rice	Director of Athletics
Ronald M. Bell	Vice President and General Manager for the Georgia Tech Research Corporation
	Executive Vice President's Office
Michael E. Thomas	Executive Vice President
Demetrius T. Paris	Vice President for Research and Graduate Programs
Helen E. Grenga	Associate Vice President for Graduate Studies and Research
Maureen Kilroy	Director, Graduate Academic and Enrollment Services
Keith Oden	Director, Graduate Co-op and Fellowship Programs
J. W. Dees	Associate Vice President for Research and Director, Contract Administration
G. Duane Hutchison	Associate Director, Contract Administration
Joseph E. Gilmour, Jr.	Vice President for Strategic Planning
<ul> <li>A. Lawrence Fincher</li> </ul>	Director, Institutional Research and Planning
Hal Irvin	Continuous Quality Improvement Facilitator
Catherine Ross	Associate Vice President for Academic Affairs
Hans Puttgen	Director, Georgia Tech Lorraine
W. Denney Freeston, Jr.	Special Assistant for Outreach and Director, Continuing Education
Joseph S. Boland	Associate Director
Charles Windish	Director, Foreign Language Institute
Thomas M. Akins	Director, Cooperative Education
Frank E. Roper, Jr.	Registrar
William F. Leslie	Associate Registrar
Annette Satterfield	Associate Registrar
M. Jo McIver	Director, Registration and Records
William Sangster	Director, International Programs
David J. McGill	Special Assistant for Programs and Director, Center for the Enhancement of Teaching and Learning
Gavin Samms	Director, Office of Minority Educational Development
Gary Watson	Interim Executive Director, Information Technology
Ed Coleman	Director, Client Services
Linda Cabot	Associate Director, Client Services
Jim Consuegra	Associate Director, Client Services
Ron Hutchins	Director, Network Services
Phil Mathis	Associate Director, Network Services
Jules Maderos	Director, Technical Services
Dianne Newman	Director, Administrative Services
Ray Spalding	Director, Internal Services
Art Vandenberg	Director, Information Systems and Services
	Senior Vice President/Administration & Finance
James W. Ray	Interim Senior Vice President, Administration and Finance
Jerry A. Dark	Associate Vice President, Human Resources
Annette Cummings	Acting Director, Affirmative Action
Bill Miller	Director, Olympic Planning
Jim Priest	Associate Vice President, Facilities
Jack Vickery	Chief of Police, Parking and Transportation
Michael Edwards	Executive Director, Athletic and Recreational Facilities
Linda Martinson	Vice President, Planning, Budget and Finance
Vacant	Director, Auxiliary Services
Tom Kirby	Director, Real Estate and Space Management
Vacant	Director, Administrative Information Management Systems
Vacant	Chief Legal Adviser
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- <b>%</b>	INTRODUCTION Page 1

# Table 1.5 Senior Administrators-Continued

President	

Roger E. Wehrle Interim Vice President
Carole E. Moore Assistant Vice President
Vacant Associate Vice President

Barbara Hall Associate Vice President for Enrollment Services
Irma Rodriquez Director, Marketing and Enrollment Services

Paul Hurst Director, Special Events

William Pouncey Director, Audits, Policy & Procedures

Deborah Smith Director, Admissions

William S. Barnes Assistant to the Vice President for Student Organizations Vacant Director, Disabled/Non-traditional Students Services

Darrell Landy Spirit Coordinator and Cheerleading Coach

Rich Steele Director, Student Services Center

Butch Stanphill Director, Student Athletic Complex and Intramurals

W. Miller Templeton Director, International Student Programs

Russ Terwilliger Director, Counseling Center

Stan Altschuler Executive Director, Student Success Center

### Vice President/External Affairs

James M. Langley Vice President

John B. Carter, Jr. Executive Director of Georgia Tech Alumni Association

Robert S. Hawkins Director, Corporate Relations

Patrick J. McKenna Director, Development Support Division and Secretary, Georgia Tech Foundation

Andrew J. Harris
Thomas K. Hamall
Barry W. Walker
Ronald C. Harding
Director, Government Relations
Director, University Partnerships
Director, Communications Division
Director, Capital Campaign

# Ivan Allen College

Robert G. Hawkins Dean

Fred A. Tarpley, Jr. Associate Dean

William A. Schaffer Acting Director, School of Economics

Robert C. McMath, Jr. Director, School of History, Technology, and Society Linda P. Brady Acting Director, School of International Affairs

Kenneth J. Knoespel Director, School of Literature, Communication, and Culture

Arthur Kraft Dean, School of Management

Andrew J. Cooper III Assistant Dean

Heidi M. Rockwood Acting Head, Department of Modern Language

Barry Bozeman Director, School of Public Policy
Lt. Col. Jeffrey A. Kern Head, Department of Military Science
Capt. Kenneth D. Barker Head, Department of Naval Science
Col. William P. Cobb Head, Department of Aerospace Studies

# College of Architecture

Thomas D. Galloway Dea

Thomas N. Debo Interim Associate Dean for Academic and Student Affairs

Micha Bandini Director, Architecture Programs

Garvin T. Dreger Director, Building Construction Program

Steve French Director, City Planning
William C. Bullock Director, Industrial Design
Vacant Director, Division of Fine Arts
James G. Johnson Head, Department of Music

# Table 1.5 Senior Administrators-Continued

# College of Sciences

Robert A. Pierotti Dean

Thomas G. Tornabene Associate Dean

Roger M. Wartell Acting Director, School of Biology

Laren M. Tolbert Director, School of Chemistry and Biochemistry
William L. Chameides Director, School of Earth and Atmospheric Sciences
James A. Reedy Head, Department of Health and Performance Sciences

Shui-Nee Chow Director, School of Mathematics
Henry S. Valk Acting Director, School of Physics
Anderson D. Smith Director, School of Psychology

Robert A. Pierotti Director, Center for Education Integrating Science, Mathematics, and Computing

Carolyn C. Thorsen Director, Pre-college Programs, Center for Education Integrating

Science, Mathematics, and Computing

# College of Engineering

John A. White Dean

J. Narl Davidson Associate Dean
Jack R. Lohmann Associate Dean
Carolyn W. Meyers Associate Dean
Lytia R. Howard Assistant Dean
Jane G. Weyant Assistant Dean

Robert G. Loewy Director, School of Aerospace Engineering
Ronald W. Rousseau Director, School of Chemical Engineering
Jean-Lou Chameau Director, School of Civil Engineering

Roger P. Webb Director, School of Electrical and Computer Engineering
John J. Jarvis Director, School of Industrial and Systems Engineering
Ashok Saxena Director, School of Materials Science and Engineering

Ward O. Winer Director, School of Mechanical Engineering
Fred L. Cook Director, School of Textile and Fiber Engineering

# Georgia Tech Research Institute

Richard H. Truly Vice President and Director

Devon G. Crowe Chief Scientist

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Edward K. Reedy Director, Research Operations

Charles E. Brown Acting Director, Research Support and Finance

Charles E. Brown Director, Enterprise Planning

Robert A. Cassanova Director, Aerospace Sciences Laboratory

Larry D. Holland Director, Electronic Systems

Robert S. Hyde Director, Electro-Optics, Enjvironment and Materials

Richard P. Stanley Director, Huntsville Research Operations

Randolph M. Case Director, Information Technology and Telecommunications
Robert N. Trebits Director, Sensors and Electromagnetics Applications

John G. Meadors Director, Signatures Technology
Joe K. Parks Director, Systems Development

Wayne Hodges Director, Economic Development Institute
Charles Estes Group Director for Industrial Outreach
Ned Ellington Group Director for Management Services
Dwight Holter Group Director for New Enterprise Development
Rick Duke Group Director for Economic Development

Bob Springfield Associate Director for Atlanta Industrial Extension Services
Sherman Dudley Associate Director for South GA Industrial Extension Services
Larry Edens Associate Director for North GA Industrial Extension Services

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Table 1.5 Senior Administrators-Continued

Table 1.5 Senior Adminis	
	Libraries
Miriam A. Drake	Dean and Director
Julia Zimmerman	Associate Director
Juna Zimmerman	Associate Director
	College of Computing
Peter A. Freeman	Dean
Richard J. LeBlanc	Associate Dean
	Interdisciplinary Programs
Gary Poehlein	Vice President
Ratib Karam	Director, Neely Nuclear Research Center
Michael Kelly	Director, Manufacturing Research Center
Bernd Kahn	Director, Environmental Resources Center
Ajit Yoganathan	Co-Director, Bioengineering Research Center
Jim Toler	Co-Director, Bioengineering Research Center
Ira W. Pence	Director, Material Handling Research Center
Jack K. Hale	Director, Center for Dynamical Systems and Nonlinear Studies
Ajit Yoganathan	Director, Emory/Georgia Tech Biomedical Technology Research Center
Richard J. Higgins	Director, Microelectronics Research Center
Satya Atluri	Director, Computational Mechanics Center
Michael J. Sinclair	Director, Multimedia Technology Laboratory
Bob Nerem	Director, Institute for Bioengineering and Biosciences
Roger Wartell	Director, Bioscience Center
Robert E. Fulton	Co-Director, CALS Technology Center
James I. Craig	Co-Director, CALS Technology Center
Charles Ueng	Director, Composites Education and Research Center
Uzi Landman	Director, Center for Computational Materials Science
C.S. Kiang	Director, Environmental Science, Technology, and Policy
W. M. Stacey	Director, Fusion Research Center
J. Copeland	Director, Georgia Center for Advanced Telecommunications Technology
Charles A. Eckert	Director, Georgia Speciality Separations Center
John E. Endicott	Director, Center for International Strategy, Technology, and Policy
David L. McDowell	Director, Mechanical Properties Research Laboratory
William T. Thodes	Director, Center for Optical Science and Engineering
A. S. Abhiraman	Director, Polymer Education and Research Center
Chris Summers	Director, Phosphor Technology Center for Excellence
Alan Porter	Director, Technology Policy and Assessment Center
Michael D. Meyer	Director, Transportation Research and Education Center
Aires Debasei	Director, Center of Excellence for Photogoltains Descerab and Education

Ajeet Rohatgi

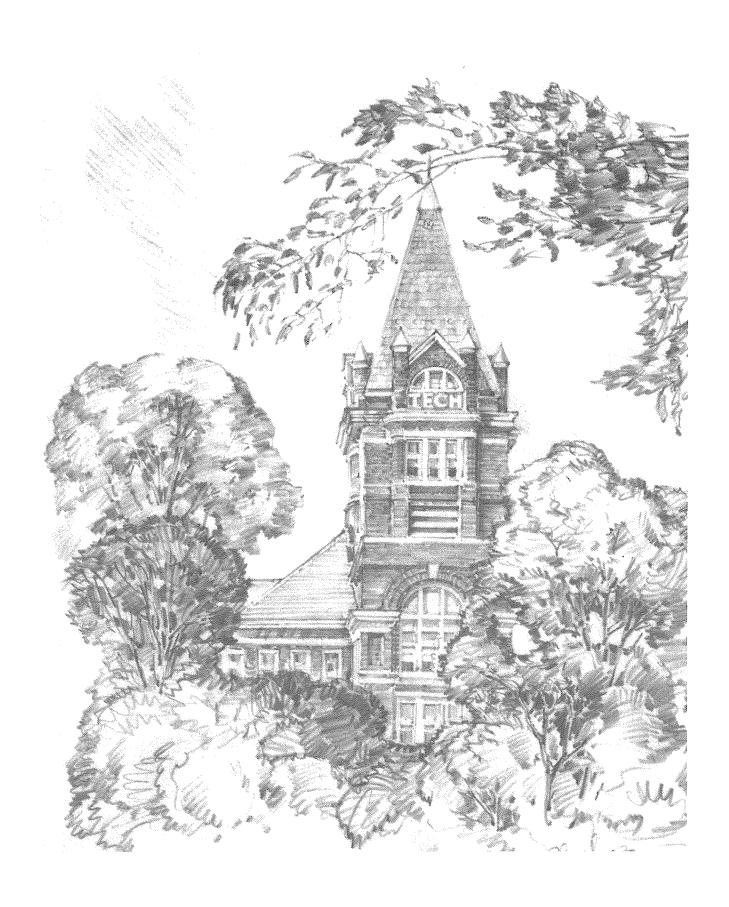
Director, Center of Excellence for Photovoltaics Research and Education

# DEGREES OFFERED

Table 1.6	Degree	Program	Disci	plines	and	Areas

Bachelor's	Master's	Doctoral
Curricula are offered leading to bachelor's degrees in the following disciplines:	Programs of study and research leading to master's degrees are offered in the following areas:	Programs of study and research leading to the doctoral degree are offered in the following areas:
	College of Architecture	
Architecture Building Construction Industrial Design	Architecture City Planning	Architecture
	College of Computing	
Computer Science	Computer Science	Computer Science
	College of Engineering	
Aerospace Engineering Ceramic Engineering Chemical Engineering Civil Engineering Computer Engineering Electrical Engineering Engineering Science and Mechanics Industrial Engineering Materials Engineering Mechanical Engineering Nuclear Engineering Polymer and Textile Chemistry Textile Engineering Textiles	Aerospace Engineering Bioengineering Ceramic Engineering Chemical Engineering Civil Engineering Electrical Engineering Engineering Science and Mechanics Environmental Engineering Health Physics Health Systems Industrial Engineering Materials Engineering Mechanical Engineering Mechanical Engineering Nuclear Engineering Operations Research Polymers Statistics Textile Chemistry Textile Engineering Textiles	Aerospace Engineering Algorithms, Combinatorics, and Optimization Ceramic Engineering Chemical Engineering Civil Engineering Electrical Engineering Engineering Science and Mechanics Environmental Engineering Industrial Engineering Mechanical Engineering Metallurgical Engineering Nuclear Engineering and Health Physics Operations Research Textile Engineering
	Ivan Allen College	
Economics History, Technology, and Society International Affairs Management Management Science Science, Technology, and Culture	Economics History of Technology Information, Design, and Technology Management Public Policy Statistics	Economics Management History of Technology
	College of Sciences	
Applied Biology Applied Mathematics Applied Physics Applied Psychology Chemistry Discrete Mathematics Earth and Atmospheric Sciences Physics	Applied Biology Applied Mathematics Applied Physics Chemistry Earth and Atmospheric Sciences Physics Psychology Statistics	Algorithms, Combinatorics, and Optimization Applied Biology Biochemistry Chemistry Earth and Atmospheric Sciences Mathematics Physics Psychology
Source: Office of the Registrar	INTRODUCTION	

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Sti	ude	nt	Pr	ofi	les
	<b></b>	- M.H. &			

Georgia Institute of Technology

# QUICK FACTS

# Students

• The Georgia Tech Cumulative Average SAT for 1992-93:

Ve	rbal	Math	Composite
M	F	M F	
558	548	673 634	1,218

• Admissions, Fall Quarter 1993:

	Number	Number	% of Applied	Number	% of Applied	% of Accepted
	Applied	Accepted	Accepted	Enrolled	Enrolled	Enrolled
Freshman	7,837	4,527	58%	1,753	22%	39%
Transfer	1,087	416	38%	334	31%	80%
Graduate	5,013	2,026	37%	1,048	20%	54%

- The President's Scholarship Program has 258 students enrolled for the 1993-94 academic year
- Students at Georgia Tech represent 80 different countries; 263 undergraduate and 950 graduate
- Fall Quarter 1993 Enrollment by College:

	Undergraduate	
Architecture		571
Computing		449
Engineering	6,	,174
Ivan Allen	1,	,086
Sciences		865
	Graduate	
Architecture		291
Computing		233
Engineering	2,	266
Ivan Allen	·	268
Sciences		537

Fall Quarter 1993 Graduate Enrollment by Degree Program

Architecture	Computing	Engineering	lvan Allen	Sciences	Total
M.S. Ph.D.	M.S. Ph.D.	M.S. Ph.D.	M.S. Ph.D.	M.S. Ph.D.	M.S. Ph.D.
254 36	95 128	1,160 1,096	254 36	93 430	1,856 1,726

• Degrees Conferred (Summer through Spring Quarters), FY '93

G 11	D 1 1 1		DI D
College	Bachelor's	Master's	Ph.D.
Architecture	164	72	7
Computing	87	69	15
Engineering	1,234	723	124
Ivan Allen	362	119	4
Sciences	127	65	46

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# SCHOLASTIC APTITUDE TEST SCORES

Table 2.1 Averages for Entering Freshman, Academic Years 1983-84 to 1992-93

	Ve	erbal	N	<b>I</b> ath	
Year	Male	Female	Male	Female	Composite
	Georgia	Tech Cumulative Em	collment Average S	SAT*	
1992-93	558	548	673	634	1,218
1991-92	541	529	660	617	1,187
1990-91	538	529	655	625	1,183
1989-90	536	520	649	607	1,172
1988-89	537	530	649	612	1,175
1987-88	542	534	656	616	1,188
1986-87	535	528	649	610	1,174
1985-86	526	521	634	600	1,151
1984-85	526	513	631	601	1,147
1983-84	521	525	636	600	1,149
		National Avera	age SAT*		
1992-93	428	420	502	457	904
1991-92	428	419	499	456	899
1990-91	426	418	497	453	896
1989-90	429	419	499	455	900
1988-89	434	421	500	454	903
1987-88	435	422	498	455	904
1986-87	435	425	500	453	906
1985-86	437	426	501	451	906
1984-85	433	420	495	449	897
1983-84	430	420	493	445	893

<sup>\*</sup> SAT = Scholastic Aptitude Test

Source: Office of the Registrar

# **ADMISSIONS**

Table 2.2 Freshman Admissions

	Number Applied	Number Accepted	%of Applied Accepted	Number Enrolled	% of Applied Enrolled	% of Accepted Enrolled
		Year and	College, Fall Quarter	s 1990-1993		
Fall 1990						
Architecture	505	271	54	118	23	44
Computing	159	98	62	47	30	48
Engineering	3,965	2,856	72	1,138	28	40
Ivan Allen	490	282	58	117	24	41
Sciences	724	521	72	185	26	36
Total	5,843	4,028	69	1,605	27	40
Fall 1991						
Architecture	577	263	46	114	20	43
Computing	237	135	57	62	26	46
Engineering	4,622	3,041	66	1,247	27	41
Ivan Allen	618	312	50	145	23	46
Sciences	916	570	62	193	21	34
Total	6,970	4,321	62	1,761	25	41
Fall 1992						
Architecture	527	193	37	86	16	45
Computing	361	161	45	72	20 .	45
Engineering	5,456	2,950	54	1,237	23	42
Ivan Allen	694	302	44	130	19	43
Sciences	1043	544	52	160	15	29
Total	8,081	4,150	. 51	1,685	21	41
Fall 1993						
Architecture	564	228	40	93	16	41
Computing	378	208	55	97	26	47
Engineering	5,216	3,140	60	1,244	24	40
Ivan Allen	607	293	48	127	21	43
Sciences	1,072	658	61	192	18	29
Total	7,837	4,527	58	1,753	22	39
		Ethn	ic Origin, Fall Quarte	r 1993		
Asian	865	407	47	141	16	35
Asian Black	1,255	476	38	151	12	32
Hispanic	427	228	53			34
Indian	15	7	47	78 1	18 7	14
White	5,275	3,409	65	1,382	26	41
		G	ender, Fall Quarter 19	993		
Male	5,820	3,383	58	1,335	23	39
Female	2,017	3,363 1,144	57	418	21	39 37
remaie	2,017	1,144	31	410	21	31

Source: Office of the Registrar

# ADMISSIONS

Table 2.3 Transfer Admissions

	Number	Number	% of Applied	Number	% of Applied	% of Accepted				
	Applied	Accepted	Accepted	Enrolled	Enrolled	Enrolled				
	Year and College, Fall Quarters 1990-93									
Fall 1990										
Architecture	117	24	21	21	18	88				
Computing	59	23	39	17	29	74				
Engineering	573	266	46	203	35	76				
Ivan Allen	112	38	34	27	24	71				
Sciences	162	80	49	62	38	78				
Total	1,023	431	42	330	32	77				
Fall 1991										
Architecture	101	15	15	11	11	73				
Computing	47	16	34	11	23	69				
Engineering	593	278	47	233	39	84				
Ivan Allen	154	37	24	30	19	81				
Sciences	154	80	52	66	43	83				
Total	1,050	426	41	351	. 33	82				
Fall 1992										
Architecture	71	10	14	8	11	80				
Computing	44	17	39	15	34	88				
Engineering	618	292	47	237	38	81				
Ivan Allen	113	41	36	34	30	83				
Sciences	163	89	55	72	44	81				
Total	1,009	449	44	366	36	82				
Fall 1993										
Architecture	90	13	14	9	10	69				
Computing	61	13	21	7	12	54				
Engineering	656	279	43	219	33	78				
Ivan Allen	96	24	25	22	23	92				
Sciences	184	87	47	77	42	89				
Total	1,087	416	38	334	31	80				
		Ethni	ic Origin, Fall Quarter	1993						
Asian	136	43	32	32	24	74				
Black	235	82	35	69	29	84				
Hispanic	57	18	32	12	21	66				
Indian	2	0	0	0	0	0				
White	663	273	41	223	34	82				
		G	ender, Fall Quarter 199	93						
Male	778	304	39	247	32	81				
Female	315	112	36	89	28	79				

Source: Office of the Registrar

# **ADMISSIONS**

**Table 2.4 Graduate Admissions** 

	Number Applied	Number Accepted	% of Applied Accepted	Number Enrolled	% of Applied Enrolled	% of Accepted Enrolled
	Арриец		and College, Fall Quar		Linoned	Lindica
		1 ear a	mu Conege, Fan Quar			
Fall 1990						
Architecture	275	133	48	77	28	58
Computing	437	104	24	45	10	43
Engineering	2,056	1,032	50	536	26	52
Ivan Allen	327	173	53	107	33	62
Sciences	618	253	41	111	18	44
Total	3,713	1,695	46	876	24	52
Fall 1991						
Architecture	335	141	42	97	29	69
Computing	487	179	37	84	17	47
Engineering	2,309	1,212	52	624	27	51
Ivan Allen	426	201	47	126	30	63
Sciences	659	234	36	130	20	56
Total	4,216	1,967	47	1,061	25	54
Fall 1992						
Architecture	336	151	45	98	29	65
Computing	582	135	23	50	9	37
Engineering	2,480	1,277	51	671	27	53
Ivan Allen	486	211	43	114	23	54
Sciences	763	245	32	124	16	51
Total	4,647	2,019	43	1,057	23	52
Fall 1993						
Architecture	506	205	41	114	23	56
Computing	474	132	28	69	15	52
Engineering	2,754	1,242	45	611	22	49
Ivan Allen	561	251	45	135	24	54
Sciences	718	196	27	119	17	61
Total	5,013	2,026	37	1,048	20	54
		Et	hnic Origin, Fall Quar	ter 1993		
Asian	1,886	415	22	203	11	49
Black	439	173	39	105	24	61
Hispanic	240	99	41	51	21	52
Indian	3	3	0	0	0	0
White	2,445	1,340	55	689	28	52
			Gender, Fall Quarter	1993		
Male	3,882	1,533	39	767	20	50
Female	1,131	494	44	281	25	57

### **ADMISSIONS**

Fig. 2.1. Percent of Admitted Freshman Enrolled, Fall Quarters 1990-93

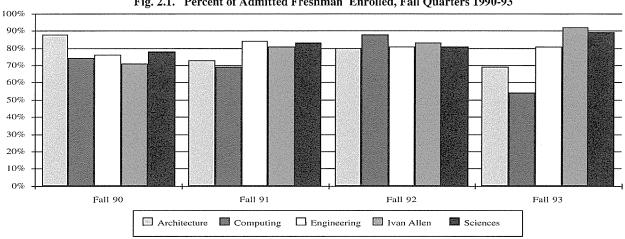


Fig. 2.2. Percent of Admitted Transfers Enrolled, Fall Quarters 1990-93

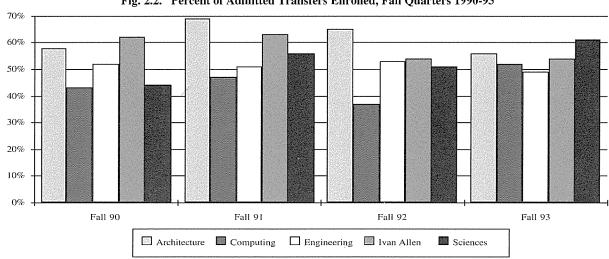
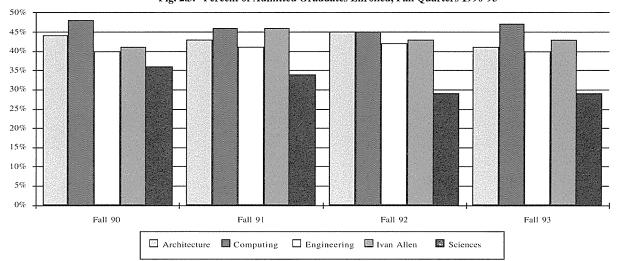


Fig. 2.3. Percent of Admitted Graduates Enrolled, Fall Quarters 1990-93



# **ADMISSIONS**

Table 2.5 Sources of Ten or More Entering Freshmen

High School	Location	Number of Students
Alan C. Pope	Marietta, GA	28
Shiloh	Lithonia, GA	23
Brookwood	Snellville, GA	22
George Walton Comprehensive	Marietta, GA	21
Parkview	Lilburn, GA	21
Wheeler	Marietta, GA	20
Dunwoody	Dunwoody, GA	19
Lassiter	Marietta, GA	18
Roswell	Roswell, GA	16
Redan	Stone Mountain, GA	15
Woodward Academy	College Park, GA	15
Marist School (The)	Atlanta, GA	14
Chattahoochee	Atlanta, GA	12
McIntosh	Peachtree City, GA	12
Stone Mountain	Stone Mountain, GA	12
Evans	Evans, GA	11
Lakeside	Atlanta, GA	11
McEachern	Powder Springs, GA	11
Milton	Alpharetta, GA	11
Sprayberry Senior	Marietta, GA	11
Campbell	Smyrna, GA	10
Central Gwinnett	Lawrenceville, GA	10
Jonesboro Senior	Jonesboro, GA	10
Rockdale County	Conyers, GA	10
Sequoyah	Canton, GA	10

Table 2.6 Student Financial Aid Awards, Academic Years 1990-91 to 1991-92\*

	199	00-91		1991-92
	Number of	Amount of	Number	of Amount of
Award	Awards	Awards	Awards	Awards
	Georgia Tech	n Awards		
Perkins Loans (National Direct Student Loans)	1,208	\$1,259,909	1,170	\$1,469,684
Supplementary Educational Opportunity Grants	404	273,483	643	379,744
College Work-Study Program	129	131,787	197	179,883
Pell Grants	1,067	1,537,155	1,367	2,045,774
Subtotal Federal Funds	2,808	\$3,202,334	3,277	\$4,075,085
Georgia Tech National Merit	302	\$254,517	236	\$279,681
Georgia Tech National Achievement	15	\$19,083	16	21,333
Subtotal Merit/Achievement	317	\$273,600	252	\$301,014
Institutional Scholarships	2,466	\$3,073,756	3,375	4,974,670
Georgia Tech Long-term Loans	92	119,398	163	207,984
Short-term Loans	568	646,726	428	458,496
Emergency Loans	56	14,660	76	11,760
Subtotal Institutional Aid	3,182	\$3,854,540	4,042	\$5,652,910
Total Georgia Tech Aid	6,307	\$7,330,474	7,571	10,029,009
	Outside A	wards		
Georgia Incentive Scholarships	315	\$222,878	380	\$281,430
Georgia Governor's Scholarships	264	356,258	298	399,195
Miscellaneous Scholarships	875	1,175,239	892	1,178,476
Miscellaneous Grants	16	10,619	20	9,650
Stafford Loans	1,994	5,492,018	2,064	5,801,824
Miscellaneous Loans	33	53,620	64	255,531
PLUS/SLS Loans	556	\$1,916,522	699	\$2,468,878
Total Outside Aid	4,053	\$9,227,154	4,417	\$10,394,983

<sup>\* 1992-93</sup> numbers not available as of publication date

Source: Office of the Director, Student Financial Planning and Services

#### President's Scholarship Program

In 1981, the Georgia Institute of Technology awarded President's Scholarships for the first time, honoring exceptional young people with high intellectual talents, outstanding leadership ability, and a desire to meet the challenge of the future. President's Scholars are expected to represent the ideal of excellence at Georgia Tech. For the 1993-94 academic year, 258 students are enrolled in the program.

Scholarship winners are selected on the basis of SAT scores (1350 or above for Georgia residents, 1400 or above for nonresidents), high school record, leadership and activities, a personal essay, and recommendations by one high school mathematics or science teacher and one humanities teacher, and personal interviews. Qualified Georgia residents are interviewed by a Regional Committee. Finalists and their parents are invited to the campus for a second interview and to meet the Scholarship Committee, other administrators, students, and members of the faculty.

Awards made under the President's Scholarship Program may be renewed annually for a maximum of four years or until the first undergraduate degree is obtained. Renewal of the scholarship requires that the scholar maintain a strong academic/leadership record.

Table 2.7 Program Summary

	Mean	Mean	Geo	orgia	Out-o	f-State	
Entering Year	HSA	SAT	Male	Female	Male	Female	Total
1984-85	3.9	1432	25	10	7	2	44
1985-86	3.9	1437	32	8	20	3	63
1986-87	3.9	1428	36	8	23	2	69
1987-88	3.9	1434	35	11	19	3	68
1988-89	3.9	1429	32	13	28	7	80
1989-90	3.9	1437	40	3	21	7	71
1990-91	3.9	1427	34	14	19	4	71
1991-92	3.9	1418	31	14	11	4	60
1992-93	3.9	1435	19	9	13	7	48
1993-94	3.9	1440	27	4	13	4	48
Program Totals	_		311	94	174	43	622

Source: Office of the President

Table 2.8 National Merit and Achievement Scholars

	All Institutions			Public Institu	tions		
Ran	k Institution	# of Scholars	Rank	Institution	Freshman Enrollment	# of Scholars	% of Clas
		Nation	ıal Merit	Scholars			
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11.	Harvard/Radcliffe Colleges Rice University University of Texas, Austin Stanford University Texas A&M University Yale University Princeton University University of Florida Massachusetts Institute of Technology University of Oklahoma Brigham Young University Georgia Institute of Technology	383 227 212 152 140 139 137 130 121 118 110	1. 2. 3. 4. 5.	Georgia Institute of Technology University of Oklahoma University of Texas University of Florida Texas A&M	1,691 2,422 5,157 3,174 6,006	104 118 212 130 140	6.15 4.87 4.11 4.09 2.33
		National A	chieven	nent Scholars			
1 2 3 4 5 6	<ul><li>Harvard/Radcliffe Colleges</li><li>Stanford University</li><li>University of Oklahoma</li><li>Duke University</li></ul>	73 49 28 27 23 21	1. 2. 3.	Florida A&M Georgia Institute of Technology University of Oklahoma	1,328 1,691 2,422	73 21 27	5.49 1.24 1.11

Source: Office of the Director, Admissions

#### **Graduate Financial Assistance**

#### President's Minority Fellowships

President's Minority Fellowships were established in 1986 through the support of the Georgia Tech Foundation and are awarded to minority students intending to pursue a doctorate. In 1992-93, there were 31 President's Minority Fellows.

#### President's Minority Research Fellowships

These fellowships were established in 1991 through the support of the Georgia Tech Research Corporation and are awarded to minority doctoral research assistants. The award provides a \$4,000 annual supplement to the research assistantship in the academic unit, center, or laboratory. In 1992-93 there were nine President's Minority Research Fellows.

#### Regents' Opportunity Scholarships

Georgia Tech has participated in the Regents' Opportunity Scholarship Program since 1978. Since then, 78 blacks, 6 hispanics, 1 native American, and 60 non-minority women have been supported on Regents' Opportunity Scholarships. Eleven of these students have completed the Ph.D. degree, and 78 have received master's degrees. Fourteen Regents' Scholars are enrolled currently.

#### Patricia Roberts Harris Fellowship Program

Georgia Tech has participated in this program (formerly G\*POP) since 1978 with the exception of one year (1984-85), and served as the Regional Resource Center from 1978 through 1982. Funded by the Department of Education, this program provides fellowships for minorities and women for graduate study in fields in which they are underrepresented. As of spring quarter 1993, 56 blacks, 9 hispanics, 1 Asian, and 48 non-minority women have been supported with G\*POP or P. R. Harris Fellowships. Of these, six have completed a Ph.D. and 71 have received master's degrees. Eleven Patricia Roberts Harris Fellows were enrolled during 1992-93.

#### **National Consortium for Educational Access Fellowships**

Georgia Tech is an active member of the National Consortium for Educational Access (NCEA), which was established in 1985 and is a partnership agreement between historically black colleges and majority institutions of higher education. Fellowships of \$3,000 per academic year are awarded to black doctoral students to supplement the school's normal awards. Fifteen NCEA Fellowships were awarded to Georgia Tech students for 1992-93.

#### President's Fellowship Program

President's Fellowships were established in 1973 to enhance the scope and quality of Georgia Tech's Ph.D. programs. Through support of the Georgia Tech Foundation, President's Fellowships are offered annually to a select number of highly qualified U.S. nationals who intend to pursue doctoral degrees. President's Fellowships provide \$4,000 stipends, which supplement other support offered by the academic units. Since the inception of the President's Fellowship Program in fall quarter 1973, 650 awards have been made. As of spring quarter 1993, 262 were enrolled.

#### General Electric Foundation Ph.D. Forgivable Loan Program

Doctoral candidates in engineering and computer science who are U.S. citizens and plan to pursue an academic career may receive up to \$5,000 per year from this program. Recipients earn loan forgiveness by teaching in a U.S. college or university.

#### Domenica Rea D'Onofrio Graduate Fellowships

Approximately \$8,000 per year may be awarded in this fellowship program to native-born citizens of Italy.

#### **Tuition Waivers**

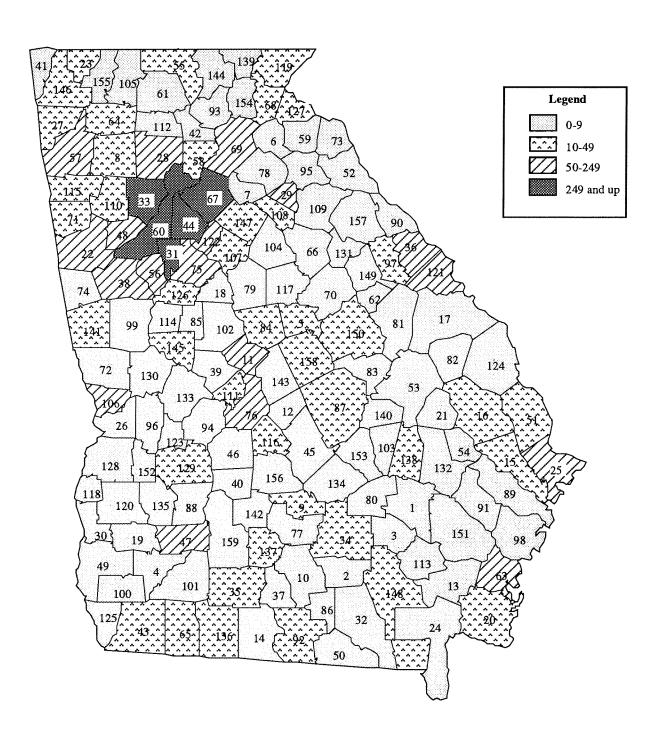
Outstanding students who are not residents of Georgia may receive out-of-state tuition waivers. Approximately 150 of these are awarded annually.

Table 2.9 President's Fellowship Survey

Academic Year	New Fellows	Awarded Terminal M.S.	Awarded Ph.D.	Ph.D.s Completed in Award Year	
1983-84	8	5	2	6	
1984-85	11	4	5	5	
1985-86	12	4	6	6	
1986-87	9	3	5	5	
1987-88	71	30	19	4	
1988-89	75	23	17	5	
1989-90	67	30	5	7	
1990-91	90	14	1	8	
1991-92	81	0	0	15	
1992-93	76	2	0	26	

Source: Office of the Associate Vice President for Graduate Studies and Research

Fig. 2.4. Enrollment by Georgia County of Residence, Fall Quarter 1993



Note: Number in counties correspond to county numbers in table 2.10 on page 44.

Table 2.10 Students Enrolled by Georgia County, Fall Quarter 1993

County	(1)	(2)	(3)	County	(1)	(2)	(3)	County	(1)	(2)	(3)
County	(1)	(2)	(3)	County	(1)	(2)	(3)	County	(1)	(2)	
<ol> <li>Appling</li> </ol>	6	0	6	54. Evans	3	1	4	107. Newton	18	2	20
2. Atkinson	0	0	0	55. Fannin	7	0	7	108. Oconee	11	1	12
3. Bacon	1	0	1	56. Fayette	157	9	166	109. Oglethorpe	5	0	5
4. Baker	2	0	2	57. Floyd	54	5	58	110. Paulding	19	1	20
5. Baldwin	22	2	24	58. Forsyth	27	2	29	111. Peach	6	1	7
6. Banks	3	0	3	59. Franklin	4	0	4	112. Pickens	7	1	8
7. Barrow	11	2	13	60. Fulton	788	303	1,091	113. Pierce	3	0	3
8. Bartow	34	9	43	61. Gilmer	5	0	5	114. Pike	9	0	9
9. Ben Hill	10	0	10	62. Glascock	1	0	1	115. Polk	17	0	17
10. Berrien	6	0	6	63. Glynn	44	4	48	116. Pulaski	4	0	4
11. Bibb	86	8	94	64. Gordon	24	2	26	117. Putnam	6	0	6
12. Bleckley	5	1	6	65. Grady	10	1	11	118. Quitman	2	0	2
13. Brantley	1	0	1	66. Greene	5	2	7	119. Rabun	7	1	8
14. Brooks	4	0	4	67. Gwinnett	720	138	858	120. Randolph	1	0	1
15. Bryan	2	2	14	68. Habershar	n 22	2	24	121. Richmond	99	17	116
16. Bulloch	20	2	22	69. Hall	86	3	89	122. Rockdale	77	11	88
17. Burke	9	1	10	70. Hancock	1	0	1	123. Schley	0	0	0
18. Butts	7	1	8	71. Haralson	3	2	5	124. Screven	6	1	7
19. Calhoun	6	0	6	72. Harris	8	2	10	125. Seminole	3	0	3
20. Camden	19	1	20	73. Hart	14	1	15	126. Spalding	33	4	37
21. Candler	3	0	3	74. Heard	3	0	3	127. Stephens	21	3	24
22. Carroll	51	6	57	75. Henry	47	3	50	128. Stewart	0	1	1
23. Catoosa	29	2	31	76. Houston	56	6	62	129. Sumter	19	1	20
24. Charlton	1	0	1	77. Irwin	2	1	3	130. Talbot	0	0	0
25. Chatham	132	15	147	78. Jackson	9	1	10	131. Taliaferro	0	0	0
26. Chattahooc		0	1	79. Jasper	2	1	3	132. Tattnall	6	0	6
27. Chattooga	8	0	8	80. Jeff Davis	2	0	2	133. Taylor	0	0	0
28. Cherokee	65	16	81	81. Jefferson	3	0	3	134. Telfair	1	0	1
29. Clarke	36	12	48	82. Jenkins	2	0	2	135. Terrell	2	0	2
30. Clay	2	0	2	83. Johnson	2	0	2	136. Thomas	10	1	11
31. Clayton	214	19	233	84. Jones	8	2	10	137. Tift	13	0	13
32. Clinch	1	0	1	85. Lamar	6	1	7	138. Toombs	20	0	20
33. Cobb	827	194	1,021	86. Lanier	0	0	0	139. Towns	4	0	4
34. Coffee	9	0	, 9	87. Laurens	19	1	20	140. Treutlen	1	0	1
35. Colquitt	9	0	9	88. Lee	10	0	10	141. Troup	37	5	42
36. Columbia	107	11	118	89. Liberty	11	1	12	142. Turner	0	0	0
37. Cook	4	0	4	90. Lincoln	9	1	10	143. Twiggs	2	0	2
38. Coweta	44	9	53	91. Long	1	0	1	144. Union	2	0	2
39. Crawford	5	0	5	92. Lowndes	37	8	45	145. Upson	12	0	12
40. Crisp	6	0	6	93. Lumpkin	6	0	6	146. Walker	18	5	23
41. Dade	1	0	1	94. Macon	8	0	8	147. Walton	13	1	14
42. Dawson	2	1	3	95. Madison	5	0	5	148. Ware	19	2	21
43. Decatur	10	2	12	96. Marion	2	1	3	149. Warren	2	1	3
44. DeKalb	823	240	1,063	97. McDuffie	7	0	7	150. Washington		0	16
45. Dodge	7	1	8	98. McIntosh	3	0	3	151. Wayne	3	0	3
46. Dooly	1	0	1	99. Meriweth		0	6	152. Webster	0	0	0
47. Dougherty	73	2	75	100. Miller	3	0	3	153. Wheeler	2	0	2
48. Douglas	73	8	81	101. Mitchell	2	0	2	154. White	5	0	5
49. Early	5	1	6	102. Monroe	7	0	7	155. Whitfield	52	3	55
50. Echols	0	0	0	103. Montgom		0	ó	156. Wilcox	4	1	5
51. Effingham	17	1	18	104. Morgan	7	1	8	157. Wilkes	7	0	7
52. Elbert	10	1	11	105. Murray	2	2	4	158. Wilkinson	3	1	4
53. Emanuel	8	0	8	106. Muscogee		9	99	159. Worth	4	0	4
JJ. Linanuci	o	U	O	100. Muscoget	, ,0	2	22		838	1,152	6,990
								IUIAL 3,	0.00	1,122	0,230

 $\it Note: \ Column \ headings \ are \ as follows: (1) \ Undergraduate; (2) \ Graduate; \ and (3) \ Total.$ 

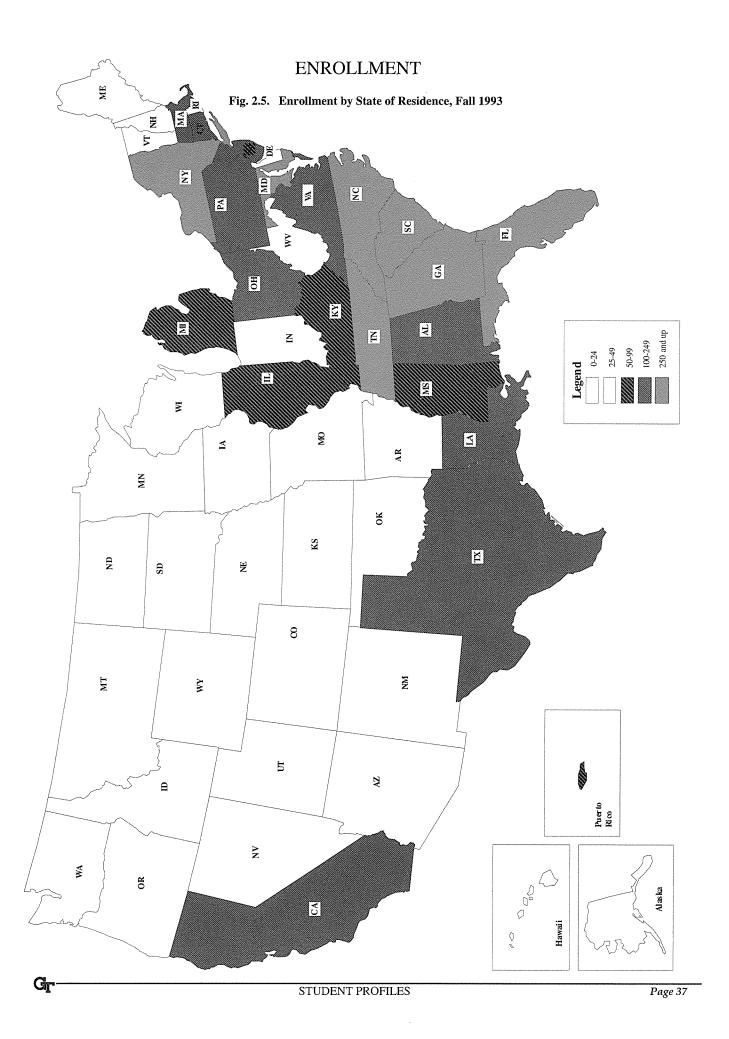


Table 2.11 Students Enrolled by State of Residence, Fall 1993

-	Institute		Undergr	aduate			Grad		
State	Total	Male	Female	Minority	Total	Male	Female	Minority	Tota
Alabama	246	127	37	38	164	63	19	51	82
Alaska	4	2	1	1	3	0	1	0	1
Arizona	19	6	1	2	7	12	0	2	12
Arkansas	27	16	1	1	17	8	2	1	10
California	132	24	18	22	42	72	18	30	90
Colorado	40	14	5	3	19	19	2	3	21
Connecticut	86	59	5	13	64	17	5	2	22
Delaware	18	11	1	4	12	3	3	3	6
District of Columbia	12	6	1	4	7	1	4	2	5
Florida	870	553	129	183	682	162	26	49	188
Georgia	6,993	4,198	1,642	1,112	5,840	841	312	199	1,153
Hawaii	12	7	1	3	8	2	2	1	4
Idaho	5	3	0	0	3	2	0	1	2
Illinois	93	28	12	14	40	38	15	11	53
Indiana	44	14	6	4	20	17	5	4	22
Iowa	9	0 -	1	0	1	7	1	0	8
Kansas	13	5	2	0	7	4	2	1	6
Kentucky	87	48	6	7	54	29	4	6	33
Louisiana	107	54	20	6	74	24	9	21	33
Maine	6	· 2	3	0	5	1	0	0	1
Maryland	159	83	29	26	112	35	12	7	47
Massachusetts	105	56	7	9	63	31	11	2	42
Michigan	69	17	16	12	33	24	12	6	36
Minnesota	25	5	1	I	6	17	2	6	19
Mississippi	59	21	9	13	30	21	8	11	29
Missouri	39	14	3	3	17	18	4	4	22
Montana	4	1	1	0	2	1	I	1	2
Nebraska	11	1	2	0	3	8	0	1	8
Nevada	9	4	1	1	5	3	1	0	4
New Hampshire	16	13	1	1	14	2	0	0	2
New Jersey	174	97	21	25	118	47	9	23	56
New Mexico	21	7	1	3	8	11	2	2	13
New York	279	155	39	76	191	63	22	27	85
North Carolina	269	147	36	31	183	63	23	24	86
North Dakota	1	0	0	0	0	1	0	0	1
Ohio	126	62	17	17	79	33	14	7	47
Oklahoma	24	7	2	3	9	10	5	0	15
Oregon	13	4	2	1	6	7	0	0	7
Pennsylvania	171	74	28	21	102	48	21	10	69
Rhode Island	16	10	2	2	12	4	0	1	4
South Carolina	354	217	68	97	285	55	14	15	69
South Dakota	1	0	0	0	0	0	1	0	1
Tennessee	294	162	47	35	209	69	16	17	85
Texas	140	52	32	20	84	48	8	6	56
Utah	8	2	0	0	2	5	1	0	6
Vermont	10	4	2	0	6	4	0	1	4
Virginia	236	116	42	23	158	66	12	18	78
Washington	30	9	3	4	12	16	2	5	18
West Virginia	25	18	5	2	23	2	0	1	2
Wisconsin	18	5	2	2	7	9	2	1	11
Wyoming	1	. 0	0	0	0	1	0	0	1
Other U.S. Territories			•	50	50	2.4	10	2.4	2 :
Puerto Rico	93	50	9	58	59	24	10	34	34
Virgin Islands	10	7	2 222	5	9	1	0	1	0
Total	11,633	6,597	2,322	1,908	8,916	2,069	643	618	2,711

Source: Office of the Registrar

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Table 2.12 Students Enrolled by Country of Residence, Fall 1993

Country	(1)	(2)	(3)	Country	(1)	(2)	(3)
Anguilla	0	1	1	Israel	1	4	5
Antigua & Barbuda	0	1	1	Italy	1	4	5
Argentina	2	5	7	Jamaica	2	3	5
Australia	0	1	1	Japan	15	15	30
Bahamas	3	0	3	Jordan	2	7	9
Bangladesh	6	6	12	Kenya	1	2	3
Belgium	4	1	5	Kuwait	0	3	3
Bolivia	1	0	I	Latvia	1	0	1
Brazil	3	13	16	Lebanon	33	12	45
British Indian Ocean	0	1	1	Liberia	1	1	2
British Virgin Islands	1	0	1	Malaysia	7	6	13
British West Indies	0	1	1	Mexico	1	10	11
Bulgaria	0	1	1	Morocco	1	2	3
Burma	0	2	2	Netherlands	ī	1	2
Cameroon	1	0	1	Neutral Zone	Î	0	1
Canada	1	11	12	Nicaragua	1	0	1
Chile	2	1	3	Nigeria	Ô	2	2
China	12	197	209	Norway	1	4	5
Colombia	4	8	12	Pakistan	14	27	41
Costa Rica	8	2	10	Panama	12	0	12
Cyprus	Ö	1	1	Peru	4	2	6
Czechoslovakia	0	6	6	Philippines	2	4	6
Denmark	0	2	2	Poland	0	i	1
Dominican Republic	1	6	7	Portugal	1	2	3
Ecuador	2	1	3	Quatar	0	1	1
Egypt	1	6	7	Republic of Korea	9	92	101
El Salvador	3	0	3	Romania	0	12	12
England	3	2	5	Russia	2	0	2
Ethiopia	2	0	2	Saudi Arabia	0	11	11
Fed Republic of Germany		40	41	Sierra Leone	1	0	1
Finland	1	I	2	Singapore	0	3	3
France	7	47	54	South Africa	1	4	5
German Dem Republic	2	0	2	Spain	3	7	10
Germany (Berlin)	0	1	1	Sri Lanka	2	2	4
Ghana	I	3	4	Sweden	2	0	2
Great Britain	5	1	6	Switzerland	1	6	7
Greece	3	14	17	Syrian Arab Republic	1	2	3
Guatemala	3	0	3	Taiwan Rep of China	10	65	75
Guyana	0	1	1	Thailand	10	10	11
Haiti	0	I	1	Tunisia	1	7	8
Honduras	3	0	3	Turkey	2	26	28
Hong Kong	5	9	14	USSR	0	7	7
Iceland	0	1	14	Venezuela	3	14	17
India	15	144	159	Yemen	1	0	1
Indonesia	7	10	139	Yugoslavia	0	2	2
	2	0	2	Y ugosiavia Zimbabwe	1	1	2
Ireland Islamic Pen of Iran	4	17	21		-	-	
Islamic Rep of Iran	4	1 /	21	TOTAL	263	950	1,213

Note: Column headings are as follows: (1) Undergraduate; (2) Graduate; and (3) Total.

Table 2.13 Class Enrollment by Gender and Ethnicity, Fall 1993

	,	\ aiam		lack			American				Non-USA		
Class		Asian _		Hispanic		spanic	Indi		Wh			ident*	
Class	M	F	M	F	M	F	M	F	M	F	M	F	
				Un	dergrad	uate							
JEPHS**	1	0	0	0	0	0	0	0	15	5	0	0	
Freshman	141	59	141	70	76	22	1	1	1,357	429	37	9	
Sophomore	146	40	110	73	67	14	2	1	1,175	408	47	7	
Junior	143	69	112	105	58	19	2	1	1,161	352	57	8	
Senior	201	69	125	104	62	20	3	1	1,679	464	78	14	
Special Undergraduate	4	3	12	10	0	2	0	0	28	19	6	0	
Total Undergraduate	636	240	500	362	263	77	8	4	5,415	1,677	225	38	
					Gradua	<u>:e</u>							
Master's	226	65	102	55	70	21	4	0	1,015	298	221	56	
Ph.D.	463	71	72	41	55	8	4	1	795	2.16	556	89	
Special Graduate	5	0	3	0	0	0	0	0	56	18	22	6	
Total Graduate	694	136	177	96	125	29	8	1	1,866	532	799	151	
					Institut	<u>e</u>							
Total	1,330	376	677	458	388	106	16	4	7,281	2,209	1,024	189	

Note: The nonresident students are included within the preceding columns.
 \*\* JEPHS = Joint Enrollment Program for High School Students

Table 2.14 Class Enrollment by Gender and Year

		1989		1	990		1	1991			1992		1	993	
	M	F	Total												
						Uı	ndergradua	te							
JEPHS	9	5	14	20	2	22	11	3	14	14	5	19	16	5	21
Freshman Sophomore	1,964 1,633	589 490	2,553 2,123	1,794 1,659	626 495	2,420 2,154	1,926 1,434	638 530	2,564 1,964	1,751 1,488	640 530	2,391 2,018	1,716 1,500	581 536	2,297 2,036
Junior	1,487	471	1,958	1,555	511	2,066	1,650	487	2,137	1,464	545	2,009	1,476	546	2,022
Senior	2,404	580	2,984	2,625	562	3,187	2,086	642	2,728	2,532	614	3,146	2,070	658	2,728
Special Undergradu	iate 33	18	51	56	20	76	57	23	80	61	41	102	44	34	78
							Graduate								
Master's	1,216	313	1,529	1,279	363	1,642	1,410	413	1,823	1,475	424	1,899	1,417	439	1,856
Ph.D.	988	190	1,178	1,055	226	1,281	1,172	274	1,446	1,282	304	1,586	1,389	337	1,726
Special Graduate	47	12	59	37	11	48	43	15	58	66	21	87	64	18	82
							Institute								
Total	9,781	2,668	12,449	10,080	2,816	12,896	9,789	3,025	12,814	10,133	3,124	13,257	9,692	3,154	12,846

Table 2.15 Undergraduate Enrollment by College, Ethnicity, and Gender, Fall Quarter 1993

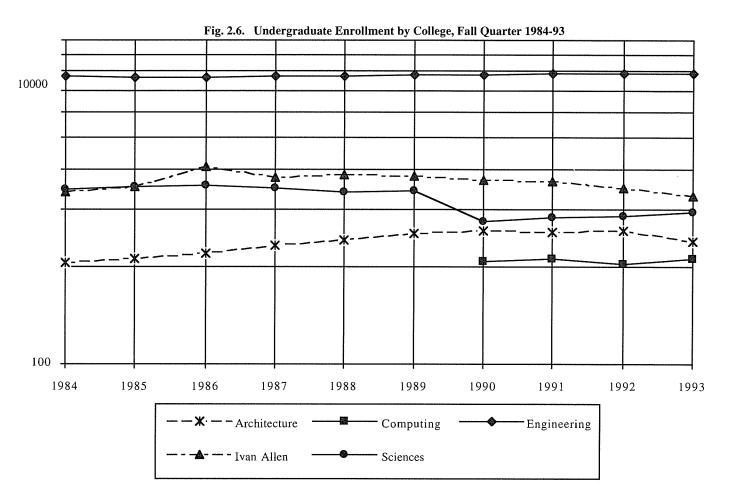
				lack			Amer				
		Asian		Hispanic	-	oanic -	Indi			White	
School	M	F	M	F	M	F	M	F	M	F	Tota
			_	Architec	ture						
Architecture	24	20	11	10	9	6	0	0	198	89	367
Building Construction	6	0	4	2	1	0	0	0	60	15	88
Industrial Design	8	5	5	2	0	2	0	0	72	22	116
Undeclared Architecture	0	0	0	0	0	0	0	0	0	0	1
Total Architecture	38	25	20	14	10	8	0	0	330	126	57
				Comput	ing						
Computer Science	38	6	23	9	11	1	0	0	326	34	449
Information and Computer Sci.	0	0	0	0	0	0	0	0	0	0	(
			23	9	11		0	0		34	449
Total Computing	38	. 6	23	9	11	1	U	U	326	34	445
			-	Engineer	ring						
Aerospace	19	1	19	8	10	3	0	0	228	46	354
Ceramic	0	0	2	0	0	0	0	0	10	5	17
Chemical	56	30	23	57	13	9	1	1	375	155	740
Civil	27	12	20	20	23	3	1	0	410	113	63
Computer Engineering	43	5	29	8	12	3	0	0	199	12	31
Electrical	187	33	118	62	39	4	2	0	755	69	1,269
Eng. Sci. and Mechanics	1	0	0	1	0	0	0	0	28	0	30
ndustrial and Systems	87	35	26	61	35	9	0	0	418	194	81:
	5	0	20	2	2	1	0	0	73	8	9:
Materials	_	-					-				
Mechanical	64	6	67	32	52	6	1	0	768	118	1,11:
Nuclear Eng. and Health Phys.	3	1	4	0	0	0	1	0	45	9	6.
Textiles	2	1	9	2	0	1	0	0	19	10	44
Textile Chemistry	1	2	1	3	0	1	0	0	21	8	37
Textile Engineering	13	2	6	8	3	1	0	0	75	37	145
Undeclared Engineering	- 29	5	20	11	24	5	1	1	350	84	530
Total Engineering	489	133	348	27,5	213	46	7	2	3,785	868	6,174
				Ivan All	len						
Economics	1	2	1	2	2	0	0	0	20	10	38
History, Technology, and Soc.	0	2	2	0	0	0	0	0	22	6	32
International Affairs	3	5	1	4	3	1	0	0	89	67	173
Literature, Comm., and Culture	0	0	0	0	Ő	0	0	0	5	6	11
Management	9	15	70	22	12	3	0	1	391	223	746
Management Science	4	13	3	1	1	0	0	0	20	16	46
	2	0	1	0	1	2	0	0	20 29	17	50
Undeclared Ivan Allen							_				
Total Ivan Allen	19	25	79	29	19	6	0	1	579	348	1,105
				Science	es						
Biology	22	23	6	11	3	5	0	1	102	101	274
Chemistry	13	15	2	6	1	2	0	0	32	58	139
Mathematics	3	5	4	3	3	2	0	0	39	27	83
Physics	9	2	4	2	2	3	0	0	116	21	159
Psychology	0	3	1	0	0	0	0	0	8	27	39
Undeclared Sciences	7	5	13	13	1	4	0	0	73	55	171
Total Sciences	54	51	30	35	10	16	0	1	385	301	883
				Institut	<u>te</u>						
tal	636	240	500	362	263	77	8	4	5,415	1,677	9:354
urce: Office of the Registrar	050	2-10	200	302	203	, ,	J	7	5,415	1,077	411
arce. Office of the Registral											( )

Table 2.16 Graduate Enrollment by College, Ethnicity, and Gender, Fall Quarter 1993

		Asian		Black Hispanic	ıı:	cnonic		erican dian	,	White	
School	M	Asian F	M	F	M	spanic F	M In	cuan F	M		Tota
				Archite	ecture						
Architecture	19	9	6	3	5	3	0	1	95	52	193
City Planning	3	4	8	8	3	2	0	0	50	20	98
Total Architecture	22	13	14	11	8	5	0	1	145	72	291
				Comp	uting						
Computer Science	70	8	17	4	5	3	0	0	98	28	233
Total Computing	70	8	17	4	5	3	0	0	98	28	233
				Engine	ering						
Aerospace	73	6	6	0	3	0	2	0	111	5	206
Ceramic	8	0	1	0	4	0	0	0	6	2	21
Chemical	14	8	6	4	4	0	0	0	43	17	96
Civil	53	0	10	4	26	2	0	0	106	16	217
Electrical	196	16	42	23	30	7	0	0	405	48	807
Eng. Sci. & Mechanics	8	0	2	1	0	0	0	0	13	1	25
Environmental	14	4	3	3	3	2	0	0	45	14	88
Industrial and Systems	42	13	3	6	13	4	1	0	124	45	251
Materials	2	2	0	1	0	0	1	0	6	<del>4</del> 5	13
Mechanical	46	6	34	5	8	0	1	0	187	33	320
Metallurgy and Metal. Engin.		3	2	0	1	1	0	0	13	33 8	38
Nuclear Eng. and Health Phys		3	0	1	5	0	0	0	30	4	57
Textiles	7	1	0	0	0	0	0	0	5		13
Textile Chemistry	1	1	1	0	0	0	0	0	0	0 1	
Textile Engineering	22	8	0	2	0	0	1	0	9	3	4
Total Engineering	515	72	113	51	97	17	6	0	1,210	224	45 2,305
				Ivan_A	llen		-		-,		_,,,,,,,
Economics	0	0	1	0	1	0	0	0	3	3	8
Management	22	6	5	3	4	1	0	0	128	51	220
Public Policy	0	0	0	3	0	0	0	0	14	15	32
Technology and Sci. Policy	0	0	0	0	0	0	0	0	6	1	8
Total Ivan Allen	22	6	6	6	5	1	0	0	139	70	255
				_Scien	ces						
Biology	6	6	4	1	1	1	0	0	17	10	46
Chemistry	10	12	12	9	1	2	0	0	50	22	118
Earth and Atmos. Sciences	17	7	3	2	2	0	0	0	38	14	83
Mathematics	12	. 4	2	7	5	0	1	0	34	20	85
Physics	18	4	6	3	1	0	1	0	70	11	114
Psychology	1	3	0	2	0	0	0	0	42	42	90
Undeclared Sciences	0	0	0	0	0	0	0	0	1	0	1
Total Sciences	64	36	27	24	10	3	2	0	252	119	537
				Institu	ute						
Total	694	136	177	96	125	29	8	1	1,866	532	3,664

Table 2.17 Undergraduate Enrollment by College, 1984-93

School	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
			Arch	itecture						
Architecture			333	373	410	454	476	446	443	367
Building Construction			69	87	83	92	96	98	102	88
Industrial Design	***************************************		75	78	85	91	94	99	112	116
Undeclared Architecture	_				6		1	2	1	0
Total Architecture	423	447	477	538	584	637	667	645	658	571
			Cor	nputing						
Computer Science	******	_	*********		**********	_	427	433	410	449
Information and Computer Science Total Computing		_					427	12 445	1 411	449
Total Computing			Eng	ineering						
			Elig	illecting						
Aerospace	738	692	602	617	530	512	443	389	386	334
Ceramic and Materials	48	55	51	59	68	71	86	100	99	110
Chemical	567	513	504	464	413	416	457	560	693	740
Civil	430	437	450	448	480	467	504	594	607	631
Computer Engineering			1.606	1 (00	1.502	89	189	227	255	311
Electrical	1,692	1,630	1,636	1,629	1,593	1,519	1,395	1,424	1,314	1,269
Engineering Science and Mechanics	100	85	93	82	79	64	60	54	53 797	30
Industrial and Systems	789	827	873	876	909	897	852	861		815
Mechanical	1,037	1,014	990	1,096	1,178	1,227	1,229	1,282	1,247 73	1,115
Nuclear and Health Physics	134	136	149	135	111	101 41	83	72 52	73 53	63 44
Textiles	118	107	26 15	23	29 17	16	43 19	23	24	37
Textile Chemistry			15 57	12 54	66	93		128	132	145
Textile Engineering	214	370		434	530	558	118 578	505	473	530
Undeclared Engineering	314 5,967		392	5,929	6,003	6,071	6,056	6,271	6,206	6,174
Total Engineering	3,907	5,866	5,838		0,003	0,071	0,030	0,271	0,200	0,174
			Iva	n Allen						
Economics			24	37	51	61	64	52	42	38
History, Technology, and Society		-	.philiphysione					8	24	32
International Affairs								85	153	173
Literature, Communication, and Cult	ıre —							6	11	19
Management			1,146	1,235	1,265	1,233	1,162	1,065	889	746
Management Science			108	69	50	56	49	36	41	46
Undeclared Management			75	80	107	99	88	77	67	50
Total Ivan Allen	1,141	1,241	1,353	1,421	1,473	1,449	1,363	1,329	1,227	1,104
			Sc	iences						
Applied Biology	108	133	171	165	157	182	198	239	249	274
Chemistry	81	79	78	77	91	99	97	122	137	139
Information and Computer Science	601	588	563	512	458	435				
Mathematics	100	117	106	100	80	91	86	79	77	83
Physics	153	153	188	182	187	175	161	153	140	159
Psychology	41	43	45	33	44	44	39	30	36	39
Undeclared Sciences	115	139	121	148	136	141	176	174	178	171
Total Sciences	1,199	1,252	1,272	1,217	1,153	1,167	757	797	817	865
			_In	stitute						
Total	8,730	8,806	8,940	9,105	9,213	9,324	9,270	9,487	9,319	9,163
Source: Office of the Registrar										
<u>G</u>		S	TUDENT	PROFILE	ES	·····				Page 4



*Note:* Except for the College of Engineering, data are not directly comparable to previous years due to a major academic restructuring beginning in Fiscal Year 1990. Vertical scale is logarithmic to better display the mix of a large number and several smaller numbers.

Table 2.18 Graduate Enrollment by College, Fall 1984-93

School	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
			Arc	chitecture	_					
Architecture	***************************************		180	171	174	173	165	171	180	193
Building Construction		_					1		******	
City Planning			54	65	52	54	54	74	81	98
Total Architecture	234	228	234	236	226	227	220	254	261	291
			_ <u>Cc</u>	mputing						
Computer Science	*******	_	*********	*************		_	182	235	246	233
Information and Computer Science		_		********			_	4	0	0
Total Computing	-			*****		_	182	239	246	233
			<u>En</u>	gineering	_					
Aerospace	101	114	122	140	162	177	164	174	191	206
Ceramic and Materials	18	15	17	17	20	21	30	25	21	39
Chemical	113	92	90	78	78	73	75	83	86	96
Civil	177	119	153	179	164	190	188	178	212	217
Computer Engineering		_				_	100			
Electrical	370	455	541	572	591	624	666	700	740	807
Engineering Science and Mechanics	24	19	23	17	21	26	25	25	30	25
Environmental Engineering		21	24	26	31	34	57	80	90	88
Industrial and Systems	161	138	169	198	200	198	247	317	299	251
Mechanical	204	231	264	232	224	224	257	311	334	320
Metallurgical		31	29	34	31	25	29	36	33	38
Nuclear and Health Physics	95	73	69	74	79	78	89	97	122	117
Textiles	19	6	8	6	3	9	13	19	15	13
Textiles  Textile Chemistry		7	5	9	5	3	6	8	5	4
Textile Chemistry  Textile Engineering		11	10	14	20	21	35	41	45	45
Total Engineering  Total Engineering	1,282	1,332	1,524	1,596	1,629	1,704	1,882	2,094	2,265	2,266
			Iv	an Allen						
Economics			_	-	*******			2	3	8
Management	_		168	182	173	185	186	219	232	220
Public Policy	_		_				_	20	32	32
Management Science	_	***********	1	1				_	_	_
Technology and Science Policy			_			***************************************	59	30	17	8
Total Ivan Allen	140	143	169	183	173	185	245	271	274	268
			S	ciences						
Applied Biology	32	30	33	38	39	42	45	42	46	46
Chemistry	100	94	90	98	96	98	107	127	115	118
Earth and Atmospheric Sciences	54	53	67	66	68	68	63	69	68	83
Information and Computer Science	233	228	255	218	180	180		_	_	
Mathematics	44	50	48	60	68	64	64	66	90	85
Physics	50	48	68	85	86	84	99	100	113	114
Psychology	47	51	53	57	65	67	64	73	82	90
Fechnology and Science Policy	12	14	13	29	44	47	<del></del>	_		_
Undeclared		1		_				1	1	1
Total Sciences	572	569	627	651	646	650	442	478	515	537
			<u>I</u> 1	nstitute						
Total	2,228	2,272	2,554	2,666	2,674	2,766	2,971	3,327	3,561	3,595
Source: Office of the Registrar										
G <sub>r</sub>			TUDENT	PROFILE	75					Page 4

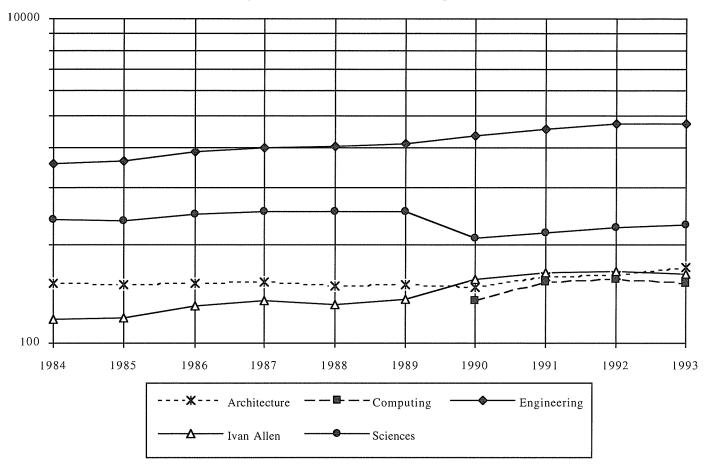


Fig. 2.7. Graduate Enrollment by College, 1984-93

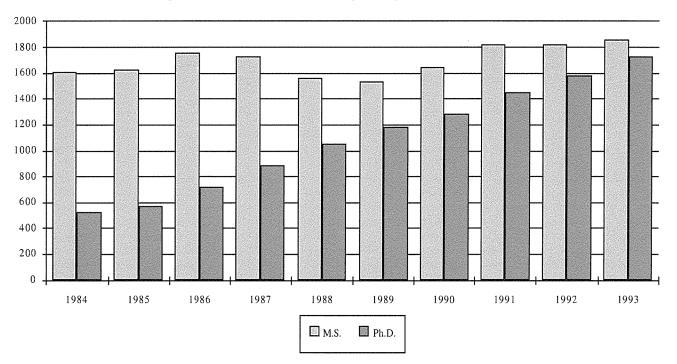
*Note:* Except for the College of Engineering, data are not directly comparable to previous years due to a major academic restructuring beginning in Fiscal Year 1990. Vertical scale is logarithmic to better display the mix of a large number and several smaller numbers.

Table 2.19 Graduate Enrollment by Degree Program, Fall Quarters 1984-93\*

	Archi	tecture	Com	outing	Engin	eering	Ivan	Allen	Scie	ences	Т	`otal
Year	M.S.	Ph.D.	M.S.	Ph.D.	M.S.	Ph.D.	M.S.	Ph.D.	M.S.	Ph.D.	M.S.	Ph.D.
1984	224	9			946	292	118	5	316	219	1,604	525
1985	217	9	_		979	314	124	7	301	238	1,621	568
1986	217	12			1,071	416	158	9	313	284	1,759	721
1987	217	17	_	_	1,034	538	167	11	307	319	1,725	885
1988	205	18	_	-	925	671	156	14	271	349	1,557	1,052
1989	203	17	_		916	757	165	18	245	386	1,529	1,178
1990	191	24	73	109	1,062	797	213	25	103	326	1,642	1,281
1991	211	28	106	120	1,165	908	236	31	105	359	1,823	1,446
1992	143	33	108	126	1,217	995	248	34	105	395	1,821	1,583
1993	254	36	95	128	1,160	1,096	254	36	93	430	1,856	1,726

<sup>\*</sup>Includes both full- and part-time Ph.D. and M.S. students; does not include special students.

Fig. 2.8. Graduate Enrollment by Degree Program, Fall Quarters 1984-93



#### **ROTC**

#### Army ROTC

Tech's Army ROTC program was one of the original ROTC units established by Congress in June 1916. Today approximately 75 students representing each of Tech's major schools and disciplines participate in a military science curriculum that integrates the classroom with field training experiences. Cadets can volunteer for airborne, air assault, northern warfare, jungle, and mountain warfare schools during the summer. Tech's Army ROTC program also supports another 50 students from the following Atlanta-area schools: Morris Brown College, Morehouse College, Spelman College, Clark Atlanta University, Kennesaw College, Southern College of Technology, and Emory University.

In addition to its regular four-year scholarship program, Army ROTC offers two-year and three-year competitive scholarships. Students may apply for these scholarships without prior enrollment in the ROTC program. ROTC scholarships pay tuition and academic-related fees plus \$100 per month while the student is enrolled in Military Science. Approximately 50 percent of Tech's Army ROTC cadets today are under full tuition Army scholarships. Students enrolled in Army ROTC, both scholarship and nonscholarship, may participate in the cooperative degree program.

Army ROTC is available for both men and women. Entry can be made anytime prior to the junior year. The program of instruction consists of two phases: basic and advanced. The basic military course, which normally occurs during freshman and sophomore years, explores the contemporary Army in today's society and provides an introduction to principles of management and leadership. The advanced curriculum focuses on situational leadership, ethics, and American defense policies.

Upon successful completion of ROTC, Tech graduates enter a wide range of officer specialties that maximize individual talents and academic backgrounds. Commissions as a second lieutenant are awarded in most branches of the Army, and these officers go on to serve either the regular (active) Army, the U.S. Army Reserve, or the U.S. Army National Guard.

#### Navy ROTC

The Navy ROTC Unit at Tech was established in 1926 as one of the six original Naval ROTC Units. The Tech Unit is one of the largest in the country; current enrollment is approximately 73. Non-scholarship Tech students may enroll in the NROTC College Program and compete for scholarships providing up to three years of scholarship benefits. In recent years, all freshmen with a grade point average of 3.0 or higher qualified.

The NROTC Unit places primary emphasis on academic performance. Midshipmen have a strong record of achievement in all aspects of campus life. That tradition carries over into commissioned service as Naval officers. Among many successful graduates who received commissions through the Georgia Tech NROTC Program are RADM Richard Truly, the former director of NASA; William L. Ball III, former secretary of the Navy; John Young, former astronaut; and more than 30 flag and general officers. In keeping with the mission of the NROTC program, Tech graduates are well prepared "...to assume the highest responsibilities of command, citizenship, and government." Traditionally, every graduate of the NROTC program receives a commission in the Navy or Marine Corps and immediately goes on active duty.

#### Air Force ROTC

The Air Force ROTC program at Georgia Tech has one of the largest cadet corps in the country. It is organized as a group with two squadrons and eight flights. The Georgia Tech unit supplies a leading input of Air Force engineers, with a large representation of both females and minorities. This unit provides the USAF newly commissioned officers for pilot, navigator, missile, and technical billets around the world. The 1993 fall enrollment of 113 students includes 79 Air Force scholarship recipients. This includes 21 females and 47 minority cadets. Four-Year Program: Students entering the four-year program enroll in AFROTC courses in the same manner as they register for other undergraduate courses. Students enrolled in the first two years, the General Military Course (GMC), incur no military obligation unless they are on an AFROTC scholarship. Those students desiring to become commissioned officers must compete for entry into the second two years, the Professional Officers Course (POC), which is normally taken during the last two years of college. Between the sophomore and junior years, cadets normally attend a four-week summer field training session conducted at an Air Force base. Students accepted for the POC become members of the Air Force Reserve and receive a tax-free subsistence allowance of \$100 per month. The GMC covers the development of air power and the contemporary Air Force in the context of U.S. military organization. The POC covers Air Force management and leadership, and American defense policy. Two-Year Program: The two-year program and the last two years of the four-year program are identical in academic content. The basic requirement for entry into this program is that the student must have two academic years remaining in school. This may be at the undergraduate or graduate level or a combination of the two. In addition, candidates must successfully complete a six-week field training course at an Air Force base during the summer preceding their enrollment and be recommended to enter the POC upon their return to campus. AFROTC College Scholarship Program: AFROTC college scholarships are available on a competitive basis to qualified cadets in both programs described above and vary in length from two to four years. Scholarships cover tuition, matriculation, health services, student activity fees, and books. All scholarship cadets also receive the tax-free subsistence allowance of \$100 per month. Eligibility: The Air Force ROTC program at Georgia Tech is open to all students attending a college in the Atlanta area that has a consortium agreement or cross-enrollment agreement with Georgia Tech. Eligible students from all schools are encouraged to apply for scholarships.

Table 2.20 ROTC Scholarships; 1992-93 Academic Year

Table 2.20 ROTE Delibrars	mps, 1772-75 Academic Te	41		
	Service	# of Students	Total Value	
	Air Force ROTC	32	\$265,000	
	Army ROTC	46	301,361	
	Navy ROTC	73	436,790	
	•			

Source: Office of the Commanding Officer; Army ROTC, Navy ROTC, Air Force ROTC

# DISTRIBUTION OF GRADES

Table 2.21 Student Grades by College, Fall Quarter 1993

College	Α	В	C	D	F	S*	U*	I*	W*	V
			Ţ	Jndergradu	ate Lower I	Division				
Architecture										
Number	484	413	266	51	30	2	**********	6	69	7
Percentage	36.4	31.1	20.0	3.8	2.3	0.2	-	0.5	5.2	0.5
Computing										
Number	345	228	147	51	44	23		26	134	6
Percentage	33.7	24.2	14.4	5.0	4.3	2.2		2.5	13.0	0.6
Engineering										
Number	519	560	388	96	56	40	2	14	141	1
Percentage	28.6	30.8	21.4	5.3	3.1	2.2	0.1	0.8	7.8	0.0
Ivan Allen										
Number	1,688	2,331	1,390	302	138	158	77	31	336	32
Percentage	26.1	36.0	21.4	4.7	2.1	2.4	1.2	0.5	5.2	0.5
Sciences										
Number	2,842	2,659	2,270	774	445	528	21	56	481	5
Percentage	28.2	26.4	22.5	7.7	4.4	5.2	1.2	0.5	5.2	0.5
			Ţ	Jndergradu	ate Upper D	Division				
Architecture										
Number	545	492	173	24	6	10	1	15	70	3
Percentage	40.7	36.7	12.9	1.8	0.4	0.7	0.0	1.1	5.2	0.2
Computing										
Number	230	264	95	27	18	22	1	1	75	19
Percentage	30.6	35.1	12.6	3.6	2.4	2.9	0.1	0.1	10.0	2.5
Engineering										
Number	3,569	3,827	2,390	594	252	63	6	244	742	51
Percentage	30.4	32.6	20.4	5.1	2.1	0.5	0.0	2.1	6.3	0.4
Ivan Allen										
Number	1,670	1,739	798	147	72	112	1	56	289	40
Percentage	33.9	35.3	16.2	3.0	1.5	2.3	0.0	1.1	5.9	0.8
Sciences										
Number	1,270	1,454	856	280	109	106	9	130	323	16
Percentage	27.9	31.9	18.8	6.1	2.4	2.3	0.2	2.9	7.1	0.4
				G	raduate				<del></del>	
Architecture										
Number	413	315	26	1		86	4	20	35	
Percentage	45.9	35.0	2.9	0.1		9.6	0.4	2.2	3.9	
Computing										
Number	296	135	13	2	*uncunns	156	1	20	32	71
Percentage	40.8	18.6	1.8	0.3		21.5	0.1	2.8	4.4	9.8
Engineering										
Number	1,713	1,062	184	20	4	1,419	14	186	204	809
Percentage	30.5	18.9	3.3	0.4	0.0	25.3	0.2	3.3	3.6	14.4
Ivan Allen										
Number	612	424	58	4	6	168	2	29	52	63
Percentage	43.2	29.9	4.1	0.3	0.4	11.8	0.1	2.0	3.7	4.4
Sciences										
Number	449	305	64	11	4	605	6	38	107	308
Percentage	23.7	16.1	3.2	0.6	0.2	31.9	0.3	2.0	5.6	16.2

<sup>\*</sup>S=Satisfactory Completion of Pass/Fail; U=Unsatisfactory Completion of Pass/Fail; W=Withdrawn; I=Incomplete; V=Audit or Thesis

### **DISTRIBUTION OF GRADES**

Fig. 2.9. Undergraduate Lower Division

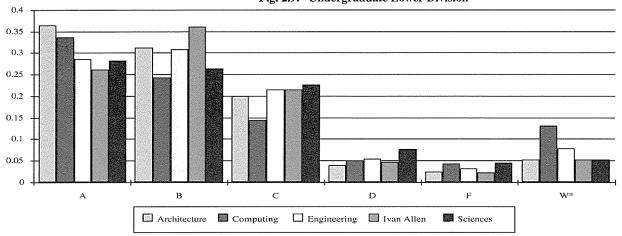


Fig. 2.10. Undergraduate Upper Division

A B C D F W\*

Architecture Computing Engineering Ivan Allen Sciences

Fig. 2.11. Graduate 0.45 0.4 0.35 0.3 0.25 0.2 0.15 0.1 0.05 0 C W\* В D F Computing ☐ Engineering Ivan Allen Sciences

0.45 0.4 0.35 0.3 0.25 0.2 0.15 0.1 0.05

### **CREDIT HOURS**

Table 2.22 Student Credit Hours by Division, Fiscal Years 1983-84 to 1992-93

Fiscal Year	Lower Division	Upper Division	Graduate Division	Total	Grad I Division**	Grad II Division**
1992-93	228,650	244,288	156,515	629,454	59,958	96,557
1991-92	231,543	236,051	140,855	608,480	53,855	87,030
1990-91	236,652	240,453	129,481	606,586	98,347	31,134
1989-90	239,133	234,613	123,606	597,352	0	0
1988-89	238,317	226,977	123,011	588,305	0	0
1987-88	245,634	223,006	112,553	581,193	0	0
1986-87	235,884	218,091	100,740	554,715	0	0
1985-86	227,939	223,839	72,082	523,860	0	0
1984-85	231,300	226,606	68,948	526,854	0	0
1983-84	254,574	233,651	66,760	554,985	0	0

<sup>\*</sup> Does not include sponsored or military hours, which are dropped for purposes of the University System Budget Request.

650,000 600,000 550,000 500,000 450,000 400,000 350,000 300,000 250,000 200,000 150,000 100,000 50,000 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992

Fig. 2.12. Total Student Credit Hours, Fiscal Years 1983-92

Source: Office of the Board of Regents

<sup>\*\*</sup> Reporting of graduate level student credit hours subdivided by IPEDS definitions (Grad I = Program designed for completion with at least 30 credit hours; Grad II = Program designed for completion with at least 60 credit hours;) roughly equivalent to master's and doctoral levels.

### **CREDIT HOURS**

Fig. 2.13. Student Credit Hours, Lower Division

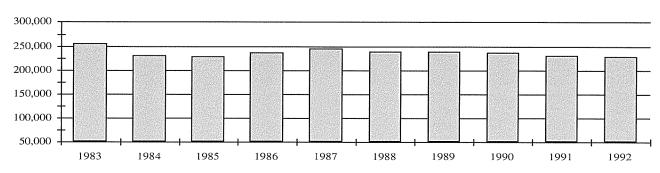
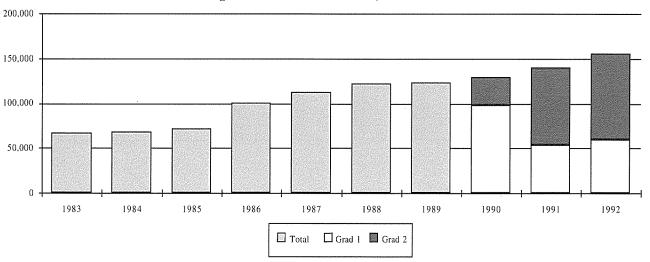


Fig. 2.14. Student Credit Hours, Upper Division 300,000 250,000 200,000 150,000 100,000 50,000 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992

Fig. 2.15. Student Credit Hours, Graduate Division



Source: Office of the Board of Regemts

### UNDERGRADUATE COOPERATIVE PROGRAM

Since 1912, Georgia Tech has offered a five-year cooperative program to those students who wish to combine industrial work experience with classroom studies. The program is the fourth oldest of its kind in the world and the largest optional co-op program in the country. Students who enroll in this program alternate between industrial assignments and classroom studies on a quarterly basis, completing the same course work on the campus that is completed by regular four-year students. Graduates of the program are awarded a degree in their field with the designation "Cooperative Plan."

Industrial work gives cooperative students an opportunity to develop their career interests, to become more confident in their career choices, and to develop human relations skills through their work experiences. They are paid for their work in industry and are able to save a portion of their salaries, which can be applied toward educational expenses. More than 500 companies participate in the program.

Table 2.23 Enrollment by Major, Fall Quarter 1984-93

<u>Major</u>	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Aerospace Engineering	119	160	177	180	152	123	116	111	128	123
Biology	0	0	5	13	16	19	15	24	32	35
Ceramic Engineering	10	11	13	14	20	17	11	4	5	7
Chemical Engineering	189	183	178	197	203	202	205	232	295	354
Chemistry	12	11	13	11	15	18 -	18	24	21	28
Civil Engineering	76	80	99	115	146	146	172	208	203	238
Computer Engineering	0	0	0	0	1	35	75	97	101	133
Computer Science	185	195	205	193	187	170	148	149	151	180
Earth and Atmospheric Sciences	0	0	0	0	0	0	0	0	0	2
Economics	1	2	2	3	5	6	5	5	6	6
Electrical Engineering	727	753	807	805	776	739	699	672	625	609
Engineering Science and Mechanics	s 25	29	32	25	18	20	16	15	10	14
Health Physics	0	0	5	4	3	1	0	0	0	0
Industrial Design	0	0	0	0	0	0	2	17	29	30
Industrial Engineering	197	220	263	310	323	322	321	338	320	309
International Affairs	0	0	0	0	0	0	0	0	15	22
Management	100	110	138	155	157	165	169	183	166	143
Management Science	10	14	10	10	10	11	14	9	11	13
Materials Engineering	0	0	0	0	6	13	18	32	29	27
Mathematics	9	11	13	11	14	14	13	12	10	10
Mechanical Engineering	376	376	397	426	456	506	536	610	617	511
Nuclear Engineering	35	32	36	38	32	32	20	22	21	17
Physics	21	27	27	36	45	40	33	32	33	30
Textiles	5	3	2	3	3	6	7	7	5	6
Textile Chemistry	2	2	5	2	3	5	7	9	8	16
Textile Engineering	14	18	16	12	24	31	35	41	56	61
Undecided Engineering College	0	9	28	12	78	85	94	75	96	189
Undecided Ivan Allen College	0	0	4	1	7	15	13	10	15	8
Undecided Sciences College	0	0	0	0	0	0	0	0	0	11
Undeclared	0	0	0	0	0	0	0	0	0	0
Total	2,113	2,246	2,475	2,576	2,701	2,747	2,769	2,944	3,015	3,132

Prior to 1990, Undecided Ivan Allen = Undecided Management

Prior to 1990, Undecided Sciences = Undecided COSALS (College of Sciences and Liberal Studies)

Prior to 1987, Management = Industrial Management

Table 2.24 Program Summary, Fiscal Years 1985-93

	1985	1986	1987	1988	1989	1990	1991	1992	1993
Cumulative Enrollment	2,598	2,786	2,974	3,093	3,150	3,246	3,568	3,571	3,648
Student Graduates	357	305	367	373	305	325	360	416	468

Source: Office of the Director, Cooperative Division



STUDENT PROFILES Page 53

### GRADUATE COOPERATIVE PROGRAM

The Graduate Cooperative Program was established in December 1983 and is currently the largest such program in the U.S. for science and engineering. Four hundred twenty five students (121 in 1992-93) have received their graduate degrees with Graduate Co-op Program certificates. Enrollment in the program was 565 during 1992-93, including 115 doctoral students. Summary statistics for the program are provided in the table.

Table 2.25 Enrollment by Major

Major	1986	1987	1988	1989	1990	1991	1992	1993
Aerospace Engineering	3	6	11	13	20	27	24	25
Architecture	0	0	3	2	2	4	12	13
Biology	0	1	3	1	0	1	2	3
Chemical Engineering	8	8	6	4	4	3	1	5
Chemistry	0	2	3	2	2	2	1	5
Civil Engineering	6	6	11	13	25	41	49	31
City Planning					3	4	7	19
Electrical Engineering	25	37	99	102	126	126	147	155
Engineering Science and Mechanics	3	5	4	11	12	10	13	10
Earth and Atmospheric Sciences	1	l	2	6	8	10	10	5
Information and Computer Sciences	0	3	20	23	36	51	42	55
Industrial and Systems Engineering	11	13	27	31	44	75	84	68
Mechanical Engineering	30	36	59	51	46	47	66	79
Nuclear Engineering	2	l	1	2	3	2	4	4
Materials Engineering	0	0	4	2	3	3	3	8
Mathematics	5	5	6	8	5	5	3	5
Metallurgical Engineering	1	1	0	0	0	0	0	0
Management	6	13	26	33	39	38	33	28
Physics	5	8	11	9	13	12	15	16
Psychology	0	0	2	1	5	12	15	19
Technology and Science Policy	0	0	4	5	3	5	3	4
Textiles	2	2	4	1	5	8	6	8
Total	108	148	306	320	404	486	540	565

Table 2.26 Program Summary, Fiscal Years 1986-93

	1986	1987	1988	1989	1990	1991	1992	1993	
Applicants	121	142	180	126	245	265	375	391	
Admissions	92	138	149	121	234	249	360	380	
Placements	54	59	90	179	216	253	242	317	
Companies for above placements	46	32	49	78	85	141	135	148	

Source: Office of the Associate Vice President for Graduate Studies and Research

Table 2.27 Bachelor's Degrees Conferred by College, Fiscal Years 1984-93

College	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Architecture	104	77	82	69	78	98	104	103	84	164
<b>Building Construction</b>			22	12	22	30	22	25	23	28
Industrial Design		**********	5	17	10	13	20	12	12	11
Architecture		***************************************	55	40	46	55	62	66	49	125
Computing	**	**	**	**	**	**	**	92	97	87
Information and Computer Sc	cience **	**	**	**	**	**	**	92	97	87
Engineering	1,315	1,243	1,193	1,083	1,062	1,031	1,144	1,145	1,207	1,234
Aerospace	80	89	106	83	97	87	94	72	64	63
Ceramic	10	8	13	8	9	8	6	7	1	1
Chemical	160	165	102	91	67	67	55	58	72	84
Civil	103	92	95	95	88	97	123	98	116	125
Computer	_	*********			1	8	10	16	14	19
Electrical	404	362	357	353	336	293	343	297	302	333
Engineering Science and Med	chanics 12	13	18	11	9	6	9	11	7	12
Industrial and Systems	208	190	192	189	203	227	218	280	254	256
Health Systems	8	11	3		_	1	************			-
Materials		*********		1			3	10	12	16
Mechanical	293	274	250	210	215	208	244	259	331	282
Nuclear and Health Physics	22	21		_			******	_		
Nuclear	_		30	13	13	8	13	11	7	7
Health Physics		*******	11	6	11	7	8	3		
Textiles	15	18	6	10	3	4	8	7	8	11
Textile Chemistry		**********	2	3	1	5	2	3	5	6
Textile Engineering			8	10	9	5	8	13	14	19
Ivan Allen	256	275	322	349	338	382	406	355	369	362
Economics	********		5	4	7	12	15	13	16	7
History, Technology, and Soc	eiety —			_				1	1	2
Industrial Management	-		202	204		-		_		
International Affairs				_				_	7	37
Management	******		62	100	306	355	376	330	336	300
Management Science	*******		53	41	25	15	15	11	8	13
Science, Technology, and Cul	lture —		_			********		_	1	3
Sciences	169	194	190	208	227	200	193	134	127	127
Applied Biology	12	11	16	22	24	16	24	31	45	46
Applied Physics		_	21	22	26	23	13	17	14	8
Chemistry	13	15	12	15	14	20	17	29	22	29
Mathematics	12	7	17	13	24	15	11	17	18	13
Information and Computer Sc		121	99	106	103	94	88	**	**	**
	40	31	15	13	23	25	26	28	17	24
Physics	411					/ 1	711	/^		

<sup>\*\*</sup> Effective FY 1990 Information and Computer Science in the College of Sciences and Liberal Studies (COSALS) became Computer Science in the College of Computing.

Except for the College of Engineering, data are not directly comparable to previous years due to a major academic restructuring beginning in Fiscal Year 1990.

Table 2.28 Master's Degrees Conferred by College, Fiscal Years 1984-93

College	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Architecture	73	68	71	68	66	76	64	68	51	72
City Planning			18	18	26	23	22	22	21	25
Architecture			53	50	40	53	42	46	30	47
Computing	**	**	**	**	**	**	**	57	53	69
Information and Computer Scie	ence **	**	**	**	**	**	**	57	53	69
Engineering	426	442	451	487	509	512	519	562	579	723
Aerospace	22	25	23	32	29	46	51	57	49	57
Ceramic	5	5	4	2	2	4	1	4	3	7
Chemical	18	27	24	21	13	10	4	7	8	9
Civil	60	64	50	40	52	57	61	68	53	101
Electrical	159	160	147	202	228	179	209	231	203	224
Engineering Science and Mecha	anics 4	10	7	3	7	3	5	5	4	5
Environmental			3	4	1	6	10	6	14	25
Industrial			18	26	22	24	21	36	48	64
Industrial and Systems	69	49	5	9	16	23	20	15	30	24
Health Systems	5	6	5	8	6	8	4	7	10	19
Mechanical	52	72	92	92	81	69	68	66	86	105
Metallurgical			10	6	3	8	3	5	3	7
Materials	_		3	-	-					
Nuclear and Health Physics	25	18	**********				_			
Nuclear	٨	٨	16	8	4	6	14	8	8	4
Operations Research			16	17	18	26	23	22	23	24
Polymers	_		1	2	1	7	3	2	2	1
Health Physics	-	******	21	11	15	29	13	14	14	25
Statistics			5	1	1	4	2	2	6	6
Textiles	7	6		1	2		1	1	5	7
Textile Engineering	_	_	1	2	8	3	6	6	3	9
Ivan Allen	82	55	61	59	78	69	84	72	92	119
Economics		_	_					1	1	6
Management	_	_	60	59	78	69	84	69	81	100
Technology and Science Policy	***	***	***	***	***	***	***	2	10	13
Sciences	113	113	127	121	147	140	124	63	56	65
Applied Biology	4	4	1	1	2	5	4	3	6	0
Applied Physics			4	2	13	7	6	4	4	4
Chemistry	6	4	4	2	6	10	9	7	9	13
Earth and Atmospheric Science	s 10	16	8	6	12	10	12	8	9	9
Mathematics	10	5	13	10	9	11	15	13	5	12
Information and Computer Scie	nce 62	66	78	75	79	72	40	**	**	**
Physics	16	13	11	15	12	8	15	10	15	18
Psychology	3	3	4	6	7	7	8	13	8	7
Social Sciences	2	2	4	3	6	7	11	***	***	***
Statistics	_									
				1	1	3	4	1		2

<sup>\*\*</sup> Effective FY 1990 Information and Computer Science in the College of Sciences and Liberal Studies (COSALS) became Computer Science in the College of Computing.

Except for the College of Engineering, data are not directly comparable to previous years due to a major academic restructuring beginning in Fiscal Year 1990.

<sup>\*\*\*</sup> Effective FY 1990 Social Sciences became Technology and Science Policy.

Table 2.29 Doctoral Degrees Conferred by College, Fiscal Years 1984-93

College	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
					,	2		2	,	7
Architecture	_				1	3	2	2	1	7
Architecture					1	3	2	2	1	7
Computing	**	**	**	**	**	**	**	12	8	15
Information and Computer Science	**	**	**	**	**	**	**	12	8	15
Engineering	54	35	54	45	63	81	81	104	129	124
Aerospace	8	7	7	11	8	19	15	15	20	15
Ceramic		1	1	2	1	1	1	3	1	1
Chemical	7	4	12	5	17	8	8	9	8	12
Civil	5	4	6	2	4	6	2	8	3	11
Electrical	8	7	11	3	7	12	28	33	48	31
Engineering Science and Mechanics	3		2	2	1	3	0	1	2	3
Environmental					2	2	0			
Industrial	_		8	7	9	7	9	7	16	20
Industrial and Systems	9	7			_					
Metallurgical			1	2	1	3	4	4	3	3
Mechanical	7	2	6	7	10	17	11	16	23	24
Nuclear and Health Physics	6	2			_				*********	
Nuclear				4	1	3	2	7	3	3
Textiles	1	1			_		******	-		
Textile Engineering				_	2	******	1	1	2	1
Ivan Allen	4	1	1	1	2	2	1	2	3	4
Industrial Management		*******	1				MATERIAL STATE OF THE STATE OF			
Management				1	2	2	1	2	3	4
Sciences	26	29	28	42	31	39	30	36	47	46
Biology				2	2	3	0	6	3	4
Chemistry	15	13	14	11	16	13	6	8	14	17
Geophysical Sciences	1	2	5	5	1	5	· 7	6	7	5
Mathematics		2	1	4	1	4	4	1	7	5
Information and Computer Science	1	2	2	7	6	9	6	**	**	**
Physics	ĺ	5	2	8	2	2	4	9	12	9
Psychology	8	5	4	5	3	3	3	6	4	6
10,0006,	0	-	•	-	~	_	~	-	-	-

Table 2.30 Total Degrees Granted through Spring 1993

Degree	Number Granted	
Bachelor's	70,543	
Master's	18,935	
Doctoral	2,496	
Overall	91,969	

Except for the College of Engineering, data are not directly comparable to previous years due to a major academic restructuring beginning in Fiscal Year 1990.

<sup>\*\*</sup> Effective FY 1990 Information and Computer Science in the College of Sciences and Liberal Studies (COSALS) became Computer Science in the College of Computing.

Table 2.31 Summary of Degrees Conferred, by College and Degree, Fiscal Years 1984-93

College	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Architecture	177	145	153	137	156	177	170	173	136	243
Bachelor's	104	77	82	69	78	98	104	103	84	164
Master's	73	68	71	68	77	76	64	68	51	72
Doctoral	-	_			1	3	2	2	1	7
Computing		_						161	158	171
Bachelor's	_					_	_	92	97	87
Master's								57	53	69
Doctoral	_					_		12	8	15
Engineering	1,795	1,720	1,698	1,615	1,634	1,624	1,744	1,811	1,915	2,082
Bachelor's	1,315	1,243	1,193	1,083	1,062	1,031	1,144	1,145	1,207	1,235
Master's	426	442	451	487	509	512	519	562	579	723
Doctoral	54	35	54	45	63	81	81	104	129	124
Ivan Allen	342	331	384	409	418	453	491	429	464	485
Bachelor's	256	275	322	349	338	382	406	355	369	362
Master's	82	55	61	59	78	69	84	72	92	119
Doctoral	4	1	1	1	2	2	1	2	3	4
Science	308	336	345	371	405	379	347	233	230	232
Bachelor's	169	194	190	208	227	200	193	134	127	121
Master's	113	113	127	121	147	140	124	63	56	65
Doctoral	26	29	28	42	31	39	30	36	47	46
Institute Total	2,622	2,532	2,580	2,532	2,601	2,630	2,752	2,807	2,903	3,219
Bachelor's	1,844	1,789	1,787	1,709	1,705	1,711	1,847	1,829	1,884	1,975
Master's	694	678	710	735	800	797	791	822	831	1,048
Doctoral	84	65	83	88	96	122	114	156	188	196

Except for the College of Engineering, data are not directly comparable to previous years due to a major academic restructuring beginning in Fiscal Year 1990.

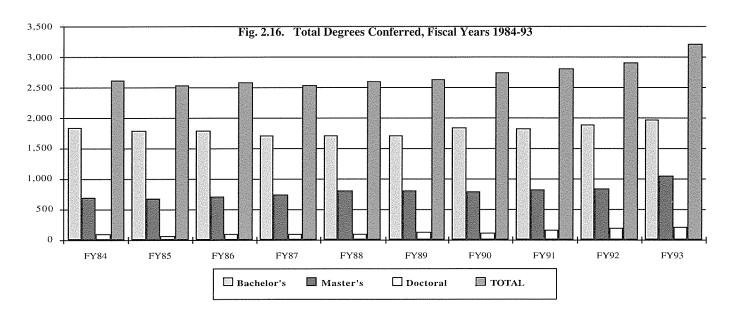


Table 2.32 Degrees Conferred by College, Ethnicity, and Gender, Summer 1992 - Spring 1993

		esident	Bla		Na	tive						
	Al	iens	Non-H			erican	Asi			panic		hite
College	M	F	M	F	M	F	M	F	M	F	M	F
					I	Bachelor's						
Architecture	1	2	5	1			6	2	3	3	109	32
Computing		1	5	1			4	2	1	1	66	6
Engineering	41	2	60	37	1	1	70	22	23	5	790	183
Ivan Allen		1	12	5		1	4	5	2	5	212	115
Sciences	2	1	_	5		Antonioni	6	3	1	1	63	45
Total	44	7	82	49	1	2	90	34	30	15	1,240	381
						Master's						
Architecture	7	5	2	3	*********		1		1		32	20
Computing	75	6	5	3	***************************************		1	1		1	29	9
Engineering	139	14	34	27	1	1	48	4	23	3	351	76
Ivan Allen	12	7	3	1	***************************************	***********	1		3	2	65	25
Sciences	7	5	1	3	******		1	1	1	1	28	16
Total	180	37	45	37	1	1	52	6	28	7	505	146
						Doctoral						
Architecture	1	2	2	**********			_					2
Computing	4	1		-							7	3
Engineering	44	3	2	2			11		3		51	8
Ivan Allen	1										2	1
Sciences	11	6	1	***************************************			1	_		2	19	6
Total	61	12	5	2		************	12	<del></del>	3	2	79	20
						Institute						
Total Institute	285	56	132	88	2	3	154	40	61	24	1,824	547

Table 2.33 Degrees Conferred by Georgia County of Residence, Summer Quarter 1992 - Spring Quarter 1993

County	(1)	(2)	(3)	County of Res	(1)	(2)	(3)	County	(1)	(2)	(3)
A ==1i= =	1	0	0	Fannin	2	0	0	Oglethorpe	0	0	0
Appling	1 0	0	0		24	3	0	Paulding	2	1	0
Atkinson		0	0	Florid		2	0	Peach	2	1	0
Bacon	0			Floyd	15	2		Pickens	3	0	0
Baker	0	1	0	Forsyth	8		1				
Baldwin	4	0	0	Franklin	0	0	0	Pierce	0	0	0
Banks	0	0	0	Fulton	224	91	14	Pike	0	0	0
Barrow	1	0	0	Gilmer	0	0	0	Polk	7	0	0
Bartow	10	1	0	Glascock	1	0	0	Pulaski -	3	0	0
Ben Hill	0	0	0	Glynn	10	1	0	Putnam	2	1	0
Berrien	1	0	0	Gordon	3	0	0	Quitman	0	0	0
Bibb	27	4	0	Grady	2	0	0	Rabun	0	0	0
Bleckley	2	0	0	Greene	1	0	0	Randolph	0	0	0
Brantley	0	0	0	Gwinnett	135	29	5	Richmond	30	4	0
Brooks	0	0	0	Habersham	8	1	0	Rockdale	25	5	0
Bryan	2	0	0	Hall	12	3	0	Schley	0	0	0
Bulloch	4	2	0	Hancock	0	0	0	Screven	0	1	0
Burke	2	0	0	Haralson	5	1	0	Seminole	0	0	0
Butts	2	0	0	Harris	2	1	0	Spalding	5	1	0
Calhoun	2	0	0	Hart	0	0	0	Stephens	2	2	0
Camden	2	0	0	Heard	Ő	0	0	Stewart	0	0	0
Candler	0	0	0	Henry	12	0	0	Sumter	2	0	0
Carroll	11	1	0	Houston	12	0	0	Talbot	0	0	0
Catoosa	4	1	0	Irwin	2	0	0	Taliaferro	0	0	0
		1					0		2	0	0
Charlton	0	0	0	Jasper	2	0		Tattnall			
Chatham	17	7	0	Jeff Davis	0	0	0	Taylor	0	0	0
Chattahooche		0	0	Jefferson	0	0	0	Telfair	0	0	0
Chattooga	1	0	0	Jenkins	0	0	0	Terrell	0	0	0
Cherokee	9	3	2	Johnson	0	0	0	Thomas	3	0	0
Clarke	13	4	1	Jones	8	2	0	Tift	7	0	0
Clayton	46	8	0	Lamar	4	0	0	Toombs	4	0	0
Clinch	1	0	0	Lanier	0	0	0	Towns	1	0	0
Cobb	175	69	7	Laurens	2	1	0	Treutlen	0	. 0	0
Coffee	2	1	0	Lee	3	1	0	Troup	9	2	0
Colquitt	1	0	0	Liberty	2	0	0	Turner	1	0	0
Columbia	16	4	0	Lincoln	0	0	0	Twiggs	0	0	0
Cook	2	0	0	Long	1	0	0	Union	0	0	0
Coweta	14	3	0	Lowndes	3	0	0	Upson	7	1	0
Crawford	1	0	0	Lumpkin	1	0	0	Walker	6	0	0
Crisp	2	0	0	Macon	2	0	0	Walton	3	0	0
Dade	1	0	0	Madison	2	0	0	Ware	6	0	0
Dawson	0	0	Ö	Marion	1	0	0	Warren	2	1	0
Decatur	3	1	Ö	McDuffie	4	0	0	Washington	2	0	0
DeKalb	213	65	7	McIntosh	Ó	Ö	0	Wayne	0	ő	ő
Dodge	3	0	ó	Meriwether	1	0	0	Webster	0	0	0
_				Miller	1	0	0	Wheeler	0	0	0
Dooly	0	0	0		_						
Dougherty	24	0	1	Mitchell	2	0	0	White	0	0	0
Douglas	14	7	0	Monroe	2	0	0	Whitfield	17	2	0
Early	0	0	0	Montgomery	0	0	0	Wilcox	1	0	0
Echols	0	0	0	Morgan	2	0	0	Wilkes	0	0	0
Effingham	3	1	1	Murray	1	0	0	Wilkinson	3	0	0
Elbert	1	0	0	Muscogee	24	2	0	Worth	0	0	0
Emanuel	0	0	0	Newton	3	1	0				
Evans	1	0	0	Oconee	0	0	0	Total	1,344	346	39

Note: Column headings are as follows: (1) Bachelor's; (2) Master's; and (3) Doctoral.

Source: Office of the Registrar

Page 60 STUDENT PROFILES

Table 2.34 Degrees Conferred by State of Residence, Summer Quarter 1992 - Spring Quarter 1993

State	(1)	(2)	(3)	State	(1)	(2)	(3)
Alabama	29	38	1	Nevada	1	0	0
Alaska	0	1	0	New Hampshire	0	1	1
Arizona	0	3	1	New Jersey	27	10	2
Arkansas	5	3	0	New Mexico	1	2	1
California	. 8	25	6	New York	23	38	3
Colorado	3	6	2	North Carolina	51	28	8
Connecticut	6	9	1	North Dakota	0	0	0
Delaware	5	1	1	Ohio	21	14	2
District of Columbia	1	1	0	Oklahoma	2	4	0
Florida	134	58	16	Oregon	0	5	1
Georgia	1,344	346	39	Pennsylvania	16	24	3
Hawaii	0	0	0	Rhode Island	1	0	0
Idaho	0	1	0	South Carolina	52	27	2
Illinois	9	15	3	South Dakota	0	0	0
Indiana	3	6	1	Tennessee	48	18	7
Iowa	0	0	0	Texas	12	16	3
Kansas	1	3	0	Utah	0	1	0
Kentucky	12	6	0	Vermont	0	1	0
Louisiana	8	15	1	Virginia	27	22	3
Maine	0	2	1	Washington	1	2	0
Maryland	23	16	3	West Virginia	4	2	1
Massachusetts	5	8	2	Wisconsin	0	8	0
Michigan	6	8	0	Wyoming	0	0	0
Minnesota	2	6	1	Other U.S. Territories & P	ossessions		
Mississippi	6	5	1	Puerto Rico	8	8	2
Missouri	6	13	1	Virgin Islands	2	2	0
Montana	0	2	0				
Nebraska	0	2	0	Total	1,913	832	120

Note: Column headings are as follows: (1) Bachelor's; (2) Master's; and (3) Doctoral.

Table 2.35 Degrees Conferred by Country of Residence, Summer Quarter 1992 - Spring Quarter 1993

Country	(1)	(2)	(3)	Country	(1)	(2)	(3)
Algeria	0	0	1	Italy	0	1	0
Austria	1	0	1	Jamaica	1	0	1
Bangladesh	0	1	0	Japan	0	6	2
Belgium	1	3	0	Jordan	0	1	0
Brazil	0	3	5	Kenya	0	1	0
Burma	0	1	0	Republic of Korea	2	8	13
Camaroon	0	1	0	Kuwait	0	0	1
Canada	1	0	4	Lebanon	14	4	2
China	0	20	12	Malaysia	2	1	0
Taiwan Republic of China	4	12	8	Mexico	0	5	0
Colombia	0	6	1	Morocco	1	0	0
Cyprus	1	1	0	Netherlands	0	1	0
Czechoslovakia	0	1	0	Nigeria	1	0	0
Denmark	1	0	0	Pakistan	1	18	2
Dominican Republic	0	1	0	Panama	4	0	0
Ecuador	1	0	0	Peru	1	1	0
Egypt	0	1	1	Poland	0	0	1
El Salvador	3	0	0	Romania	0	7	0
Finland	0	1	0	Singapore	0	0	1
France	0	20	3	South Africa	0	1	0
Federal Republic of Germany	0	20	4	Spain	1	2	0
Great Britain	0	1	0	Sri Lanka	0	0	1
Greece	1	2	0	St. Vincent & Grenadin	0	1	0
Guatemala	1	2	0	Swaziland	1	0	0
Honduras	2	0	0	Syrian Arab Republic	0	1	0
Hong Kong	4	6	0	Thailand	0	1	0
Iceland	0	1	0	Trinidad and Tobago	1	0	0
India	4	28	8	Turkey	2	8	1
Indonesia	0	0	1	Venezuela	0	9	0
Islamic Republic of Iran	1	3	0				
Israel	0	0	1	Total	58	212	75

Note: Column headings are as follows: (1) Bachelor's; (2) Master's; and (3) Doctoral.

#### **CAREER SERVICES**

The Office of Career Services (formerly Student Placement) is located in the Bill Moore Student Success Center. The Office serves the Georgia Tech community with a variety of placement services, including opportunities for full-time, as well as part-time, temporary, and summer employment. One of the primary objectives of the Office is to assist students in determining their career objectives and in attaining career and employment goals. The Center conducts workshops and seminars on a variety of career-related subjects—interviewing skills, resume preparation, networking, etc. A library that includes information on specific employers, governmental services, and employment-related publications is maintained at the Career Services Center. Also, the Office keeps local and national salary data, employment patterns of Georgia Tech graduates (employers, types of positions, and work locations), and graduate and professional school information. In addition, the Office issues a resume book and maintains an open resume file for employer review.

Assistance is available to employers in the planning, implementation, and administration of programs that encourage effective corporate-campus relations at Georgia Tech.

Over 600 employers annually interact directly with the Career Services Center. These employers represent a substantial number of the Fortune 500 corporations, as well as many state and regional organizations. Last year over 16,000 interviews were conducted by over 2,000 recruiters from these employers.

Table 2.36 Top Interviewing Companies, 1990-93

Company	Company	Company
1990-91	<u> 1991-92</u>	1992-93
General Electric Co.	Motorola, Inc.	Motorola, Inc.
Motorola, Inc.	Procter and Gamble	Procter and Gamble
Westinghouse	General Electric Co.	General Electric Co.
IBM	Schlumberger	International Paper
United Technologies	E-Systems	Schlumberger
Amoco	United Technologies	Milliken and Co.
Procter and Gamble	Milliken and Co.	Andersen Consulting
Schlumberger	Florida Power and Light	Michelin Tire Company
Frito-Lay	Michelin Tire Company	NCR Corporation
McDonnell Douglas	Westinghouse	Texas Instruments

Source: Office of the Director, Career Services



# **CAREER SERVICES**

Table 2.37 Dollar and Percent Change of Reported Monthly Starting Salaries, 1991-93

Degree	1992-93	1991-92	Percent Change	
Overall	\$3,054	\$2,906	+4.8%	
Bachelor's	\$2,857	\$2,737	+4.2%	
Master's	\$3,283	\$3,197	+2.6%	
Doctoral	\$4,325	\$4,008	+7.3%	

Table 2.38 Average Reported Starting Salaries by College and Degree, 1992-93

College	Overall	Bachelor's	Master's	Doctoral
Architecture	\$2,466	\$2,405	\$2,410	\$3,500
Computing	\$3,243	\$2,783	\$3,352	\$4,608
Engineering	\$3,100	\$2,935	\$3,350	\$4,477
Ivan Allen	\$2,719	\$2,251	\$3,317	N/A
Sciences	\$3,007	\$2,890	\$3,093	\$3,250

Table 2.39 Reported Starting Monthly Salaries by Major and Degree, 1992-93

Major	Degree	High	Low	Average
Aerospace Engineering				
	Bachelor's	\$3,200	\$2,000	\$2,550
	Master's	\$3,333	\$2,400	\$3,050
Architecture				
	Bachelor's	\$3,000	\$1,500	\$2,450
	Master's	\$2,350	\$1,700	\$2,050
Biology				
	Bachelor's	\$4,155	\$2,150	\$3,150
Building Construction				
•	Bachelor's	\$2,500	\$2,100	\$2,360
Ceramic Engineering				
5 5	Bachelor's	N/A	N/A	\$2,900
	Master's	N/A	N/A	\$2,920
Chemical Engineering				
	Bachelor's	\$3,200	\$1,250	\$3,350
	Master's	\$3,500	\$2,250	\$2,875
	Doctoral	\$5,583	\$3,600	\$4,735
Chemistry				
•	Bachelor's	\$2,983	\$2,500	\$2,808
	Master's	\$3,417	\$3,241	\$3,320
	Doctoral	N/A	N/A	\$4,190
Civil Engineering				
• •	Bachelor's	\$3,550	\$2,100	\$2,690
	Master's	\$3,100	\$2,500	\$2,720
Computer Engineering				
	Bachelor's	\$3,170	\$2,850	\$3,000
Computer Science				
-	Bachelor's	\$3,500	\$2,000	\$2,790
	Master's	\$3,920	\$2,621	\$3,355
	Doctoral	\$5,670	\$3,500	\$4,610
Electrical Engineering				
	Bachelor's	\$4,410	\$2,100	\$3,003
	Master's	\$4,833	\$2,460	\$3,500
	Doctoral	\$5,420	\$3,710	\$4,751

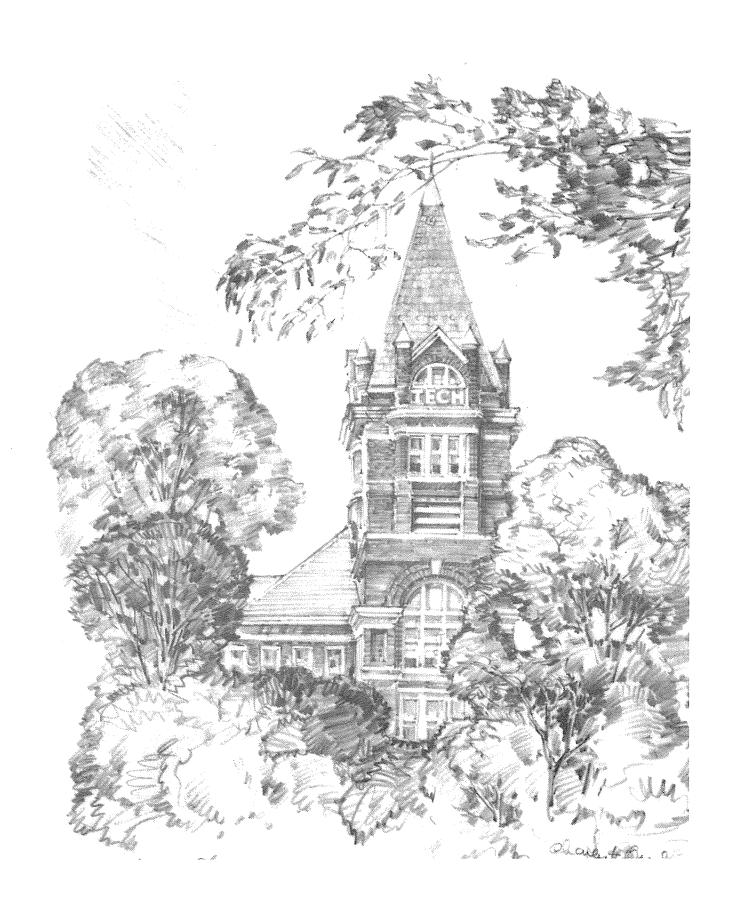
Source: Office of the Director, Career Services

# **CAREER SERVICES**

Table 2.39 Reported Starting Monthly Salaries by Major and Degree, 1992-93-Continued

Major	Degree	High	Low	Average
Engineering Science and Mechan	ics			
	Bachelor's	\$3,050	\$2,000	\$2,420
	Doctoral	\$4,500	\$3,620	\$4,100
Environmental Engineering		•		,
	Master's	\$3,083	\$3,000	\$3,041
Health Physics				
•	Bachelor's	\$3,100	\$2,500	\$2,800
History, Technology, and Society	•			
3, 63,	Master's	\$2,920	\$2,670	\$2,820
Industrial and Systems Engineering	ng			
•	Bachelor's	\$3,750	\$2,000	\$2,790
	Master's	\$3,916	\$2,833	\$3,315
	Doctoral	\$5,000	\$4,800	\$4,925
Management				
	Bachelor's	\$3,960	\$1,120	\$2,170
	Master's	\$5,200	\$2,500	\$3,370
Management Science				
	Bachelor's	\$3,333	\$2,333	\$2,770
Mathematics				
	Doctoral	\$3,300	\$2,500	\$2,940
Mechanical Engineering				
	Bachelor's	\$4,500	\$1,560	\$2,960
	Master's	\$3,865	\$2,916	\$3,340
	Doctoral	\$4,750	\$3,750	\$4,250
Physics				
•	Bachelor's	\$3,000	\$2,670	\$2,860
Polymer and Textile Chemistry				
•	Bachelor's	\$3,750	\$2,920	\$3,188
	Doctoral	\$4,620	\$2,500	\$3,620
Textile Engineering				
	Bachelor's	\$3,100	\$2,200	\$2,832
Textiles				
	Bachelor's	\$3,000	\$2,210	\$2,518

Source: Office of the Director, Career Services



Gr

# Faculty/Staff Profiles

Georgia Institute of Technology

# QUICK FACTS

Fac	ulty		
• Faculty Profile (Headcount):			
Full time Teaching Feaulty		615	
Full-time Teaching Faculty General Administration		14	
Academic Administrators		49	
Librarians		5	
On-leave		24	
Part-time Faculty		7	
Total		714	
Faculty Profile by Gender:			
Male		631	
Female		83	
Total		714	
• Faculty by Highest Degree:			
Doctoral		648	
Master's		60	
Bachelor's		6	
Total		714	
• Percent Tenured:			
	Male	Female	
Professor	34.5	1.1	
Associate Professor	29.4	4.2	
Assistant Professor	22.3	4.9	
Instructor	1.8	1.5	
Lecturer	0.3	0.0	
St	aff		
Total Employee Profile:			
Executive, Administrative, Managerial		356	
Faculty/Academic		689	
Research Faculty and Other Professiona	ıls	1,108	
Clerical and Secretarial		496	
Technical and Paraprofessional		421	
Skilled Crafts		181	
Service and Maintenance		291	
Total		3,542	

# **CHAIRS AND PROFESSORSHIPS**

Name of Chair or Professorship	Chair Holder	Department, School or College
College of Comp	uting	
Advanced Telecommunications Chair	Unfilled	College of Computing
John P. Imlay, Jr., Chair in Computing	Unfilled	College of Computing
Ivan Allen College of Management, Poli	cy, and International Aft	fairs
F. H. F. C. H	Europe C. Comieles	I Allan Callana
Fuller E. Callaway Chair in College of Management Hal and John Smith Chair of Small Business Entrepreneurship	Eugene C. Comiskey Unfilled	Ivan Allen College Ivan Allen College
Melvin Kranzberg Chair in History of Science and Technology	Olliffied	Ivan Anen Conege
(Formerly Fuller E. Callaway Chair)	Bruce Sinclair	History, Technology, and Society
Southern Bell Professorship in Communications Policy	William Read	Public Policy
Гhomas R. Williams Chair in Business and Management	William Read	Tublic Tolley
(Formerly First National Bank Endowed Chair)	Unfilled	Ivan Allen College
(Tornierry Prist National Bank Endowed Chair)		Ivan Anen Conege
College of Engine	ering	
Air Quality Chair	Unfilled	Earth and Atmospheric Sciences
Julius Brown Chair in School of Chemistry	Unfilled	Chemistry
Vasser Woolley Chair in the School of Chemistry	Unfilled	Chemistry
College of Scien	nces	
A. Russell Chandler II Chair for Distinguished Faculty in the		
School of Industrial and Systems Engineering	George L. Nemhauser	Industrial and Systems Engineering
B. Mifflin Hood Professorship in Ceramic Engineering	Unfilled	Materials Engineering
Byers Eminent Scholars in Microelectronics	Carl Verber	Electrical Engineering
Coca-Cola Chair in Material Handling and Distribution in the		
School of Industrial and Systems Engineering	Ellis L. Johnson	Industrial and Systems Engineering
David S. Lewis Chair in Aerospace Engineering	Ben Zinn	Aerospace Engineering
Eugene C. Gwaltney, Jr., Chair in Manufacturing Systems	John A. White	Industrial and Systems Engineering
Frank H. Neely Professorship in Nuclear Engineering and Health Physics	Unfilled	Mechanical Engineering
Fuller E. Callaway Chair in Nuclear Engineering and Health Physics	Weston M. Stacey, Jr.	Mechanical Engineering
Fuller E. Callaway Chair in the School of Textile Engineering	Unfilled	Textile Engineering
George W. Woodruff Chair in Thermal Systems	Unfilled	Mechanical Engineering
George W. Woodruff Chair in Mechanical Systems	Jerry Ginsberg	Mechanical Engineering
Georgia Power Professorship in the School of Electrical Engineering	Roger P. Webb	Electrical Engineering
Georgia Power Professorship in the School of Mechanical Engineering	William Z. Black	Mechanical Engineering
Georgia Power Professorship in Nuclear Engineering	S.I. Abdel-Khalik	Mechanical Engineering
Georgia Power Professorship in School of Electrical Engineering	Ajeet Rohatgi	Electrical Engineering
J. Erskine Love, Jr., Institute Chair in Engineering	Charles Eckert	Chemical Engineering
John H. Weitnaur, Jr., Technology Transfer Chair	John Copeland	Electrical Engineering
John O. McCarty/Audichron Professorship in the School of		
Electrical Engineering	Ronald W. Schafer	Electrical Engineering
Joseph M. Petit Chair in Electrical Engineering	James Meindl	Electrical Engineering
Ioseph M. Petit Chair in Materials	Rao Tummala	Electrical Engineering
Julian T. Hightower Chair in Engineering	Edward Kamen	College of Engineering
Julius Brown Chair in the School of Electrical Engineering	Thomas K. Gaylord	Electrical Engineering
Morris M. Bryan, Jr., Chair in Mechanical Engineering for		
Advanced Manufacturing Systems	Steven Danyluk	Mechanical Engineering
Parker H. Petit Chair for Engineering in Medicine	Robert M. Nerem	Mechanical Engineering
Schumberger Professorship in Microelectronics	Philip E. Allen	Electrical Engineering
Water Quality Chair	Unfilled	Civil Engineering



# FACULTY DEGREES

Table 3.2 Institutions Awarding Highest Degrees, as of June 1993

Number per Institution	Institution
60	Georgia Institute of Technology
36	Massachusetts Institute of Technology
33	University of Illinois, Urbana-Champaign
20	Stanford University
21	University of California, Berkeley; University of Michigan
15	Ohio State University
14	Emory University
12	Columbia University
16	Cornell University
13	University of Pennsylvania; Purdue University
11	University of Florida
10	Northwestern University; University of Wisconsin; University of Texas, Austin
9	Carnegie Mellon University; Harvard University; University of Maryland;
	University of North Carolina; Princeton University; University of Wisconsin, Madison
8	Brown University; Johns Hopkins University
7	Rice University; Tulane University
6	University of Southern California; University of California, Los Angeles;
	University of Chicago; University of Georgia; Florida State University; Yale University
5	University of California, San Diego; Case Western Reserve Institute;
	University of London, U.K.; Michigan State University; North Carolina State University;
	University of Rochester; University of Virginia; University of Washington; Washington
	University
4	California Institute of Technology; Georgia State University; University of Massachusetts;
	University of Pittsburgh; Pennsylvania State University; University of Tennessee, Knoxville
3 and under	103 different institutions

# **FACULTY PROFILE**

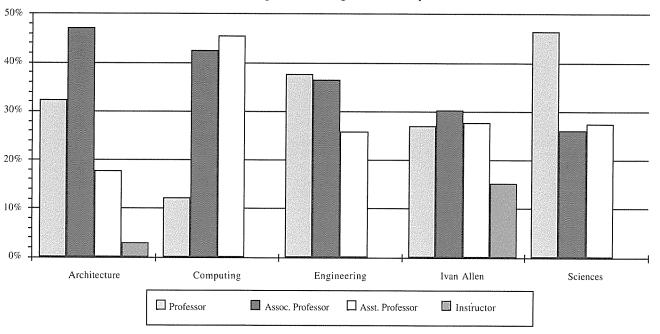
Table 3.3 Academic Faculty Distribution by College, as of June 1993

				_E	By Rank						
	<b>.</b>			sociate		sistant					
	Prof	essor	Pro	ofessor	Pro	ofessor	In	structor	Le	cturer	Total
College	#	%	#	%	#	%	#	%	#	%	#
Architecture	11	32.4	16	47.1	6	17.6	1	2.9	0	0.0	34
Computing	4	12.1	14	42.4	15	45.5	0	0.0	0	0.0	33
Engineering	106	37.5	103	36.4	73	25.8	0	0.0	1	0.4	283
Ivan Allen	34	26.8	38	29.9	35	27.6	19	15.0	1	0.8	127
Sciences	64	46.4	36	26.1	38	27.5	0	0.0	0	0.3	138
Total	219	35.6	207	33.7	167	27.2	20	3.3	2	0.3	615

			_ <u>B</u>	y Highest De	gree		
	Doo	ctoral	Ma	ister's	Bachelo	r's/Other	Total
College	#	%	#	%	#	%	#
Architecture	15	44.1	17	50.0	2	5.9	34
Computing	32	97.0	1	3.0	0	0.0	33
Engineering	279	98.6	2	0.7	2	0.7	283
Ivan Allen	105	82.7	22	17.3	0	0.0	127
Sciences	134	97.1	4	2.9	0	0.0	138
Total	565	91.9	46	7.5	4	0.7	615

			By Race a	nd Sex			
College	Black Male	White Male	Other Male	Black Female	White Female	Other Female	Total
Architecture	1	29	0	0	4	0	34
Computing	0	23	9	0	1	0	33
Engineering	9	207	50	2	15	0	283
Ivan Allen	2	73	16	2	32	2	127
Sciences	1	112	11	0	12	2	138
Total	13	444	86	4	64	4	615

Fig. 3.1. Percentage Distribution by Rank



# FACULTY PROFILE

Table 3.4 Academic Faculty Distribution by Sex, Percent Tenured, and Doctorates, as of June 1993

Totals	То	otal	Profe	essor		ciate essor		istant essor	Instr	uctor	Lecturer		
College	M	F	M	F	M	F	M	F	M	F	M	(1)	(2)
Architecture	30	4	11	0	13	3	5	1	1			73.5	44.1
Computing	32	1	3	1	14		15					30.3	97.0
Engineering	266	17	106	enterior.	98	5	61	12			1	61.1	98.6
Aerospace Engineering	25		12		8		4				1	56.0	96.0
Chemical Engineering	24	1	13		7		4	1			*******	72.0	100.0
Civil Engineering	36	2	14		15		7	2				63.2	100.0
Electrical Engineering	71	4	27		21		23	4				60.0	97.3
Industrial and Systems Eng.	35	4	11		18	2	6	2				66.7	97.4
Materials Engineering	12	2	5		4	1	3	1				35.7	100.0
Mechanical Engineering	53	3	22	-	19	2	12	1		**********		64.3	100.0
Textile and Fiber Engineering	g 10	1	2		6	_	2	1				45.5	100.0
Ivan Allen	91	36	28	6	24	14	28	7	10	9	1	52.0	82.7
Economics	7	******	1	-	3		3				-	42.9	100.0
Management	30	5	9	2	7	2	14	_	_	1		54.3	97.1
Public Policy	7	2	4		1	1	2	1				44.4	88.9
Hist., Technol., and Society	10	4	4	1	3	2	3	1				78.6	100.0
International Affairs	7	1	4	1	3		-					87.5	100.0
Lit., Comm., and Culture	23	17	5	1	5	7	5	1	8	8		42.5	60.0
Modern Languages	7	7	1	1	2	2	1	4	2		1	35.7	71.4
Sciences	124	14	64		32	4	28	10				63.8	97.1
Biology	10	3	3		6	1	1	2				69.2	100.0
Chemistry and Biochemistry	24	1	15		4		5	1				64.0	100.0
Earth and Atmospheric Sci.	13		7		3	_	3					69.2	100.0
Mathematics	41	4	19		11		11	4				55.6	95.6
Physics	23	1	15		5	_	3	1				79.2	100.0
Psychology	11	4	5		2	2	4	2			*******	46.7	100.0
Health and Performance Sci.	2	1			1	1	1					100.0	33.3
Institute													
Total	543	72	212	7	181	26	137	30	11	9	2	58.9	91.9
Percentage of Total	88.3	11.7	34.5	1.1	29.4	4.2	22.3	4.9	1.8	1.5	0.3		

<sup>\*</sup> Includes only those persons with academic rank; does not include academic administrators, or those on leave of absence. *Note:* Column headings are as follows: (1) Percent Tenured; and (2) Percent Doctorates.

# FACULTY PROFILE

Table 3.5 Academic Faculty Distribution by Position Classification, as of June 1993

	By Rank									
	Professor	Associate Professor	Assistant Professor	Instructor	Lecturer	Total				
Full-time Teaching Faculty	219	208	166	20	2	615				
General Administrators	11	2	_	1		14				
Academic Administrators	36	12	1			49				
Librarians	1	2	2		******	5				
On-leave	8	8	8			24				
Part-time Faculty*	3	1	3			7				
Total	278	233	180	21	2	714				

By Highest Degree						
	Doctoral	Master's	Bachelor's	Total		
Full-time Teaching Faculty	565	46	4	615		
General Administrators	12	2	_	14		
Academic Administrators	45	3	1	49		
Librarians	_	5	_	5		
On-leave	23	1	_	24		
Part-time Faculty*	3	3	1	7		
Total	648	60	6	714		

		Ву	Race and Sex	_			
	Black	White	Other	Black	White	Other	
	Male	Male	Male	Female	Female	Female	Total
Full-time Teaching Faculty	13	444	86	4	64	4	615
General Administrators		10		1	3		14
Academic Administrators		44	2	-	3		49
Librarians		2		1	2	-	5
On-leave		20	3	-	1		24
Part-time Faculty*		7			en-renera		7
Total	13	527	91	6	73	4	714

<sup>\*</sup> Includes only those part-time faculty (less than .75 EFT) who are on contract; does not include part-time faculty who are hired on a per course, per quarter basis as needed.

### STAFF PROFILE

Table 3.6 Total Employee Profile by EEO Category

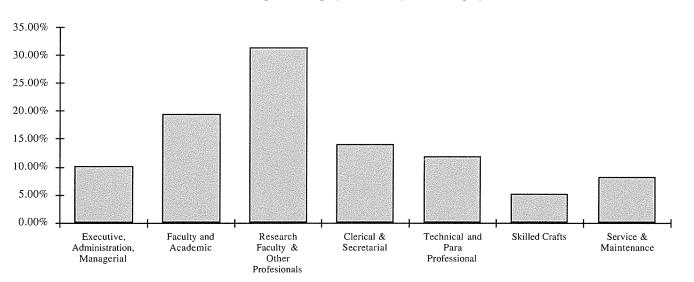
EEO		W	hite	Bl	Black		Other <sup>a</sup>		Γotal
Cod	e Category	M	F	M	F	M	F	M	F
1	Executive, Administrative, Managerial	222	94	16	17	4	3	242	114
2	Faculty/Academic <sup>b</sup>	484	88	13	7	93	4	590	99
3	Research Faculty and Other Professionals	679	290	22	90	20	7	721	387
4	Clerical and Secretarial	31	235	40	183	1	6	72	424
5	Technical and Paraprofessional	213	119	40	40	3 .	6	256	165
6	Skilled Crafts	124	3	49	4	1		174	7
7	Service and Maintenance	18	6	172	94	1		191	100
	Total	1,771	835	352	435	123	26	2,246	1,296

EEO = Equal Employment Opportunity

<sup>a</sup>Includes Hispanic, Asian, and native Americans.

blncludes librarians.

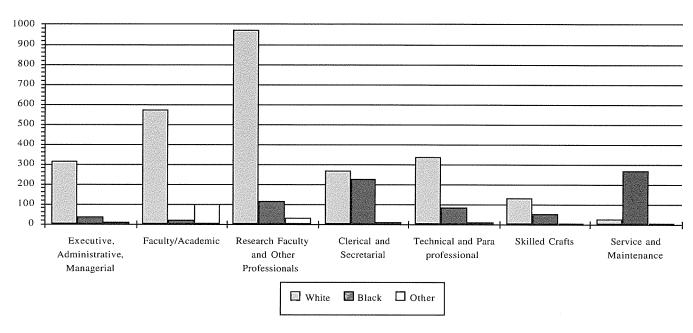
Fig. 3.2. Employee Profile by EEO Category



Source: Office of Human Resources

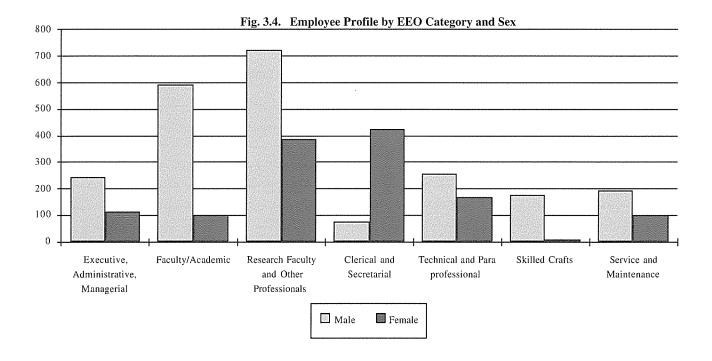
# STAFF PROFILE

Fig. 3.3. Employee Profile by EEO Category and Ethnicity



Source: Office of the President

### STAFF PROFILE



# **General Information**

Georgia Institute of Technology	

# **QUICK FACTS**

	Students		
<ul> <li>Matriculation and Nonresident Tuition Fees, Fa</li> </ul>	Il Ouarter 1993		
Matriculation Fee	Nonresident Tuition Fee	Total Nonres	ident Fee
\$615.00	\$1,485.00	\$2,100	
\$015.00	\$1,405.00	φ2,100	5.00
• Estimated Academic Year Cost (Fall, Winter, a	nd Spring Quarters):		
Matriculation (Full-time		\$1,845.00	
Other Mandatory Fees		,	
Student Activi		114.00	
Student Athlet		99.00	•
Student Health		165.00	
Transportation		54.00	
Estimated Elective Cha		2 1100	
Dormitory Roc		1,974.00	
Board (Estima		2,430.00	
`	(Books, supplies, personal)	1,959.00	
Total	(Dooks, supplies, personal)		40.00
Total		φο,υ-	+0.00
	Space		
• Square Footage by Functional Area, Fall 1993:		1.005.105	
Instruction		1,005,105	
Organized Research		795,771	
Public Service		38,850	
Academic Support		196,239	
Student Services		1,218,858	
Institutional Support		255,750	
Independent Operation		105,399	
Unassigned		29,639	
Building Services		1,940,938	
Total		5,586,549	
• Georgia Tech has 124 buildings with 3,542 roo	ms		
<ul> <li>Total student housing capacity is 5,924</li> </ul>	****		
<u> </u>			
<del></del>	Library		
• The Georgia Tech Library collections for 1993	include:		
Catalogued Items		2,847,336	
Government Documents		613,739	
Technical Reports		2,299,081	
Maps		171,055	
Patents		5,022,027	
A 500000			
	Other		

- 391 continuing education classes are offered
- There are 31 fraternities and 8 sororities existing on campus
- Georgia Tech's athletic tradition began in 1892 with the first football team
- Georgia Tech's athletes have won four national football championships, played in 23 bowl games, and received 45 All-American citations
- Georgia Tech has 9 men's athletic teams with 325 participants, and 7 women's athletic teams with 103 participants
- The Georgia Tech Foundation, chartered in 1932, has a current market value in excess of \$260 million
- The Georgia Tech Alumni Association was chartered in June 1908

# TUITION AND FEES

Table 4.1 Matriculation and Nonresident Tuition Fees, Fall Quarters 1984-93

	Matriculation Fee	Nonresident	Total Nonresident Fee
Year (Resident and Nonresident)		Tuition Fee	(Matriculation and Tuition)
1001			
1984	377	920	1,297
1985	424	1,035	1,459
1986	460	1,123	1,583
1987	487	1,187	1,674
1988	506	1,234	1,740
1989	528	1,283	1,811
1990	552	1,334	1,886
1991	574	1,387	1,961
1992	597	1,442	2,039
1993	615	1,485	2,100

Fig. 4.1. Matriculation and Nonresident Tuition Fees, Fall Quarters 1984-93

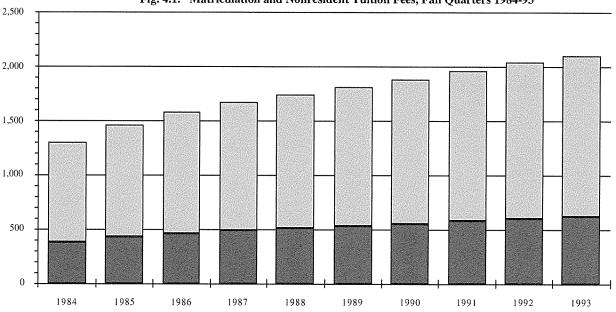


Table 4.2 Estimated Academic Year Cost

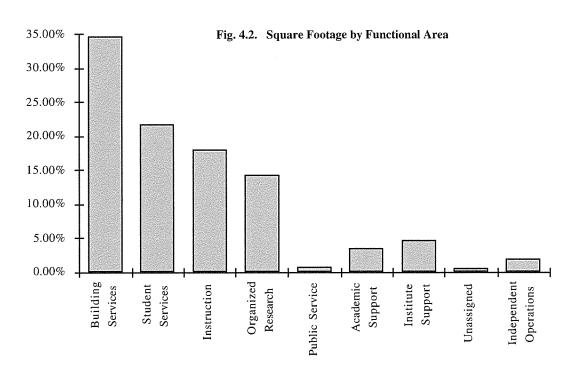
	1989-90	1990-91	1991-92	1992-93	1993-94
Matriculation (Full-time Student)	\$1,584	\$1,656	\$1,722	\$1,791	\$1,845
Other Mandatory Fees:					
Student Activity	114	114	114	114	114
Student Athletic	87	87	87	99	99
Student Health	159	165	165	165	165
Transportation	27	30	30	36	54
Estimated Elective Charges:					
Dormitory Room Rent	1,600	1,680	1,770	1,869	1,974
Board (Estimate)	2,029	2,029	2,127	2,430	2,430
Miscellaneous (Books, supplies, personal)	1,425	1,848	1,959	1,959	1,959
Total Estimated Cost	\$7,025	\$7,609	\$7,974	\$8,463	\$8,640

Source: Office of the Vice President, Planning, Budget, and Finance

# **FACILITIES**

Table 4.3 Functional Area Square Footage, Fall Quarter 1993

Function	Square Footage	Function	Square Footage	
Instruction		Institutional Support		
General Academic	1,005,105	Executive Management	42,178	
		Fiscal Operations	32,101	
Organized Research		General Administration Services	20,670	
		Logistical Services	43,219	
Research Center (GTRI)	537,132	Physical Plant Operations	86,177	
Individual or Project Research	258,639	Faculty and Staff Services	12,293	
Total	795,771	Community Relations	19,112	
		Total	255,750	
Public Service				
		Independent Oper	rations	
Community Education	38,850			
		Outside Agencies	89,362	
Academic Support		Other	16,037	
,		Total	105,399	
Libraries	151,281			
Audio/Visual	4,090	Ũnassigned		
Computing Support	26,583		<del></del>	
Academic Administration and Personnel Dev	elopment 14,285	Scheduled for Renovation	29,639	
Total	196,239			
		Building Servi	ces	
Student Services			<del></del>	
		Circulation, Mechanical, Construction,	Custodial 1,940,938	
Social and Cultural Development	413,102			
Counseling and Career Guidance	9,988	Total Institut	te	
Student Support	795,768		<del></del>	
Total	1,218,858	Grand Total	5,586,549	



Source: Office of Facilities

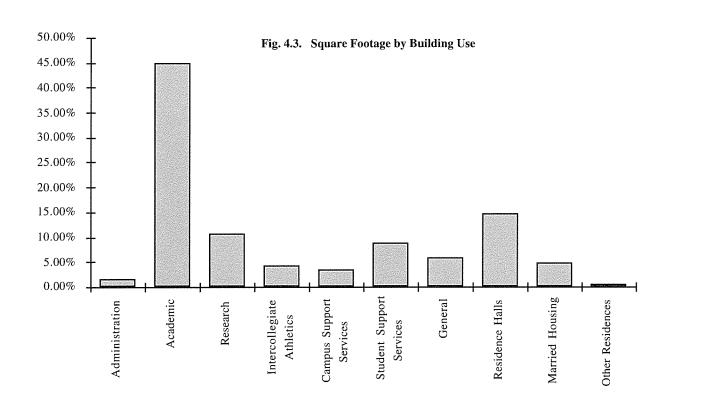
# **FACILITIES**

Table 4.4 Institute Buildings by Use, Fall Quarter 1993

	Number of	Gross Area
Principal Use of Buildings	Buildings	Square Feet
Administration	4	90,100
Academic	42	2,452,753
Research	6	587,849
Intercollegiate Athletics	6	233,742
Campus Support Services	11	191,557
Student Support Services	11	475,141
General	10	321,392
Residence Halls	23	802,837
Married Housing	3	261,600
Other Residences	8	27,937
Parking Decks	3	397,155
Institute Total	127	5,842,063

Table 4.5 Number of Rooms by Room Type

Room Type	Number	
Classrooms	154	
Teaching Laboratories	154	
Research Laboratories	559	
Offices	2,675	



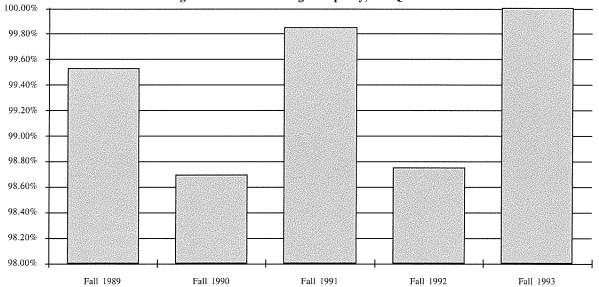
Source: Office of Facilities

# **FACILITIES**

Table 4.6 Capacity and Occupancy, Fall Quarters 1989-93

Fall	1989	Fall	1990	Fal	1 1991	Fa	11 1992	Fall	1993
M	F	M	F	M	F	M	F	M	F
3,109	1,099	3,062	1,131	3,062	1,131	3,062	1,131	3,106	1,353
3,100	1,099	3,033	1,127	3,060	1,125	3,001	1,112	3,106	1,353
976	N/A	1,017	N/A	956	N/A	956	N/A	978	N/A
976	N/A	977	N/A	956	N/A	956	N/A	978	N/A
N/A	69	N/A	81	N/A	83	N/A	83	N/A	102
N/A	69	N/A	81	N/A	83	N/A	83	N/A	102
4,085	1,168	4,079	1,212	4,018	1,214	4,018	1,214	4,084	1,455
4,076	1,168	4,010	1,208	4,016	1,208	3,957	1,205	4,084	1,455
3	300	3	300		300		300		300
2	283	3	300		300		300		300
5,5	553	5,5	591	5.	532	5.	532		5,924
,									5,924
						*			00.0%
	M 3,109 3,100  976 976  N/A N/A 4,085 4,076	3,109 1,099 3,100 1,099  976 N/A 976 N/A  N/A 69 N/A 69 4,085 1,168	M F M  3,109 1,099 3,062 3,100 1,099 3,033  976 N/A 1,017 976 N/A 977  N/A 69 N/A N/A 69 N/A  4,085 1,168 4,079 4,076 1,168 4,010  300 283  5,553 5,527  5,5	M         F         M         F           3,109         1,099         3,062         1,131           3,100         1,099         3,033         1,127           976         N/A         1,017         N/A           976         N/A         977         N/A           N/A         69         N/A         81           N/A         69         N/A         81           4,085         1,168         4,079         1,212           4,076         1,168         4,010         1,208           300         300           283         300           5,553         5,591           5,527         5,518	M         F         M         F         M           3,109         1,099         3,062         1,131         3,062           3,100         1,099         3,033         1,127         3,060           976         N/A         1,017         N/A         956           976         N/A         977         N/A         956           N/A         69         N/A         81         N/A           N/A         69         N/A         81         N/A           4,085         1,168         4,079         1,212         4,018           4,076         1,168         4,010         1,208         4,016           300         300           283         300           5,553         5,591         5,551           5,5527         5,518         5,518	M         F         M         F         M         F           3,109         1,099         3,062         1,131         3,062         1,131           3,100         1,099         3,033         1,127         3,060         1,125           976         N/A         1,017         N/A         956         N/A           976         N/A         977         N/A         956         N/A           N/A         69         N/A         81         N/A         83           N/A         69         N/A         81         N/A         83           4,085         1,168         4,079         1,212         4,018         1,214           4,076         1,168         4,010         1,208         4,016         1,208           300         300         300         300           283         300         300         300           5,553         5,591         5,532         5,524	M         F         M         F         M         F         M           3,109         1,099         3,062         1,131         3,062         1,131         3,062           3,100         1,099         3,033         1,127         3,060         1,125         3,001           976         N/A         1,017         N/A         956         N/A         956           976         N/A         977         N/A         956         N/A         956           N/A         69         N/A         81         N/A         83         N/A           N/A         69         N/A         81         N/A         83         N/A           4,085         1,168         4,079         1,212         4,018         1,214         4,018           4,076         1,168         4,010         1,208         4,016         1,208         3,957           300         300         300         300           283         300         300         300           5,553         5,518         5,524         5,           5,527         5,518         5,524         5,	M         F         M         F         M         F         M         F           3,109         1,099         3,062         1,131         3,062         1,131         3,062         1,131           3,100         1,099         3,033         1,127         3,060         1,125         3,001         1,112           976         N/A         1,017         N/A         956         N/A         956         N/A           976         N/A         977         N/A         956         N/A         956         N/A           N/A         69         N/A         81         N/A         83         N/A         83           N/A         69         N/A         81         N/A         83         N/A         83           4,085         1,168         4,079         1,212         4,018         1,214         4,018         1,214           4,076         1,168         4,010         1,208         4,016         1,208         3,957         1,205           5,553         3,591         5,532         5,532         5,532         5,462           5,5527         5,518         5,524         5,462	M         F         M         F         M         F         M         F         M           3,109         1,099         3,062         1,131         3,062         1,131         3,062         1,131         3,106           3,100         1,099         3,033         1,127         3,060         1,125         3,001         1,112         3,106           976         N/A         1,017         N/A         956         N/A         956         N/A         978           976         N/A         977         N/A         956         N/A         956         N/A         978           N/A         69         N/A         81         N/A         83         N/A         83         N/A           N/A         69         N/A         81         N/A         83         N/A         83         N/A           4,085         1,168         4,079         1,212         4,018         1,214         4,018         1,214         4,084           4,076         1,168         4,010         1,208         3,00         300         300           283         300         300         300         300         300           5,553

Fig. 4.4. Student Housing Occupancy, Fall Quarters 1989-93



Source: Student Housing Office

### LIBRARY

The Library and Information Center houses collections of scientific and technical information. It includes over 2.8 million volumes, and 2.2 million technical reports, 600,000 government documents, and 168,000 maps. It is an official depository of the U.S. Government Printing Office and the U.S. Patent and Trademark Office. The Library's goals include increasing the amount and quality of information available on campus, increasing productivity, and creating of a rich learning environment for students.

The catalog record of the Library's collections is part of the Georgia Tech Electronic Library (GTEL®) and is used by faculty, staff, and students through the campus network. GTEL® also contains abstracts and indexes to contents of journals and conference proceedings in general areas, as well as in engineering, science, computing, business, and management. GTEL® is complemented by a campus-wide delivery service of library materials to faculty and staff.

The Library has access to over 500 databases of citations, full text, and numeric data through outside vendors. The Library's Georgia Tech Information Service offers fee-based services to teaching and research faculty on campus and to individuals and businesses outside Georgia Tech. These services include research services, database searching, and reports on specific subjects tailored to meet client needs.

The Institute's membership in the University Center in Georgia allows access to and delivery of materials from 13 other libraries in the area. Georgia Tech and Georgia State University participate in a reciprocal borrowing program to enhance access to information resources for the students and faculty of both schools. Tech students and faculty also may use the libraries of all other institutions in the University System.

The Library is a member of the Association of Research Libraries, Online Computer Library Center (OCLC), Solinet, and the Georgia Library Information Network.

According to the University's financial reports, the Library has received the following funding for the 1986 through 1993 fiscal years:

**Table 4.7 Library Expenditures** 

		Percentage of Educational				
Fiscal Year	Expenditures	and General Expenditures				
1986	\$4,308,387	3.2				
1987	4,154,159	3.1				
1988	4,473,279	3.0				
1989	4,633,788	3.0				
1990	4,970,854	2.9				
1991	5,405,684	3.0				
1992	5,741,942	3.0				
1993	5,294,917	N/A				

Table 4.8 Library Collections

			Number	Percent	
	1991-92	1992-93	Change	Change	
Catalogued Items	2,718,595	2,847,336	128,741	+4.7	
Government Documents	602,379	613,739	11,360	+1.9	
Technical Reports	2,230,863	2,299,081	68,218	+3.1	
Maps	168,800	171,055	2,255	+1.3	
Patents	4,907,883	5,022,027	114,144	+2.3	

Source: Office of the Dean and Director, Libraries

The Division of Student Services at Georgia Tech seeks to provide services and activities to encourage and assist students in their physical development and to cultivate their capabilities both as professionals and as human beings. Specific programs include:

**Student Housing**: Twenty-five on-campus residence halls house 3,102 males and 1,098 females, and apartments are provided for 298 married students. The Residence Hall Association (RHA) provides numerous social, academic, and recreational activities. Fraternities provide on-campus housing for 1,000 students.

The **Student Health Center** is a modern Ambulatory Care Center with facilities for out-patient treatment, X-ray examinations, physical therapy, a medical laboratory, and beds for 30 patients. The staff consists of five full-time physicians, visiting consultants in psychiatry and radiology, registered nurses, physician assistants, and medical technicians. Physicians and dentists on the consulting staff represent all medi-dental specialties; their services are available on a fee-for-service basis. Student Health fees cover regular on-campus services during school terms. A supplemental insurance plan, which covers consultations, referrals to other physicians or hospitals, and medical problems that occur off-campus, is available to all students.

Food Services at Georgia Tech offers a dining program carefully designed to provide variety and flexibility on a budget that is right for students. The Tech Express offers services that suit the students' schedules as well as their lifestyles. Several options are available on a quarterly basis. The dining program also offers the convenient Tech Express Card, a meal "debit card" honored at all six dining facilities on campus.

The **Georgia Tech Campus Police** support the educational and research activities of the Institute by providing for the law enforcement, security, and safety needs of the community. The Campus Police are available to provide services to the community 24 hours a day, 7 days a week. All officers of the department are certified by the Georgia Peace Officer Standards and Training Council and receive professional training on a continual basis. The Campus Police can be reached by telephone at (404)894-2500.

Counseling Services with professional counselors are available to help students who have personal problems; motivational problems; study problems; or concerns about choosing a career, a major, or another college. The career information service includes a computerized interactive guidance and information system; study skills instruction; resume and job search workshops; and a library of film strips, videotapes, and cassettes containing information about careers.

**Recreation** is available at the Callaway Student Athletic Complex which features two multi-purpose gymnasiums for basketball, volleyball, and badminton. Other areas include weight training for men and women, racquetball/handball/squash courts, a 50-meter outdoor swimming pool, and a 25-meter indoor swimming pool with connecting diving well. The building houses the Health and Performance Sciences Department, and the Intramural Department.

The **Student Center** contains facilities and services for all types of out-of-classroom special interest and social programs. A professional program and numerous student committees provide a complete range of social, artistic, cultural, and recreational programs for the Tech community. The Student Center also offers a full-service post office, automatic teller machines, craft center, recreation area, music listening room, box office, computer cluster, and more.

The **Georgia Tech Bookstore** is an institutionally owned and operated facility with a staff of 35 full-time employees dedicated to fulfilling the needs of students, faculty, and staff. The store is located adjacent to the Student Center and covers approximately 48,000 square feet. In addition to textbooks, the bookstore also features calculators, school spirit items, clothing, and much more. Tenants in the mall include a travel agency, card and gift shop, hair styling center, computer store, computer repair facility, and grocery store.

**Fraternities and Sororities** are located on the campus. There are 32 national social fraternities with a total membership of 2,080 and eight national social sororities with a membership of 585.

**Student Organizations** abound at Georgia Tech. Opportunities are provided for student participation in a variety of officially recognized groups. The Student Government Association provides 13 committees for student involvement. Besides the traditional student newspaper, yearbook, and radio station, there are approximately 23 sports/recreation organizations; 35 special interest groups; 21 religious organizations; 54 departmental, professional, and honor societies; 13 social service organizations; 12 cultural organizations; and 11 national honor societies. Over 5,000 students are involved in one or more student organizations.

Services for Students with Disabilities, provided through the Division of Student Services, offers many services including assistance with registration, accessibility, parking, transportation, housing, counseling, tutoring, and other individualized needs

The Georgia Tech Theatre for the Arts plays host to nearly 300 events each year, ranging from student organized functions to an annual fine arts series, which brings world-class performers to the Tech campus. The Richards and the Westbrook galleries, located in the theatre foyer, host visual art exhibitions highlighting technology and the arts. This 1,200-seat performing and visual arts facility serves as the needed space for campus groups and local area arts organizations to present their events. For more information about the Theatre for the Arts, call the theatre administration office at (404)894-2787.

Source: Division of Student Services

Table 4.9 Fraternities and Sororities

Social Organization	Date Established on Campus
Fraternities	
Alpha Tau Omega	1888
Sigma Alpha Epsilon	1890
Kappa Sigma	1895
Sigma Nu	1896
Kappa Alpha Order	1899
Phi Delta Theta	1902
Chi Phi	1904
Phi Kappa Sigma	1904
Pi Kappa Alpha	1904
Sigma Phi Epsilon	1907
Pi Kappa Phi	1913
Phi Epsilon Pi*	1916
Zeta Beta Tau*	1970
Beta Theta Pi	1970
Delta Sigma Phi	1917
Delta Signia Fili Delta Tau Delta	1921
Sigma Chi	1921
Phi Sigma Kappa	1923
Chi Psi	1923
Theta Chi	1923
Phi Gamma Delta	1926
Phi Kappa Tau	1929
Lambda Chi Alpha	1942
Alpha Epsilon Pi	1946
Tau Kappa Epsilon	1948
Theta Xi	1951
Delta Upsilon	1957
Phi Kappa Theta	1966
Psi Upsilon	1970
Omega Psi Phi	1976
Alpha Phi Alpha	1981
Delta Chi	1991
Sororities	
Alpha Xi Delta	1954
Alpha Gamma Delta	1970
Alpha Chi Omega	1974
Alpha Delta Pi	1977
Alpha Kappa Alpha	1979
Delta Sigma Theta	1982
Zeta Tau Alpha	1984
Phi Mu	1989

<sup>\*</sup>In 1970 Phi Epsilon Pi merged into Zeta Beta Tau.

Source: Division of Student Services

Ί	able	e 4.10	Student	Organiz	ations

Table 4.10 Student Organizations Organization	Purpose
	Student Governing Organizations
D 1 66 1 1 D 1 1 1	
Board of Student Publications	Governs and coordinates the efforts of the major student publications
Graduate Student Senate	Represents graduate students
Interfraternity Council	Governing body of the fraternity system
Panhellenic Association	Governing body of the sorority system
Radio Communications Board	Governs the student radio station (WREK)
Residence Hall Association	Represents residents of the residence halls and organizes residence halls
Sports Club Council	Supervises and evaluates the sports club program
Student Athletic Center	Administers program serving recreational and athletic interests of the
Advisory Council	Tech community
Student Center Governing Board	Determines policies and procedures of the Student Center
Student Center Programming Board	Coordinates activities and programs
Student Government Association	Provides for the involvement of the student body in the operation of the Institute
	Production Organizations
The Blueprint	Georgia Tech's annual
Chamber Orchestra	Studies and performs classical chamber music
Musicians Network	Brings campus musicians together for playing and recording
Chorale	Performs sacred works and popular contemporary music
DramaTech	Theatrical performances
Erato	A student publication of art, poetry, prose, and photography
Georgia Tech Yellow Jacket Band	Performs at hoskethall games
Pep Band	Performs at basketball games
Concert Band	Light concert performances during winter and spring
Jazz Ensemble	Performance-oriented jazz group
The Technique	Student-run newspaper
North Avenue Review	Specialty student paper Georgia Tech's 24-hour a day, student-run radio station
WREK Radio	Georgia Tech 8 24-nour a day, student-full faulo station
	Honor Societies
ANAK	Honor
Briarean Society I	Promotes high scholarship among co-op students
Briarean Society II	Recognizes academic achievement of co-op students
Gamma Beta Phi Society	Encourages scholastic effort and rewards academic merit
Golden Key Nat'l Honor Society	Recognizes scholastic achievement and excellence in all undergraduate fields
Lambda Sigma	Alpha Kappa Chapter, promotes leadership, scholarship, and fellowship among sophomore
Omicron Delta Kappa	Alpha Eta Circle, promotes leadership
Order of Omega	Promotes leadership of fraternity and sorority members
Phi Eta Sigma	Freshman Honorary Society
Phi Kappa Phi	Recognizes superior scholarship in all fields of study
Tau Beta Pi Association	Georgia Alpha Chapter, honors academic achievements and exemplary character
	Department Honoraries
Alpha Chi Sigma	Chemistry
Alpha Pi Mu	Industrial engineering
Beta Beta Beta	Biology
Beta Gamma Sigma	Business and management
Chi Epsilon	Civil engineering
Omega Chi Epsilon	Chemical engineering
Eta Kappa Nu	Beta Mu Chapter, electrical engineering
Kappa Kappa Psi	Promotes the existence and welfare of the band
Keramos	Ceramic industries
Pi Mu Epsilon	Mathematics
Pi Tau Sigma	National honorary mechanical engineering fraternity
Sigma Gamma Tau	Aeronautical engineering
Sigma Pi Sigma	Physics
	Promotes and serves the Georgia Tech band
Tau Beta Sigma	Fromotes and serves the Georgia Teen band

Table 4.10 Student Organizations-Conti Organization	Purpose
	Departmental and Professional Societies
ATEORG	Promotos international understanding and cooperation
AIESEC	Promotes international understanding and cooperation
Alpha Kappa Psi	Professional business fraternity for IM's and IE's
American Assoc. of Textile Chemists and Colorists	New processes in textile manufacturing
American Ceramic Society	Furthers ceramic science, technology, and developments
American Chemical Society	Provides professional and personal services to chemical and chemical engineering major
American Institute of Aeronautics	Promotes student/industry relations in aerospace engineering and astronautics
American Institute of Architects	Provides student link to the practice of architecture and those professionals involved
American Institute of Chemical Engineers	Strives to build leadership and communication skills
American Institute of Industrial Engineers	Encourages industrial engineering awareness on campus and the professional developme of industrial engineers
American Marketing Association	Fosters research in the field of marketing
American Medical Student Association	Pre-medical society
American Nuclear Society	Provides a professional society dedicated to the discussion of policy and related issues affecting nuclear and radiation protection
American Society of Civil Engineers	Provides a professional society dedicated to the discussion of policy and related issues affecting nuclear and radiation studies
ASHRAE	Science and professions relating to heating, refrigeration engineering
American Society of Mechanical Engineers	Opportunities and responsibilities of mechanical engineering
Arnold Air Society	Develops leadership and dedication in AFROTC cadets
Assoc. for Computing Machinery	Promotes and increases knowledge of science, design, development, construction, languages, and applications of modern computing machinery
Assoc. for Environmental Engineers	To provide a forum for communication between students, faculty, scientists and engineering professionals in the field of environmental engineering.
Assoc. for Industrial Design Students	Promotes the field of industrial design
Assoc. of Chemical Engineering	Promotes graduate student interaction with the Chemical Engineering Graduate Students School, faculty, staff, and fellow graduate students
Georgia Tech Law Organization	Familiarizes students with the study and practice of law
Graduate Students in Management	Serves as a focal point for graduate management activities
Industrial Designers Society of America	Fosters better student understanding of the practice and profession of industrial design
Institute of Electrical and Electronic Engineers	Provides means for student involvement in electrical engineering
Planning Association	Promotes Graduate City Planning Program
Society for the Advancement of	Conducts and promotes scientific study of the principles governing management- nt organized effort in industrial and economic life
Society of Automotive Engineers	Advances the arts, sciences, standards, and engineering practices connected with the design and utilization of self-propelled mechanisms, prime movers, and related equipment
Society of Black Engineers	Fosters the recruitment, retention, and career development of minorities in engineering
Society of Hispanic Professional Engineers	Promotes scholarship and assists Hispanic students in acquiring cholarships
Society of Physics Students	Advances and diffuses knowledge of physics
Society of Women Engineers	Professional service organization aimed toward informing female engineering students of opportunities open to them
Student Construction Association	Promotes the Building Construction Program
Student Diaming Aggregation	Promotes city planning programs and student interest with faculty

Student Planning Association

Promotes city planning programs and student interest with faculty

#### Table 4.10 Student Organizations-Continued

Other Organization

#### Recreation, Leisure and Sports Organizations

Barbell Club Hockey Club Scuba Jackets Club International Folk Dancers **Bowling Club** Soccer Club Cheerleaders Lacrosse Club Sport Parachute Club Chess Club Musicians Network Table Tennis Club College Bowl Racquetball Club Tae Kwon Do Club Cycling Ramblin' Reck Club Volleyball Club Disc Association Rowing Club Water Polo Club Fencers Society, Yellow Jacket Rugby Club Water Ski Club Hapkido Club Sailing Club Women's Soccer Club

#### Religious and Spiritual Organizations

Alpha Omega Christian Campus Fellowship Jewish Educational Alliance Baha'i Club Christian Science Organization Lutheran Campus Ministry **Baptist Student Union** Christian Student Organization Muslim Students Association B'nai Brith Hillel Church of Jesus Christ of Latter Day Saints Newman Club Branches Fellowship of Christian Students Presbyterian Student Center Campus Crusade for Christ Forerunners for Christ Canterbury Association of All Saints Church InterVarsity Christian Fellowship

#### Service and Educational Organizations

Alpha Phi Omega Omega Phi Alpha College Libertarians AmigaSIG College Republicans Radio Club Amnesty International Environmental Forum Students for Life Angel Flight Flying Club, Yellow Jacket **Techmasters** Army ROTC Counterinsurgency Unit Forum on Democracy World Student Fund Committee Association for Metaphysical and Freshman Council Young Democrats Parapsychological Research Get a Buzz on Life Task Force Young Men's Christian Association Career Fair Committee Habitat for Humanity Circle "K" Club Mariners

#### Cultural and Diversity Organizations

Hellenic Society Pakistan Student Association African-American Student Union India Club Puerto Rican Student Association African Students Association Iranian Cultural Society Spanish Speaking Organization Caribbean Students Association Korean Students Association Turkish Students Organization Chinese Friendship Association Le Cercle Français US/Japan Intercultural Society Chinese Student Club League of United Latin American Citizens Vietnamese Club Gay and Lesbian Alliance Lebanon Club The German Club

Source: Division of Student Services

### ATHLETIC ASSOCIATION

The Georgia Tech athletic tradition is almost as old as the school itself and contributes an important part to the Tech heritage. The first football team was formed in 1892, and from that initial season until 1903 it was coached by an assortment of volunteers, most notably Lt. Leonard Wood (who later became famous as the colonel in command of Roosevelt's Rough Riders and the man who captured Geronimo). In 1904, Tech hired its first full-time football coach, John Heisman, for whom the Heisman Trophy is named.

Over that last 85 years, Tech has had only nine full-time head football coaches: John Heisman, Bill Alexander, Bobby Dodd, Bud Carson, Bill Fulcher, Pepper Rodgers, Bill Curry, Bobby Ross, and Bill Lewis.

The Tech football history includes such notable events as four national championships (1917, 1928, 1952, and 1990), 23 bowl game appearances (15 wins, 8 losses), and 45 All-American citations. The Tech legend includes more than football. Many great names have made sports history at Georgia Tech: Bobby Jones and Larry Mize (golf); Roger Kaiser, Rich Yunkus, Mark Price, John Salley (basketball); Ed Hamm (track world record holder and Olympic performer); and Antonio McKay (Olympic gold and bronze medalist in track and field).

The Georgia Tech Athletic Association is a nonprofit organization responsible for maintaining the intercollegiate athletic program at Georgia Tech. The Athletic Association is overseen by the Georgia Tech Athletic Board, chaired by the president of the Institute and composed of seven faculty members, three alumni members, and three student members. The on-going operations of the Athletic Association are managed by the Director of Athletics, Dr. Homer Rice, and his staff.

The Athletic Association consists of the following areas of operations: sport programs (17), business, development, finance, accounting, ticketing, academics, marketing and promotions, sports information, and sports medicine. In addition, the Alexander-Tharpe Fund raises funds to support intercollegiate athletics. The Fund offers scholarships and other forms of assistance to student-athletes at Tech.

Tech has some of the finest facilities in the nation, including the multi-million dollar Arthur B. Edge Athletics Center, which houses Tech's administrative and coaching staffs, a dining hall, locker, and training and weight room facilities; and the Andrew Hearn, Sr., Academic Center. Tech's athletic plant also features the 46,000-seat Bobby Dodd Stadium/Grant Field for football, the 9,500-seat Alexander Memorial Coliseum for basketball, the James Luck, Jr., Building that houses basketball locker rooms, and the Russ Chandler Stadium for baseball, as well as the Bill Moore Tennis Complex (which features both indoor and outdoor courts) and the state-of-the-art George C. Griffin Track complex and Morris Bryan Stadium.

The Georgia Tech Athletic Association is a service organization for several constituent groups: Tech's student-athletes, the student body, faculty and staff, alumni and friends, sports media, and the general community. The primary purpose of the Athletic Association is to direct each student-athlete toward growing as a total person, earning a meaningful degree, becoming a good citizen, and developing as an athlete. The basic obligation of all of these groups is two-fold:

- (1) to develop and maintain a competitive athletic program that can be a source of pride, and
- (2) to allow members of these groups the opportunity to become involved in the program, whether as participants, contributors, or spectators.

The Athletic Association also sponsors the Georgia Tech Band, Pep Band, Reckettes (drill team), cheerleaders, and Solid Gold (recruiting assistants), as well as student trainers and managers.

**Table 4.11 Athletic Association Sponsored Groups** 

Group	Number of Participants	
Band	285	
Pep Band	30	
Reckettes	16	
Cheerleaders	30	
Solid Gold	47	
Student Trainers	10	
Student Managers	14	

Source: Office of the Director, Athletic Association

# ATHLETIC ASSOCIATION

The Georgia Tech athletic program includes 16 intercollegiate athletic teams (nine men's and seven women's). During the 1992-93 school year, 382 student-athletes will compete in these sports:

**Table 4.12 Intercollegiate Athletic Teams** 

Sport	Head Coach	Number of Participants	
	Men's		
Baseball	Jim Morris	30	
Basketball	Bobby Cremins	11	
Cross Country	Alan Drosky	14	
Football	Bill Lewis	131	
Golf	Puggy Blackmon	12	
Indoor Track	Buddy Fowlkes	47	
Swimming	Bill Humber (Interim)	27	
Tennis	Jean Desdunes	6	
Track	Buddy Fowlkes	47	
	Women's		
Basketball	Agnus Berenato	12	
Cross Country	Alan Droskey	9	
Indoor Track	Buddy Fowlkes/Wendy Harper	22	
Softball	Regina Tomaselli	15	
Γennis	Janey Strause	8	
Гrack	Buddy Fowlkes/Wendy Harper	25	
Volleyball	Shelton Collier	12	

Table 4.13 Georgia Tech Athletic Board

Name	Title
	Chair
Dr. Patrick Crecine	President
	Faculty
Dr. Philip Adler, Jr.	Professor, College of Management
Dr. Linda Brady	Director, School of International Affairs
Dr. George Nemhauser	Professor, School of Industrial and Systems Engineering
Dr. William M. Sangster	Director, International Programs
Dr. William A. Schaffer	Professor, School of Economics
Mr. Mike Sinclair	Senior Research Engineer
Dr. Mark Smith	Assistant Professor College of Engineering
	Students
Chris Carson	Sports Editor, The Technique
Ashley Gigandet	Student Body President
Derek Mills	Student-Athlete Representative
	Alumni
Mr. Taz Anderson	
Mr. J. Randall Carroll	
Mr. George Mathews, Jr.	
	Honorary Members

Mr. R.H. Tharpe, Sr.

Mr. Arthur Howell

Mr. Dan McKeever

Mr. George Brodnax III

Mr. John O'Neill

Source: Office of the Director, Athletic Association

### GEORGIA TECH FOUNDATION

The Georgia Tech Foundation was chartered in 1932 to "promote in various ways the cause of higher education in the state of Georgia; to raise and receive funds for the support and enhancement of the Georgia Institute of Technology; and to aid the Georgia Institute of Technology in its development as a leading educational institution." It is a nonprofit corporation that receives, administers, and distributes virtually all contributions made in support of the Georgia Institute of Technology. It has been certified by the Internal Revenue Service of the United States and the Department of National Revenue-Taxations of Canada as a tax-exempt organization.

The Board of Trustees of the Foundation is composed of 36 individuals distinguished by success in their chosen professions and their long-time interest in, service to, and support of the Institute. These trustees include the president, president-elect, and immediate past president of the Alumni Association and chair of the Georgia Tech Advisory Board as *ex-officio* members. The trustees are elected to four-year terms and may be elected to serve no more than two consecutive full terms on the Board. Twenty-three emeritus trustees continue to advise the Foundation and actively support the Institute.

The office of the Foundation is located in the William C. Wardlaw Center on North Avenue. The assets of the Foundation as of June 20, 1993, had a market value in excess of \$260 million. The Foundation supports recruitment and support of students, acquisition of facilities and equipment, recruitment and support of faculty, academic program initiatives, and various other special projects.

(In Millions of Dollars) 300 250 200 150 100 50 FY 1989 1991 1993 1981 1982 1983 1984 1985 1986 1987 1988 1990 1992 Georgia Tech Foundation Georgia Tech Total Endowment

Fig. 4.5. Market Value of Endowment Fiscal Years 1982-1993 (In Millions of Dollars)

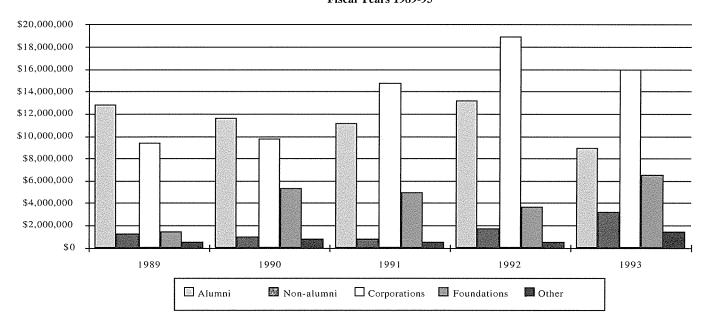
Source: Office of the Director, Georgia Tech Foundation

### SOURCES OF SUPPORT

Table 4.14 Major Institutional Support, Fiscal Years 1989-93\*

	1989	1990	1991	1992	1993
-	by D	onor Purpose			
Unrestricted	\$5,036,103	\$5,428,943	\$6,956,880	\$6,895,191	\$6,319,609
Institute Divisions	6,558,636	5,386,769	6,158,382	6,203,614	5,039,764
Faculty and Staff Compensation	1,774,494	547,028	582,113	665,022	709,936
Research	2,149,746	1,609,748	1,579,841	1,909,880	2,697,294
Student Financial Aid	924,048	987,934	1,395,670	2,339,562	1,608,926
Other Restricted Purposes	1,866,470	2,087,833	3,496,315	3,129,309	6,086,311
Total for Current Operations	\$18,309,497	\$16,048,255	\$20,169,201	\$21,142,578	\$22,461,840
Property, Buildings, and Equipment	\$2,698,818	\$8,377,846	\$9,545,159	\$13,650,255	\$9,221,534
Endowment and Similar Funds, Unrestricted	1,961,204	1,144,115	292,820	446,044	1,037,479
Endowment and Similar Funds, Restricted	2,540,469	2,897,846	2,160,079	2,816,066	3,405,452
Loan Funds	3,077	62,821	15,923	5,657	3,789
Total for Capital Purposes	\$7,203,568	\$12,482,628	\$12,013,981	\$16,918,022	\$13,668,254
Grand Total	\$25,513,065	\$28,530,883	\$32,183,182	\$38,060,600	\$36,130,094
	by Sou	irce of Support			
Alumni	\$12,839,948	\$11,651,738	\$11,145,435	\$13,175,075	\$8,950,820
Non-alumni	1,289,066	1,010,095	822,763	1,765,531	3,211,314
Corporations	9,435,178	9,783,212	14,792,043	18,937,212	15,952,992
Foundations	1,449,722	5,290,268	4,934,899	3,636,870	6,577,581
Other	499,151	795,570	488,042	545,912	1,437,387
Total	\$25,513,065	\$28,530,883	\$32,183,182	\$38,060,600	\$36,130,094

Fig. 4.6. Major Sources of Support Fiscal Years 1989-93



<sup>\*</sup> Includes all donations made to the Georgia Tech Foundation, the Georgia Tech Athletic Association, and the Georgia Institute of Technology.

Source: Office of the Vice President, External Affairs

# **OFFICERS**

Table 4.15 Georgia Tech Officers, 1993-94

Position	Title
	Georgia Tech Foundation
President	Retired, Chairman and CEO, Richway
Vice President	President, Technology Park/Atlanta Inc.
Treasurer	President, Julian LeCraw & Company
Vice President	Vice President for External Affairs, Georgia Tech
Secretary	Georgia Tech Foundation, Georgia Tech
Geo	orgia Tech Advisory Board
Chair	President and CEO, Coca-Cola Nestle Refreshments Co.
Vice Chair	President, Indigo
Vice Chair	Chairman of the Board and CEO, Interface, Inc.
r. Immediate Past Chair	Retired, Vice Chairman of the Board, E.I. du Pont de Nemours & Co., Inc.
Secretary	Vice President for External Affairs, Georgia Tech
Ale	exander-Tharpe Fund, Inc.
President	President, Georgia Tech
Vice President	President and CEO, Digital Comm. & Associates
Exec. Vice President and Executive Director	Senior Associate Athletic Director, Georgia Tech
Secretary	Vice President for External Affairs, Georgia Tech
Treasurer	Alexander-Tharpe Fund, Inc.
Vice President	Alexander-Tharpe Fund, Inc.
Athletic Director	Exec. Assistant to the President & Director of Athletics, Georgia Tech
Director	Alexander-Tharpe Fund, Inc.
Chief Admin. Officer and Associate Director	Georgia Tech Athletic Association
Associate Director	Georgia Tech Athletic Association
Attorney	Counsel, Alston & Bird
Georg	ia Tech Alumni Association
President	Vice President/Atlanta Region, Norrell Services, Inc.
Past President	President, Stith Equipment Company
President Elect/Treasurer	President, Maier & Berkele, Inc.
Vice President/Activities	Chair of the Board & CEO, Standard Group, Inc.
Vice President/Comm.	President/INVESCO Services Inc.
Vice President/Roll Call	Vice President Dist. Manager, HCB Contractors
Vice President and Exec. Dir.	Vice President and Exec. Director, Georgia Tech
Vice riesidelli alid Exec. Dii.	VICE I ICSIDEIII AIID EXCC. DIICCIDI, OCUIZIA I CCII
	President Vice President Treasurer Vice President Secretary  Geo Chair Vice Chair Vice Chair Vice Chair r. Immediate Past Chair Secretary  Ale President Vice President Exec. Vice President and Executive Director Secretary Treasurer Vice President Athletic Director Director Chief Admin. Officer and Associate Director Associate Director Associate Director Attorney  Georg President Past President Past President President Elect/Treasurer Vice President/Activities Vice President/Comm. Vice President/Roll Call

Source: Office of the Georgia Tech Foundation

### **EXTERNAL AFFAIRS**

The Office of External Affairs, headed by Vice President Jim Langley, communicates Georgia Tech's message to the public—alumni, friends, potential students, the media, business and industry—and develops prospects for funding that will ensure Georgia Tech's future as an institute of higher learning and as a major factor in the state's economy. The division is responsible for conducting the Capital Campaign and assists the individual academic units with development support. The Office of External Affairs works to maintain the integrity of the Institute's image through close monitoring of logos and trademarks, public relations efforts, funding procurement, and donor contact.

The Office of External Affairs includes the following departments:

Constituency Research Corporate Liaison Program Corporate Relations Development Development Support Foundation Accounting Foundation Relations Information Systems Joint Tech-Georgia Development Fund Media Relations Planned Giving **Publications** Roll Call Special Events Special Gifts State Relations TelePhoto University Partnerships

Wardlaw Center Management

Communications

Source: Office of the Vice President, External Affairs

### **ALUMNI ASSOCIATION**

Chartered in June, 1908, the Georgia Tech Alumni Association is a not-for-profit organization whose policies, goals, and objectives are guided by a Board of Trustees consisting of 42 elected alumni members. The mission of the association as stated in its charter is to:

- Promote active alumni participation for Georgia Tech;
- Manage the Roll Call, special projects, and fund raising to support Georgia Tech;
- Promote the academic and research achievements of Georgia Tech;
- Act as liaison between the alumni and the administration of Georgia Tech
- Manage the resources of the Association in such a way as to achieve this mission in the most cost-effective manner.

The Alumni Association publishes the *Georgia Tech Alumni Magazine* and *Tech Topics*, the alumni quarterly tabloid. In addition, it organizes and supervises alumni clubs throughout the United States and some international locations; and designs and presents alumni programs, such as homecoming events, reunions, workshops, and seminars. Special consitutuency groups are sponsored, including minority affairs, young alumni, women's issues, the Student Alumni Association, and the Student Foundation.

The Alumni Association provides employment opportunity information for alumni and graduating seniors through its Alumni Placement Service. Since 1936, this office has provided industry, business, and government with a source of well-educated, broadly experienced candidates for employment. A weekly *Alumni Placement Bulletin* is published and circulated, a Career Conference is held annually, and a career section is featured in *Tech Topics*.

The Alumni Association has won two national awards for excellence.

The offices are located in the L.W. "Chip" Robert, Jr., Alumni/Faculty House at 190 North Avenue. The telephone number is (404)894-2391or 1-800-GTALUMS, and FAX number is (404)894-5113.

Source: Office of the Vice President and Executive Director, Alumni Association

# **ALUMNI**

Table 4.16 Alumni Clubs

Location	State	Club President	Location	State	Club President
Athens	GA	Shep Hammack	Memphis	TN	Steve Stapleton
Atlanta-Buckhead	GA	Govantez Lowndes	Miami	FL	Max Diaz
Atlanta-Cobb County	GA	Steve McNeil	Milledgeville	GA	John Williamson
Atlanta-DeKalb	GA	Joe North	Montgomery	AL	Charlie Kettle
Atlanta-Georgia Power	GA	Chuck Huling	Newnan	GA	Randy Moore
Atlanta-Georgia Tech GT	GA	Fred Cook	New York	NY	Ira Bernstein
Atlanta-Gwinnett	GA	David Cowan	Northeast Ohio	OH	Tom Stefanakos
Atlanta-North Metro	GA	Larry Sprayberry	Northeast Tennessee	TN	Larry Moody
Atlanta-South Metro	GA	David Sowell	Northern California	CA	John Sessoms
Atlanta-West Metro	GA	Gene Tidwell	North Texas (Dallas/FW)	TX	Steve Frazier
Augusta	GA	Art Greene	Northwest Georgia	GA	John Neal
Austin	TX	Katherine Dunning	Phoenix	ΑZ	Philip Corbell
Baton Rouge	LA	Mark Mitchell	Puerto Rico	PR	Jose Delgado
Birmingham	AL	Jan Fridrichsen	Raleigh/Durham	NC	Dick Washington
Boston	MA	Pete McCarthy	Richmond	VA	Matt Johnson
Central Florida (Orlando)	FL	Jim Bowyer	Rome	GA	Mick Williams
Charleston	SC	Maria Parker	Savannah	GA	Jimmy Coleman
Charlotte	NC	David Pratt	Southeast Georgia	GA	Flemming Martin
Chattahoochee Valley La Grange	GA	Richard Freeman	Southern California	CA	Dennis Hall
Chattanooga	TN	Mark Hill	Space Coast (Cape Canaveral)	FL	George Rouse
Chicago	IL	Jim Hilley	Statesboro	GA	Frank Beacham
Coastal Carolinas	NC	Tim Hunt	Sun Coast (Tampa/St. Pete)	FL	Hoyt Hamilton
Columbia	SC	T.R. Parrish	Tallahassee	FL	John Graham
Columbus	GA	Bob Jones	Toccoa	GA	Keith Watson
Dayton	OH	Dennis Hall	Vidalia	GA	Dennis Donahue
Denver	CO	Wes Haun	Warner Robins/Houston Co.	GA	Jim Elliott
Emerald Coast	FL	Barry Davis	Washington, D.C.	VA	Bill Moseley
Gainesville	GA	Mike Rodrigues	West Georgia (Carrollton)	GA	Bill Kilgore
Golden Isles (Brunswick)	GA	Art Christianson	West Palm Beach	FL	Kathy Collins
Greensboro/Winston-Salem	NC	Phil Gee	*Alexander City	AL	Scott Howell
Greenville/Spartanburg	SC	Shelley Blount	*Cartersville	GA	Charlie Langford
Griffin	GA	Pete Baldwin	*Gainesville	FL	Howard Patrick
Houston	TX	Ted Farnham	*Peachtree City	GA	Gene Murphey
Jacksonville	FL	Don Merritt			
Knoxville	TN	Steve Calva			
Macon	GA	Glen Rosen			

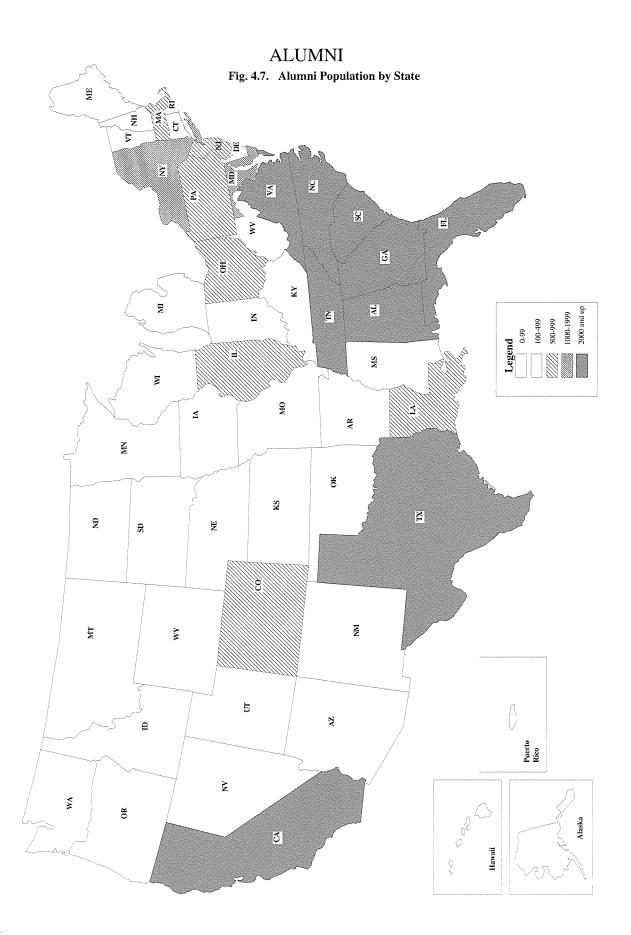
<sup>\*</sup> Informal groups and group contact

Source: Office of the Vice President and Executive Director, Alumni Association

# ALUMNI

Company	Company	Company
Aerospace Corporation	Federal Aviation Administration	Pratt & Whitney Aircraft
Alabama Power Co.	Federal Reserve Bank	Printpack Inc.
Alcoa	Florida Power Corp.	Procter & Gamble
Allen Bradley Co.	Florida Power and Light	Prudential Insurance Co.
Allied-Signal Inc.	Fluor-Daniel	RCA
American Airlines Inc.	Ford Motor Co.	Raytheon Co.
American Cyanamid	Frito-Lay Inc.	Reynolds Metals Co.
American Software	Fulton County	Rockwell International Corp.
Amoco	General Dynamics	Schlumberger
Anderson Consulting	General Electric Co.	Scientific-Atlanta Inc.
Army Corp. of Engineers	General Motors Corporation	Sears Roebuck & Co.
AT&T	Georgia Institute of Technology	Shaw Industries
AT&T Bell Labs	Georgia Pacific Corp.	Shell Oil Co.
AT&T Technologies	Georgia Power Co.	Simons Eastern Co.
Arthur Andersen & Co.	Georgia State University	Southern Bell T&T Co.
Atlanta Gas Light Co.	Georgia Tech Research Institute	South Central Bell
BP Oil Company	Goodyear Tire & Rubber Co.	Southern Company Services Inc.
Babcock & Wilcox	Harris Corp.	Southern Railway
Bechtel Corp.	Hayes Microcomputer	Southern Tech
BellSouth Corp.	Hercules Inc.	Southwire Co.
Bell Telephone Labs	Hewlett-Packard Co.	Square D. Co.
BellSouth Services Inc.	Hoechst Celanese	State of Georgia
Bethlehem Steel Corp.	Honeywell, Inc.	TRW Inc.
Blue Bird Body Company	Hughes Aircraft Co.	Teledyne Brown Engineer
Boeing	IBM	Tennessee Eastman Co.
Buckeye Cellulose	Intel Corporation	Tennessee Valley Authority
Burlington Industries	Internal Revenue Service	Texaco Inc.
Celanese Corporation	International Paper	Texas Instruments
Centers for Disease Control	Jordan Jones & Goulding	Thompson Ventulett Stainback
Charleston Naval Shipyard	Kimberly Clark Corp.	Trane Co.
Chevron USA Inc.	Kurt Salmon Associates Inc.	
		Trust Company Bank U.S. Air Force
City of Atlanta Clorox Co.	LTV Aerospace Corp.  Lockheed Aircraft	
Coca-Cola Co.		U.S. Army Corns of Engineers
	Lockheed Corp.	U.S. Army Corps of Engineers
Coca-Cola USA	Lockheed Georgia Co. Lockheed Missiles	U.S. Department of Defense
Combustion Engineering Inc.		U.S. Department of Energy
Control Data Corp.	Lockwood Greene Engineers Inc.	U.S. Department of Transportation
Corning Glass Works	Martin Marietta Corp.	U.S. Geological Survey
DeKalb County	McDonnell Douglas	U.S. Government
Delta Air Lines Inc.	Medical College of Georgia	U.S. Marine Corps
Digital Equipment Corp.	Merrill Lynch PFS	U.S. Navy
Douglas Aircraft	Michelin Tire Company	U.S. Nuclear Regulatory Comm.
Dow Chemical Company	Miliken and Co.	U.S. Postal Service
Ouke Power Co.	Mitre Corporation	Union Camp Corp.
OuPont Co.	Mobil Oil Corp.	Union Carbide
E.D.S.	Monsanto Co.	Unisys
E.I. DuPont deNemours & Co.	Motorola Inc.	United Parcel Service
E-Systems	NASA NGR Com	University of California
Ebasco Services Inc.	NCR Corp.	University of California
Electromagnetic Sciences Inc.	NationsBank	University of Georgia
Emory University	Northern Telecom Inc.	University of Tennessee
Environmental Protection Agency	Northrop Corp.	University of Virginia
Ethyl Corp.	Oglethorpe Power Co.	Wachovia Bank/Georgia
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Exxon Co.	Owens Corning Fiberglass Corp.	Warner Robins A.L.C.
Exxon Co. Exxon Corp. USA Exxon Chemical Co.	Owens Corning Fiberglass Corp. Pan American World Airways Phillips Petroleum Co.	Warner Robins A.L.C. Western Electric Company Westinghouse

Source: Office of the Executive Director, Alumni Association



# ALUMNI

Table 4.18 Geographical Distribution of Alumni\*

State	Population	State	Population	State	Population
Alabama	2,878	Maine	45	Pennsylvania	946
Alaska	57	Maryland	1,396	Rhode Island	63
Arizona	376	Massachusetts	667	South Carolina	2,349
Arkansas	541	Michigan	483	South Dakota	8
California	3,137	Minnesota	174	Tennessee	2,293
Colorado	560	Mississippi	438	Texas	3,226
Connecticut	449	Missouri	439	Utah	80
Delaware	226	Montana	19	Vermont	43
District of Columbia	132	Nebraska	50	Virginia	2,467
Florida	5,701	Nevada	80	Washington	463
Georgia	32,885	New Hampshire	116	West Virginia	128
Hawaii	85	New Jersey	1,028	Wisconsin	146
Idaho	56	New Mexico	181	Wyoming	22
Illinois	740	New York	1,277	, ,	
Indiana	309	North Carolina	2,657	Puerto Rico	329
Iowa	60	North Dakota	10	Foreign	1,689
Kansas	174	Ohio	1,001	Unknown	35
Kentucky	471	Oklahoma	191		
Louisiana	785	Oregon	139		

Table 4.19 Living Alumni by Class Year\*

Year	Alumni	Year	Alumni	Year	Alumni
1897	1	1940	252	1968	1,305
1912	1	1941	305	1969	1,359
1914	1	1942	329	1970	1,756
1915	1	1943	450	1971	1,564
1916	2	1944	162	1972	1,531
1917	5	1945	197	1973	1,581
1918	1	1946	255	1974	1,618
1919	3	1947	490	1975	1,429
1920	7	1948	642	1976	1,512
1921	9	1949	885	1977	1,564
1922	12	1950	1,168	1978	1,623
1923	30	1951	979	1979	1,853
1924	30	1952	757	1980	2,003
1925	40	1953	674	1981	2,236
1926	48	1954	620	1982	2,248
1927	54	1955	619	1983	2,172
1928	65	1956	724	1984	2,187
1929	79	1957	878	1985	2,254
1930	89	1958	984	1986	2,243
1931	108	1959	1,018	1987	2,201
1932	152	1960	1,077	1988	2,362
1933	169	1961	924	1989	2,281
1934	193	1962	990	1990	2,456
1935	158	1963	874	1991	2,365
1936	146	1964	1,016	1992	2,614
1937	142	1965	1,020	1993	2,195
1938	221	1966	973		
1939	234	1967	1,076		

<sup>\*</sup> This figure includes only those alumni whose location is known

Source: Office of the Executive Director, Alumni Association

# ALUMNI

Table 4.20 Selection of Companies whose CEOs, Presidents, or Vice Presidents are Georgia Tech Alumni

Company	Company	Company
Aaron Rents	Hughes Aircraft Co.	W.D. Alexander Co.
Accusan Inc.	IBM	Wachovia Bank/Georgia
American Express	Interface	Waffle House, Inc.
AT&T Network Systems	Intermet	Walt Disney Imagineering
Amoco Corp.	Ivan Allen Co.	Westinghouse Electric
ARA Services, Inc.	John Portman & Assoc.	Ziegler Tools, Inc.
ALCOA	Jossey-Bass, Inc.	
Atlanta Gas Light Company	Kelly Moore Paint Co., Inc.	
BellSouth Corporation	Kidder Peabody & Co.	
BellSouth Enterprise	Krispy Kreme Donuts	
BellSouth Mobility	Lehman and Assoc.	
Beers Construction Company	Litton Industries	
Beers, Inc.	Lockheed Corp.	
Blue Cross/Blue Shield	Lockheed Aeronautical Systems	
Boeing	CoGeorgia	
Booz-Allen-Hamilton	MGMNT Science America	
Brown & Root, Inc.	Maier and Berkele, Inc.	
Burnham Van Lines	Mark Inns of America	
California Research Inst.	Martin Marietta Corp.	
Carriage House Furniture	Memphis State University	
Chase Manhattan Bank	Merrill Lynch PFS	
Chemical Corp.	NationsBank	
Coca-Cola Enterprise	Nissan Motor Manufacturing Co.	
Coca-Cola USA	Pacific Aviation	
Continental Airlines	Pennsylvania House	
Control Data Corp.	Phillips Petroleum Co.	
Dan River Mills	Playtex Inc.	
Dean Witter Reynolds	Pratt and Whitney Aircraft	
Delta Air Lines, Inc.	Premark Inc.	
Dow Corning Corp.	Prudential Bache Securities	
E.F. Hutton & Co., Inc.	Rayloc Division, General Parts	
E.I. DuPont	Robinson Humphrey	
Equifax, Inc.	Russell Corp.	
Engraph	Sara Lee Corp.	
First Union National Bank	Scientific-Atlanta	
Florida Power and Light Co.	Southwire Co.	
Ford Motor Co.	Southern Engineering Corp.	
Franklin Mint	TVA	
GTE Mobile Communications	Technology Park-Atlanta	
Gainesville College	Timex Corp.	
Georgia Power Co.	Thomaston Mills	
Gold Kist, Inc.	Trans America Corp.	
Golden Flake, Inc.	Travelers Insurance Co.	
Goodwill Industries	Trust Company Bank	
Great Dane Trailers	Turner Broadcasting	
HBO & Co.	Tuner Industries	
Harris Corp.	U.S. Steel	
Hayes Microcomputer	U.S. Sugar Corp.	
Healthdyne, Inc.	Union Carbide Corp.	
Heery International, Inc.	Union Pacific Railroad	
Hoechst Celanese	United Airlines	
Holiday Inns, Inc.	Unocal	

Source: Office of the Executive Director, Alumni Association

### CENTER FOR THE ENHANCEMENT OF TEACHING AND LEARNING

The Center for the Enhancement of Teaching and Learning (CETL) was established to assist faculty members and administrators in their efforts to offer high-quality education to Georgia Tech students. Designed to function as a catalyst to stimulate thought and activities aimed at the enhancement of teaching and learning on the campus, the center provides facilities for faculty, students, and administrators to seek and share information. Current and projected activities of the center include:

- Promoting faculty development and teaching proficiency through the design, administration, and evaluation of workshops, new
  faculty orientation programs, and training opportunities and seminars for graduate teaching assistants;
- Providing consultation to faculty members or school directors in their efforts to support, develop, or assess teaching proficiency;
- · Providing or arranging for research consultation to departments or individuals engaged in research relating to teaching;
- Taping classes for professors, conducting dialogues with students at the professor's request, and observing classes, with critiquing
  as an option;
- Maintaining a special collection of books, journals, and periodicals about teaching;
- Sponsoring a series of seminars focusing on teaching effectiveness, open to all faculty and graduate teaching assistants;
- · Publishing a newsletter to apprise faculty of CETL's activities and to share ideas about teaching;
- Offering a series of tapes, developed in conjunction with the Office of Interdisciplinary Programs, that depict exemplary Tech professors discussing and demonstrating various aspects of teaching;
- Directing the Georgia Tech Foundation Teaching Fellows Program which gives financial support to, and provides opportunities for, untenured faculty to develop a teaching-related project and to focus on essential aspects of good teaching;
- Providing information to faculty on availability of facilities and services for support of teaching activities;
- Coordinating and processing the Institute's quarterly instrument (Course/Instructor Opinion Survey) for measuring student opinions of instructional quality;
- Publishing annually updated normative data on the C/I Survey;
- Soliciting nominees for, and selecting winners of, the student perseverance award and the junior faculty teaching excellence awards;
- Sponsoring the faculty Toastmasters ("Techmasters") chapter;
- Offering classes, workshops, seminars, and discussion groups, for the GTA's of Georgia Tech;
- Publishing and updating a faculty recruitment booklet;
- Coordinating the ASSET (Faculty Friends) program for freshmen retention;
- Along with the Development Office, co-coordinating the Visiting Professors Program which matches prominent Georgia Tech alumni with faculty and students.
- Coordinating the Developmental Studies and Regents' Testing Programs for the Institute

Source: The Center for the Enhancement of Teaching and Learning

### CONTINUING EDUCATION

The Department of Continuing Education coordinates the offering of short courses, video-based courses, and intensive English instruction for foreign students.

#### **Short Courses**

Short courses of varying length, with most from one to three days duration, are offered throughout the year to assist professionals with acquiring knowledge of different fields and new technologies. Courses are offered on various topics in engineering, architecture, science, management, and computing. During 1992-93, there were over 350 courses with more than 10,000 participants. For a quarterly calendar write to Continuing Education, Georgia Institute of Technology, Atlanta, GA 30332-0385 or call (404)894-2547, FAX (404)853-0117, or e-mail, Conted@conted.gatech.edu.

#### Video-based Instruction

Graduate courses leading to master's degrees in electrical engineering, environmental engineering, health physics, industrial and systems engineering, mechanical engineering, and nuclear engineering are available by videotape throughout the state of Georgia and the nation. Students at remote sites receive class handouts and videotapes of campus class sessions by mail and communicate with the instructor by telephone, computer, FAX and/or e-mail. Qualified candidates are enrolled as regular part-time graduate students. Individual courses, or sequences of courses, also may be taken without a degree objective for professional development. During 1992-93 more than 350 students enrolled in the 25-30 courses offered each quarter. For a quarterly calendar, write to Video Programs, Georgia Institute of Technology, Atlanta, GA 30332-0385 or call (404)894-3378, FAX (404)894-8924, e-mail VBIS@conted.gatech.edu.

#### Language Institute

The Language Institute provides services to both foreign students and the business community. The Institute's Intensive English Program offers instruction in English as a second language and facilitates the assimilation of foreign students into campus life in the United States through extensive orientation and assistance in the admissions process to colleges and universities. More than 230 students are enrolled quarterly from countries throughout the world with courses offered on six different levels. The program covers all skills and includes TOEFL, MELAB, and SAT preparation. For a descriptive brochure, write to Language Institute, Continuing Education, Georgia Institute of Technology, Atlanta, GA 30332-0385, USA, or call (404)894-2425, FAX (404)894-8755.

#### **On-site Programs**

The Department of Continuing Education also provides on-site training for industrial organizations and government agencies. Programs are designed to meet the needs of the organization.

### **Program Information**

Institutional Continuing Education Units (CEUs) for 1992-93 numbered 33,600. The number of programs held was 391 with participants totaling 10,996. These data represent all public service activity officially reported to the Department of Continuing Education, in addition to programs sponsored by the department.

**Table 4.21 Summary of Continuing Education Units** 

	Number	
Courses	391	
Attendees	10,996	
Continuing Education Units (CEUs)	33,600	

Source: Department of Continuing Education

### INFORMATION TECHNOLOGY

#### Information Systems and Services

Information Systems and Services' (ISS) mission is software development support for Georgia Tech's administrative information systems, development and support of the Institute's data repository, and information management support for campus departments.

ISS' responsibilities in the software development area are the design, development, and implementation of administrative information systems. The current focus is a multi-year development effort to redesign and upgrade all of the Institute's administrative information systems to relational technology. Although it has many individual applications, this project is generally composed of three large components: student information systems, financial information systems, and human resources information systems.

In providing integrated administrative systems based in relational, distributed technology, an important goal is providing leadership and assistance for departmental and executive information systems solutions. ISS works cooperatively with departments in establishing appropriate access to and sharing of administrative data, finding technical solutions for end user computing, and providing overall coordination of information systems technical directions. Additional services include database and data administration support, technical assurance guidelines and definition of quality software processes, and customer consulting services.

ISS has a commitment to high-quality customer service and responsiveness. Information Systems and Services goal is to provide quality service to Georgia Tech customers, helping them extend their overall level of information systems excellence.

#### **Network Services**

Network Services was established to provide centralized design, management, and support for network activities at Georgia Tech. Network Services manages a heterogeneous networking environment supporting a multitude of devices serving the instructional, research, and administrative needs of the Institute. Network Services provides all management and operation of the Institute's communications network backbone, its performance monitoring, security, and maintenance. This facility includes a high-speed (100 mega bit per second) Fiber Distributed Data Interface (FDDI) and ethernet data communications. Network Services supports a variety of departmental Local Area Networks (LANS) on campus and at the Institute's remote locations. Network Services provides centralized and distributed information services such as UseNet News, electronic mail, and Gopher, as well as the client programs for those services.

GTNet is the data communications network for Georgia Tech. The network is of a modular design which allows for the installation of new network nodes with minimum disturbance to existing systems and operations. The current network backbone consists of over 200 miles of single and multi-mode fiber optic cable which connects more than 80 local ethernet segments in more than 60 buildings representing the academic, administrative, and research departments on the North Avenue campus, as well as links to the Cobb County research facilities and other off-campus networks. In addition, residence halls are being connected to the GTNet to provide students with high speed (10 mega bits per second) ethernet connection to their rooms. Connections to the Internet are possible through direct connections to the National Science Foundation Network (NSFNet) and the Southeastern Universities Research Area Network (SURAnet). Other network connections include PeachNet, the state wide educational network, and Bitnet.

### **Internal Services**

Internal Services provides technical consulting services to other OIT units. Among its responsibilities are managing of the central computing user validation, resource allocation, and usage reporting and forecasting systems; designing and guiding implementation of customized system software solutions; integrating of new technologies; providing advice on major hardware upgrades; assisting with the internal and external planning activities; drafting of computing policies and technical documentation; staff training; and providing emergency technical assistance.

#### **Administrative Services**

Administrative Services (AS) was created to provide centralized management of all administrative, budgetary, purchasing, and human resources functions in Information Technology. This office provides internal and external support to the Office of the Vice President for Information Technology as well as the Information Technology Departments of Information Systems and Services, Client Services, Network Services, Technical Services, and Internal Services. Administrative Services is also responsible for the revenue and expense accounting processes related to cost centers; the functions relating to personnel and policies of the Institute and Board of Regents; and the management of the electronic data processing (EDP) approval process for all of Georgia Tech. Other services include providing assistance to other administrative and academic units of Georgia Tech in coordinating hardware and software purchases and networking services. The staff assists the associate vice president for Information Technology with the coordination of information technology resources as they relate to the long-range strategic plan. Assistance is also provided for both internal and external reporting and the many federal and state audits.

Source: Office of the Executive Director for Information Technology

### INFORMATION TECHNOLOGY

#### **Client Services**

Client Services is responsible for providing a smooth interface between clients and Information Technology. One of the primary services of this department is the operation of the HelpDesk, an Oracle system that tracks the response to the client's request for service. User Services also acts as a coordinating point for the identification of software products that are candidates for site licenses, negotiates the agreement with the vendor, and coordinates the installation of these products. They also can obtain any software that is available through the University System Computer Network of the Vice Chancellor for Information Technology Office.

Client Services is now actively involved in Georgia Tech's transition to a UNIX-based, distributed computing environment, one in which workstations and microcomputers will dominate in a network-oriented common environment that emphasizes such emerging industry standards as TCP/IP for communications, Postscript for printing, and Structured Query Language (SQL) for relational database applications.

User Services manages a large staff of student assistants who are located at 13 remote clusters around campus. The full-time staff, or student assistants, in User Services can provide information about the location and size of the clusters and the hardware and software available. Under certain circumstances, these clusters can be reserved for classes.

The Field Service group provides contractual and per-call hardware maintenance on various platforms used on campus. In addition, the Scientific Visualization and the High Performance groups support the faculty and research entities on campus by providing consulting and management services in those areas.

#### **Technical Services**

Technical Services provides management and operation of OIT computer systems, along with internal support to other groups within Information Technology. Services provided include operating system support, system analysis, capacity planning, performance monitoring, accounting, and system tuning. Technical Services is divided into three departments: Technical Support, IBM System Support, and Operations.

Technical Support and IBM System Support provide similar services but for different computing systems: Technical Support deals with Control Data, Apple Macintosh, Digital Equipment, and UNIX systems. IBM System Support handles our ES/9000 Model 260. Both departments are responsible for installing, customizing, and maintaining system software; designing, coding and installing system modifications and enhancements; investigating and correcting system malfunctions; monitoring and tuning performance; recommending hardware and software upgrades and additions; preparing documentation for operators and users; and assisting end users when needed.

The principal focus of Technical Support is to provide support for numerous UNIX systems, including those from DEC, Sun, IBM, NeXT, SGI, KSR, Cray, and Sequent. Technical Support also provides support for Georgia Tech's administrative system running Control Data's NOS operating system, academic usage on the DEC VAX VMS system, and system support for Macintosh systems in OIT clusters.

Another service provided by Technical Support is PRISM, a distributed computing environment for UNIX workstations that includes a unified file system, electronic mail, and printing services. Using a single ID and password, faculty, staff, and students can access many OIT resources, including several workstation clusters and UNIX timesharing systems. From any of these systems, users can access all of their files, read news and mail, or generate output to many OIT printers. A similar system is in place that provides printing services and a separate distributed file system for Apple Macintosh clusters.

Technical Support provides indirect support to end-users by assisting the Client Services group in responding to problems logged with the OIT Helpdesk. The group also acts as a clearinghouse and liaison with vendors to help support the Sun Scholarline program, the IBM Higher Education Software Consortium, and the DEC Education Software Library.

The principle focus of the IBM System Support group is support of IBM's VM and MVS operating systems and the Institute users on these systems. End user support is provided both directly via phone and electronic mail consultation as well as in conjunction with the Helpdesk area of Client Services.

The Institute's IBM systems provide a variety of administrative system support including general ledger, financial data processing, accounts payable, parking, and contract administration; statistical package support including SAS, SPSS, and GPSS for research and academic use; access to network news and electronic mail; and central site printing support for the Institute's large Xerox laser printers.

Much of the hardware of the various operating systems that OIT supports resides in the two Rich Building machine rooms managed by the Operations Department. Each 5,000 square foot room is supplied with a raised floor to allow under-floor cable runs and is kept at

Source: Office of the Vice President for Information Technology

# INFORMATION TECHNOLOGY

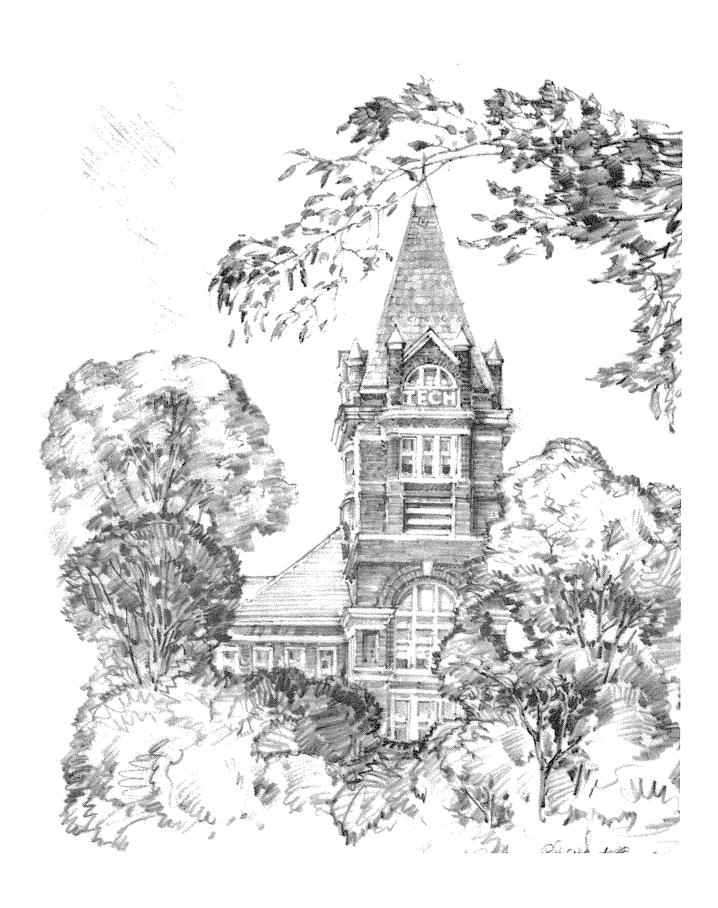
approximately 72 degrees and 50 percent humidity year-round. The Operations Department is responsible for power, equipment, and space utilization within the rooms.

As the central site for OIT equipment, the machine rooms are staffed by Operations personnel 24 hours a day, 7 days a week. OIT operators handle routine procedures such as permanent file backups, starting and stopping various subsystems as scheduled, ensuring that the systems are functioning properly, and recognizing potential problems so that corrective action can be taken. To assist them in their duties, they monitor an array of consoles covering most systems as well as on and off-campus network connectivity.

Aided by student assistants, operators also oversee the various output devices available: the Xerox 9700, Kodak 1392, and Xerox 8790 laser printers (rated at 120, 92, and 60 pages per minute, respectively), the line printer (used for special forms work) and the Hewlett Packard plotter. Current laser printer volume is about 1.4 million impressions per month.

Adjacent to the machine rooms, the I/O counter of the Rich Building provides a user interface to the operators. A status board indicates the state of various machines and output turn-around times for the printers. Private bins are available for those with output of a sensitive nature and the operators are available to answer questions regarding machine, job, or printout status.

Source: Office of the Vice President for Information Technology



# **Finances**

Georgia Institute of Technology

# QUICK FACTS

### Revenues

- The total current funds revenues by source for FY 1993 is \$384,926,604
- Total revenues by percentage for FY 1993:

Student Tuition & Fees	11.7%
Endowment Income	0.4%
Gifts & Grants	0.0%
Indirect Cost Recoveries	8.3%
Other Sources	2.0%
State Appropriation	30.6%
Departmental Sales & Service	0.4%
Sponsored Operations	33.3%
Scholarships & Fellowships-RI	3.3%
Auxiliary Enterprises	10.0%

### Expenditures

- The total current funds expenditures for FY 1993 is \$382,798,477
- Total expenditures by percentage for FY 1993:

Instruction	23.4%
Research	39.2%
Public Service	3.9%
Academic Support	4.3%
Student Services	1.7%
Institutional Support	9.5%
Operation of Plant	5.6%
Scholarships & Fellowships-RI	3.3%
Auxiliary Enterprises	9.1%

# **REVENUES**

Table 5.1 Current Funds Revenue Source	1989	1990	1991	1992	1993
Student Tuition and Fees					****
Resident Instruction	\$29,734,955	\$31,061,630	\$32,283,297	\$34,998,334	\$36,745,464
Continuing Education	3,752,826	4,499,149	4,434,672	4,629,218	4,190,883
Total	\$33,487,781	\$35,560,779	\$36,717,969	\$39,627,552	\$40,936,347
Endowment Income					
Resident Instruction	\$22,500	\$89,999	\$34,661	\$4,285	\$147,188
Unexpended Plant Funds	591,913	2,038,382	1,509,472	28,976	1,413,532
Total	\$614,413	\$2,128,381	\$1,544,133	\$33,261	\$1,560,720
Gifts and Grants					
Resident Instruction	\$120,503	\$136,303	\$223,115	\$140,965	\$85,240
Georgia Tech Research Inst.	111,974	101,764	110,798	500	500
Unexpended Plant Funds	30,709	978,002	133,163		45,000
Total	\$263,186	\$1,216,069	\$467,076	\$141,465	\$130,740
Indirect Cost Recoveries					
Resident Instruction	\$8,929,135	\$10,686,372	\$10,585,881	\$10,936,459	\$10,325,619
Georgia Tech Research Inst.	21,040,978	21,424,261	20,656,570	19,791,237	18,792,604
Adv. Tech Development Center	8,897	15,845	9,338	7,385	9,635
Continuing Education	22,637	32,195	38,027	107,282	101,102
Center for Rehab. Technology	539	4,505	5,195	18,995	104,562
Total	\$30,002,186	\$32,163,178	\$31,295,011	\$30,321,358	\$29,333,522
Other Sources	, ,	. ,			
Resident Instruction	\$2,331,585	\$2,799,537	\$2,488,592	\$4,852,794	\$2,942,352
	24,156	19,376	17,886	13,290	11,839
Continuing Education			926,924	1,275,451	1,409,088
Georgia Tech Research Inst.	1,562,687	1,327,133	7,897	15,999	720
Adv. Tech Development Center	2.247	1,024		·	
Center for Rehab. Technology	2,247	2,737	9,178 3,343,550	11,628 3,914,497	1,444 2,546,679
Unexpended Plant Funds	3,603,423	3,501,938	3,343,330		2,340,079
Total	\$7,524,098	\$7,651,745	\$6,794,027	\$10,083,658	\$6,912,122
State Appropriation					
Resident Instruction	\$71,570,438	\$80,454,267	\$84,267,072	\$83,099,387	\$93,545,787
Continuing Education	584,713	837,238	720,005	509,339	512,454
Georgia Tech Research Inst.	9,856,206	10,712,003	10,928,573	9,720,554	9,769,718
Agricultural Research	987,090	1,319,673	1,272,562	1,126,808	1,145,984
Adv. Tech Development Center	1,235,415	1,435,050	1,374,962	1,351,535	1,508,913
Center for Rehab. Technology	886,924	925,637	897,086	903,207	911,815
Unexpended Plant Funds	1,350,000	6,000,000	850,000		
Total	\$86,470,786	\$101,683,868	\$100,310,260	\$96,710,830	\$107,394,542
Departmental Sales and Service					
Resident Instruction	1,167,000	1,495,977	1,584,544	1,566,191	1,365,542
Sponsored Operations	#26 CO1 CO1	MAT 071 (2)	041 070 OCC	Φ45 405 25C	DE1 074 711
Resident Instruction	\$36,831,974	\$37,971,631	\$41,079,966	\$45,405,353	\$51,274,711
Continuing Education	464,114	182,279	191,364	587,893	876,711
Georgia Tech Research Inst.	63,439,860	57,726,492	63,931,462	64,224,610	64,246,359
Adv. Tech Development Center	55,698	87,554	38,926	33,564	36,012
Center for Rehab. Technology	63,425	505,006	419,487	640,808	749,087
Total	\$100,855,071	\$101,683,868	\$105,661,205	\$110,892,228	\$117,182,880

Source: Office of the Associate Vice President, Planning, Budget and Finance

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# **REVENUES**

Table 5.1 Current Funds Revenues	Table 5.1 Current Funds Revenues by Source, Fiscal Years 1989-93-Continued					
Source	1989	1990	1991	1992	1993	
Scholarships & Fellowships-RI	5,374,989	6,102,608	7,980,789	9,612,483	11,442,790	
Auxiliary Enterprises	28,179,247	28,727,789	29,037,668	31,176,431	35,281176	
Georgia Tech Athletic Association	10,128,997	10,433,000	12,087,032	13,385,889	12,898,253	
Student Activities	1,783,665	1,834,555	2,889,633	2,684,629	2,564,133	
Georgia Tech Foundation, Inc.	6,266,534	8,341,081	10,802,386	10,555,248	10,245,353	
Georgia Tech Research Corp.	4,508,573	9,858,488	9,581,499	8,103,608	7,678,356	
Total Revenue						
Resident Instruction	156,083,079	170,798,324	180,527,917	190,076,251	207,874,693	
Georgia Tech Research Inst.	96,011,705	91,291,653	96,554,327	95,012,352	94,218,269	
Continuing Education	4,848,446	5,570,237	5,401,954	5,847,022	5,692,989	
Agricultural Research	987,090	1,319,673	1,272,562	1,126,808	1,145,984	
Adv. Tech. Development Center	1,300,010	1,539,473	1,431,123	1,408,483	1,555,280	
Center for Rehab. Technology	953,135	1,437,885	1,330,946	1,574,637	1,766,908	
Auxiliary Enterprises	28,179,247	28,727,789	29,037,668	31,176,431	35,281,176	
Georgia Tech Athletic Association	10,128,997	10,433,000	12,087,032	13,385,889	12,898,253	
Student Activities	1,783,665	1,834,555	2,889,633	2,684,629	2,564,133	
Georgia Tech Foundation, Inc.	6,266,534	8,341,081	10,802,386	10,555,248	10,245,353	
Georgia Tech Research Corp.	4,508,573	9,858,488	9,581,499	8,103,608	7,678,356	
Unexpended Plant Funds	5,576,045	12,518,322	5,836,185	3,943,472	4,005,211	
Total	316,626,526	343,670,480	356,753,231	364,894,832	384,926,604	
Table 5.2 Consolidated Revenues by						
Source	1989	1990	1991	1992	1993	
Resident Instruction	49.30%	49.70%	50.60%	52.09%	54.00%	
Georgia Tech Research Institute	30.32%	26.56%	27.06%	26.04%	24.48%	
Continuing Education	1.53%	1.62%	1.51%	1.60%	1.48%	
Agricultural Research	0.31%	0.38%	0.36%	0.31%	0.30%	
<del>-</del>						

Source	1989	1990	1991	1992	1993
Resident Instruction	49.30%	49.70%	50.60%	52.09%	54.00%
Georgia Tech Research Institute	30.32%	26.56%	27.06%	26.04%	24.48%
Continuing Education	1.53%	1.62%	1.51%	1.60%	1.48%
Agricultural Research	0.31%	0.38%	0.36%	0.31%	0.30%
Adv. Tech. Development Center	0.41%	0.45%	0.40%	0.39%	0.40%
Center for Rehab. Technology	0.30%	0.42%	0.37%	0.43%	0.46%
Auxiliary Enterprises	8.90%	8.36%	8.14%	8.54%	9.17%
Georgia Tech Athletic Association	3.20%	3.04%	3.39%	3.67%	3.35%
Student Activities	0.56%	0.53%	0.81%	0.74%	0.67%
Georgia Tech Foundation, Inc.	1.98%	2.43%	3.03%	2.89%	2.66%
Georgia Tech Research Corp.	1.42%	2.87%	2.69%	2.22%	1.99%
Unexpended Plant Funds	1.76%	3.64%	1.64%	1.08%	1.04%
Total	100%	100%	100%	100%	100%

Source: Office of the Associate Vice President, Planning, Budget and Finance

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# **REVENUES**

Fig. 5.1. Current Funds Revenues Fiscal Year 1993: \$345.9 Million

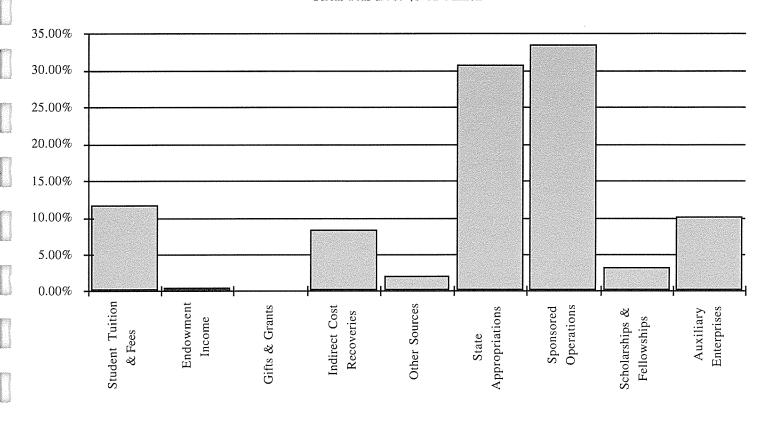


Fig. 5.2. Consolidated Revenues Fiscal Year 1993: \$384.9 Million

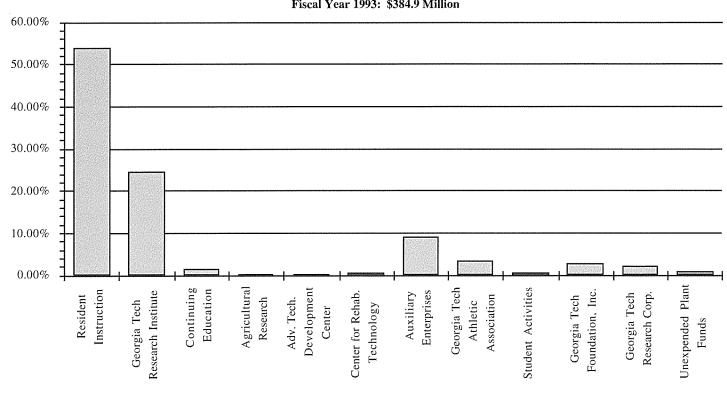


Table 5.3 Current Funds Expenditures, Fiscal Years 1989-93

Table 5.3 Current Funds Exp	enditures, Fiscal Years	1989-93			
Area	1989	1990	1991	1992	1993
Instruction					
Resident Instruction					
State	\$46,550,748	\$52,438,479	\$56,166,032	\$59,183,687	\$64,825,464
Sponsored	5,266,280	5,986,933	6,739,536	7,500,541	9,938,554
Subtotal	\$51,817,028	\$58,425,412	\$62,905,568	\$66,684,228	\$74,764,017
Continuing Education	Ψ31,017,020	Ψ30,123,112	Ψ02,>03,300	Ψ00,001,220	ψ/1,/01,01/
State	\$4,386,358	\$5,596,984	\$5,450,694	\$5,423,035	\$4,897,627
Sponsored	362,723	182,309	191,364	581,840	876,711
Subtotal	\$4,749,081	\$5,779,293	\$5,642,058	\$5,824,875	\$5,774,337
Subtotat	\$4,749,001	\$3,779,293	\$3,042,036	\$3,824,873	\$3,774,337
Total Instruction	\$56,566,109	\$64,204,705	\$68,547,626	\$72,509,103	\$80,538,355
Research					
Resident Instruction					
State	\$19,905,065	\$21,939,248	\$21,590,139	\$20,565,226	\$20,439,167
Sponsored	28,277,364	29,031,256	31,579,755	32,804,867	36,966,027
Subtotal	\$48,182,429	\$50,970,504	\$53,169,894	\$53,370,093	\$57,405,194
Georgia Tech Research Institu	ite				
State	\$18,491,718	\$19,349,797	\$17,219,248	\$15,536,456	\$14,537,749
Sponsored	61,455,329	55,712,175	62,530,199	62,606,166	62,343,959
Subtotal	\$79,947,047	\$75,061,972	\$79,749,447	\$78,142,622	\$76,881,708
Continuing Education					
Sponsored	\$4,024			\$6,053	
Subtotal	\$4,024			\$6,053	-
Center for Rehabilitation Tech				40,000	
Sponsored	\$3,120	****		\$5,874	-
Subtotal	\$3,120			\$5,874	
Total Research	\$128,136,620	\$126,032,476	\$132,919,341	\$131,524,642	\$134,286,902
Public Service					
Resident Instruction	¢14.452	¢70.004	¢125.050	¢120.450	¢222.700
State	\$14,453	\$79,924	\$125,859	\$139,450	\$223,788
Sponsored	1,636,937	1,478,831	1,426,841	2,907,366	2,549,525
Subtotal	\$1,651,390	\$1,558,755	\$1,552,700	\$3,046,816	\$2,773,314
Georgia Tech Research Institu		40.005.000	40.550.000		* . * . * . *
State	\$3,911,530	\$2,925,272	\$3,558,233	\$4,359,162	\$4,569,242
Sponsored	1,984,531	2,014,317	1,401,263	1,618,444	1,902,398
Subtotal	\$5,896,061	\$4,939,589	\$4,959,496	\$5,977,606	\$6,471,640
Agricultural Research					
State	\$987,090	\$1,319,673	\$1,272,562	\$1,126,808	\$1,145,984
Subtotal	\$987,090	\$1,319,673	\$1,272,562	\$1,126,808	\$1,145,984
Advanced Technological Deve					
State	\$1,017,439	\$1,188,660	\$1,145,913	\$1,162,101	\$1,255,096
Sponsored	55,698	87,554	522	33,564	36,012
Subtotal	\$1,073,137	\$1,276,214	\$1,146,435	\$1,195,665	\$1,291,108
Center for Rehabilitation Tech	nology				
State	\$884,712	\$895,589	\$897,443	\$928,164	\$951,081
Sponsored	60,305	505,006	419,487	634,934	749,087
Subtotal	\$945,017	\$1,400,595	\$419,487	\$634,934	\$749,087
Continuing Education	+- ·+j/	, -, , ,	, , ,	+30.,,201	+, .,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Sponsored	\$97,367	<u></u>		-	
Subtotal	\$97,367				
Total Public Service	\$10,650,062	\$10,494,826	\$10,248,123	\$12,909,993	\$13,382,214
TOTAL I HOLLE DELYICE	φ10,050,002	Ψ10, <del>724,</del> 020	Ψ10,240,123	Ψ14,707,773	Ψ15,562,214

**FINANCES** 

Source: Office of the Associate Vice President for Planning, Budget, and Finance

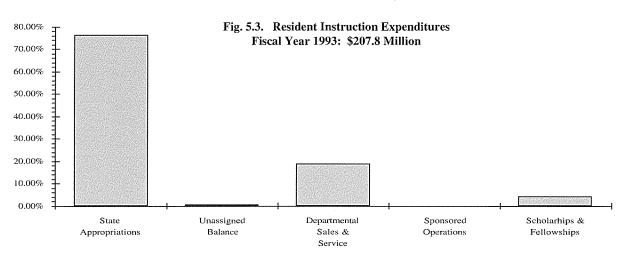
Table 5.3 Current Funds Expenditures, Fiscal Years 1989-93-Continued

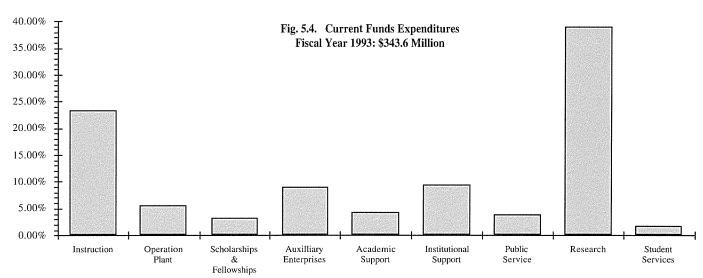
Area	1989	1990	1991	1992	1993
Academic Support					
Resident Instruction					
State	\$13,253,699	\$13,922,362	\$16,121,021	\$15,349,840	\$14,124,76
Departmental	78,218	64,249	85,642	687,940	513,33
Sponsored	159,733	140,226	117,302	77,587	78,439
Sponsored	159,755	140,220	117,502	77,507	70,43
Total Academic Support	\$13,491,650	\$14,126,837	\$16,323,965	\$16,055,367	\$14,716,536
Student Services					
Resident Instruction					
State	\$3,351,141	\$3,698,061	\$3,770,431	\$3,830,545	\$5,852,08
Departmental	8,080	11,217	41,008	27,122	11,50
Sponsored	29,098	17,396	54,399	18,208	90,636
Total Student Services	\$3,388,319	\$3,726,674	\$3,865,838	\$3,875,875	\$5,954,223
Institutional Support					
Resident Instruction					
State	\$15,713,116	\$18,445,239	\$18,448,058	\$19,567,372	\$22,386,94
Departmental	38,397	55,321	98,903	42,520	62,479
Sponsored	1,462,562	1,316,989	1,162,133	2,096,784	1,651,530
Subtotal	\$17,214,075	\$19,817,549	\$19,709,094	\$21,706,676	\$24,100,950
Continuing Education					
State	\$26,147	\$25,088	\$25,191	\$24,316	\$34,304
Subtotal	\$26,147	\$25,088	\$25,191	\$24,316	\$34,304
Georgia Tech Research Institute	. ,	·			
State	\$7,536,510	\$8,429,025	\$9,293,729	\$8,504,471	\$8,612,642
Subtotal	\$7,536,510	\$8,429,025	\$9,293,729	\$8,504,471	\$8,612,642
Advanced Technology Developm		· -, · , ·	, - , ,	, , , , ,	. , ,
State State	\$49,576	\$48,673	\$49,388	\$41,234	\$49,710
Subtotal	\$49,576	\$48,673	\$49,388	\$41,234	\$49,710
Center for Rehabilitation Techno		Ψ10,073	Ψ17,500	Ψ (1,23 (	Ψ.,,,,,
State State	\$2,764	\$2,841	\$3,648	\$3,317	\$11,800
	\$2,764	\$2,841	\$3,648	\$3,317	\$11,800
Subtotal	\$2,704	\$2,041	\$3,040	φ5,517	\$11,000
Total Institutional Support	\$24,829,072	\$28,323,176	\$29,081,050	\$30,280,014	\$32, 809,417
Operation of Plant					
Resident Instruction					
State	\$13,917,379	\$14,412,423	\$13,314,456	\$14,666,614	\$15,875,372
Departmental	1,042,305	1,365,190	1,358,991	868,609	778,23
Subtotal	\$14,959,684	\$15,777,613	\$14,673,447	\$15,535,223	\$16,653,603
Continuing Education					
State	\$75,164	\$80,495	\$83,850	\$73,656	\$72,393
Subtotal	\$75,164	\$80,495	\$83,850	\$73,656	\$72,393
Georgia Tech Research Institute	, ,	,		•	
State	\$2,671,501	\$2,861,067	\$2,551,655	\$2,381,586	\$2,193,988
Subtotal	\$2,671,501	\$2,861,067	\$2,551,655	\$2,381,586	\$2,193,988
Advanced Technology Developm		Ψ2,001,007	Ψ2,001,000	<b>42</b> ,501,500	Ψ2,1,2,,20,
	\$176,129	\$194,350	\$196,895	\$173,007	\$201,73
State Sponsored	φ170,149	Ψ127,JJU	38,404	Ψ1/2,00/	Ψ201,73
	¢176 120	¢104.250		\$172,007	\$201.73
Subtotal	\$176,129	\$194,350	\$235,299	\$173,007	\$201,73
Center for Rehabilitation Techno	nogy	¢30.440	<u>ው</u> ማ ዐላላ	ቀኅ ለ20	Ø1 0C
State		\$32,448	\$7,844 \$7,844	\$2,032	\$1,965
Subtotal		\$32,448	\$7,844	\$2,032	\$1,965
Total Operation of Plant	\$17,882,478	\$18,945,973	\$17,552,095	\$18,171,504	\$19,123,681

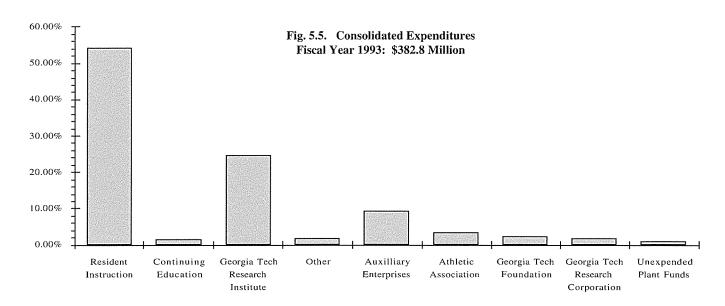
Table 5.3 Current Funds Expenditures, Fiscal Years 1989-93-Continued

Area	1989	1990	1991	1992	1993
Scholarships & Fellowships-RI	\$5,374,989	\$6,102,608	\$7,980,789	\$9,612,483	\$11,442,791
Auxiliary Enterprises	\$23,787,356	\$24,168,660	\$25,225,055	\$29,016,930	\$31,333,295
Georgia Tech Athletic Association	\$10,489,771	\$10,385,000	\$12,000,833	\$13,354,866	\$12,867,974
Student Activities	\$1,520,559	\$1,678,742	\$2,746,759	\$2,760,625	\$2,690,688
Georgia Tech Foundation, Inc.	\$6,908,000	\$7,751,427	\$8,564,128	\$9,356,601	\$9,145,176
Georgia Tech Research Corp.	\$5,588,193	\$5,208,402	\$4,448,928	\$6,268,026	\$6,671,684
Unexpended Plant Funds	\$5,606,242	\$12,518,322	\$5,836,185	\$4,050,031	\$4,005,211
Unassigned Balance	\$5,000,242	Ψ12,510,522	ψ5,050,105	φτ,050,051	φ+,005,211
Resident Instruction	\$3,515	\$292,372	\$346,622	\$189,490	\$64,060
	(39,414)	\$292,372	\$340,022	\$169,490 67	58,291
Georgia Tech Research Institute	(103,337)	(314,639)	(349,145)	(81,878)	(188,045)
Continuing Education	(105,557)	(314,039)	(349,143)	(61,676)	(100,043)
Agricultural Research	ter 1,168	20,236	<u> </u>	(1,423)	12,725
Adv. Technology Development Cent		20,230	1	(\$106,559)	12,723
Unexpended Plant Funds	(30,197)	2,001	2,524	(\$100,339)	52,974
Center for Rehabilitation Technolog				\$13	52,974 \$5
Total Unassigned Balance	(\$166,031)	(\$30)	\$2	\$15	ΦЭ
Reserve/Surplus					
Auxiliary Enterprises	\$4,391,891	\$4,559,129	\$3,812,613	\$2,159,501	\$3,947,881
Student Activities	263,106	155,813	142,874	(75,996)	(126,555)
Total Reserve/Surplus	\$4,654,997	\$4,714,942	\$3,955,487	\$2,083,505	\$3,821,326
Total Expenditures					
State	\$112,715,601	\$124,935,736	\$129,535,996	\$133,302,734	\$143,727,591
Departmental	1,167,000	1,495,977	1,584,544	1,566,192	1,365,542
Sponsored	36,831,974	37,971,631	41,079,966	45,405,353	51,274,710
Unassigned Balance	3,515	292,372	346,622	189,490	64,060
Scholarships & Felloships	5,374,989	6,102,608	7,980,789	9,612,483	11,442,791
Total Resident Instruction	\$156,083,079	\$170,798,324	\$180,527,917	\$190,076,252	\$207,874,694
Continuing Education	\$4,848,446	\$5,570,237	\$5,401,954	\$5,847,022	\$5,692,989
Georgia Tech Research Institue	96,011,446	91,291,653	96,554,327	95,012,352	94,218,270
Agricultural Research	987,090	1,319,673	1,272,562	1,126,808	1,145,984
Adv. Tech. Development Center	1,300,010	1,539,473	1,431,123	1,408,483	1,555,280
Center for Rehab. Technology	953,135	1,437,885	1,330,946	1,574,637	1,766,908
Auxiliary Enterprises	28,179,247	28,727,789	29,037,668	31,176,431	35,281,176
Georgia Tech Athletic Association	10,489,771	10,385,000	12,000,833	13,354,866	12,867,974
Student Activities	1,783,665	1,834,555	2,889,633	2,684,629	2,564,133
Georgia Tech Foundation, Inc.	6,908,000	7,751,427	8,564,128	9,356,601	9,145,176
	5,588,193	5,208,402	4,448,928	6,268,026	6,671,684
Georgia Tech Research Corp.	5,576,045	12,518,322	5,836,185	3,943,472	4,005,211
Unexpended Plant Funds	3,370,043	12,310,322	2,030,103	3,343,472	7,003,211
INSTITUTE TOTAL	\$318,708,386	\$338,382,740	\$349,296,203	\$361,829,579	\$382,798,477

Source: Office of the Associate Vice President for Planning, Budget and Finance







Source: Office of the Associate Vice President for Planning, Budget and Finance

# FINANCIAL DATA BY PERCENTAGE

Table 5.4 Current Funds by Percentage, Fiscal Years 1989-93

Area	1989	1990	1991	1992	1993
		Revenues			
Student Tuition & Fees	11.4%	11.4%	11.4%	12.0%	11.7%
Endowment Income	0.2%	0.7%	0.5%	0.0%	0.4%
Gifts & Grants	0.1%	0.4%	0.1%	0.0%	0.0%
Indirect Cost Recoveries	10.2%	10.3%	9.7%	9.2%	8.3%
Other Sources	2.6%	2.4%	2.1%	3.1%	2.0%
State Appropriation	29.4%	32.5%	31.2%	29.3%	30.6%
Departmental Sales & Service	0.4%	0.5%	0.5%	0.5%	0.4%
Sponsored Operations	34.3%	30.8%	32.9%	33.6%	33.3%
Scholarships & Fellowships-RI	1.8%	1.9%	2.5%	2.9%	3.3%
Auxiliary Enterprises	9.6%	9.2%	9.0%	9.4%	10.0%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%
		Expenditures			
Instruction	19.9%	21.7%	22.0%	22.4%	23.4%
Research	45.0%	42.5%	42.6%	40.6%	39.2%
Public Service	3.8%	3.5%	3.3%	4.0%	3.9%
Academic Support	4.8%	4.8%	5.2%	4.9%	4.3%
Student Services	1.2%	1.2%	1.3%	1.2%	1.7%
Institutional Support	8.7%	9.6%	9.3%	9.3%	9.5%
Operation of Plant	6.3%	6.4%	5.6%	5.6%	5.6%
Scholarships and Fellowships-RI	1.9%	2.1%	2.6%	3.0%	3.3%
Auxiliary Enterprises	8.4%	8.2%	8.1%	9.0%	9.1%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Office of the Associate Vice President for Planning, Budget, and Finance

# Research

**Georgia Institute of Technology** 



# **QUICK FACTS**

#### Research

• Research Proposals and Awards for Fiscal Year 1993:

	Proposal	Award
College of Engineering	\$146,681,175	\$35,647,332
College of Sciences	38,750,514	13,449,177
College of Architecture	4,533,706	2,533,126
College of Computing	22,279,146	2,449,236
Ivan Allen College	3,293,651	1,152,568
Research Centers	25,392,306	5,805,349
Georgia Tech Research Institute	315,881,773	84,237,814
Institute Total	\$556,812,271	\$145,274,602

- The Georgia Tech Research Corporation, founded in 1937, has current revenues of \$138,305,694
- The Georgia Tech Research Institute supports a staff of 1,252 housed in 530,325 square feet of space
- The Advanced Technology Development Center (ATDC) was created in 1980
- Over 800,000 square feet of floor space is devoted to research on the Georgia Tech campus, as well as several off-campus facilities
- · Georgia Tech currently has a network of over 50 interdisciplinary centers that cuts across traditional academic disciplines

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Georgia Tech is a major center for advanced technology in Georgia and the Southeast. With a full-time general faculty of more than 1,500 and a graduate student population in excess of 3,500, the Institute conducts research of national significance, provides research services and facilities to faculty, students, industry, and government agencies, and supports the economic and technological growth of the state. Research operations are carried out through a group of schools, centers, and laboratories, each performing research in a particular field of interest.

Most of the research is supported by contracts with government organizations and private industry. The Georgia Tech Research Corporation, a nonprofit organization incorporated under the laws of the state of Georgia, serves as the contracting agency. It also handles patent and other financial and administrative research matters.

Much of the research activity is within the broad field of electronics, including electronic techniques and components, antennas, microelectronics, electromagnetics, and optoelectronics. Other important areas include: materials, telecommunications, bioengineering, manufacturing, environmental science and technology, signal processing, tribology, acoustics, fusion, combustion, rotary wing aircraft, energy, domestic and international economic development, computer technology and applications, and mechanics.

Areas of recent significant research developments include synthetic vision (a technology expected to improve the safety and reliability of aircraft landings under difficult, low-visibility conditions), highway infrastructure (new test procedures that aid in measuring the resilient modulus of highway materials), pattern matching in compressed data files (a breakthrough expected to facilitate the analysis of large data archives), and X-ray tomographic microscopy (an X-ray analysis technique that has potential applications in a variety of fields ranging from materials science to bone studies).

Over 800,000 square feet of floor space is devoted to research incorporating a number of buildings on the Georgia Tech campus, as well as several off-campus facilities. About 54 percent of the research and extension activities are managed by the Georgia Tech Research Institute, and 46 percent are managed by centers and academic schools and colleges.

Table 6.1 Extramural Support

Proposal Submission			New Research Awards		
Fiscal Year	Count	Amount	Count	Amount	
1983	1,600	\$210,822,442	934	\$82,384,454	
1984	1,719	238,630,709	955	66,382,677	
.985	1,739	513,445,055	983	75,826,425	
1986	1,817	562,789,812	972	105,631,100	
1987	1,778	470,529,643	954	88,491,810	
1988	1,793	536,005,553	955	119,006,391	
989	1,718	400,762,894	1,109	130,853,396	
1990	1,514	508,863,330	1,661	142,972,554	
.991	1,402	320,446,962	1,678	155,590,067	
.992	1,550	566,693,885	1,763	141,712,725	
993	1,672	556,812,271	1,777	162,931,920	

Source: Office of the Vice President for Research and Graduate Programs



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Table 6.2 Research Grants and Contracts by Awarding Agency, Fiscal Year 1993

Awarding Agency	Amount	% of Tota
U.S. Air Force	\$28,700,677	19.8
U.S. Army	30,467,519	21.0
U.S. Navy	8,245,665	5.7
U.S. Department of Defense	9,662,816	6.7
U.S. Department of Energy	1,000,909	0.7
U.S. Department of Health and Human Services	3,057,580	2.1
National Aeronautics & Space Administration	7,408,414	5.1
National Science Foundation	11,897,582	8.2
Other Federal Agencies	12,825,137	8.8
Total Federal Government	\$102,970,556	78.1
State and Local Governments	\$1,802,830	1.2
Misc., Industrial, and Other	30,205,473	20.7
Grand Total	\$145,274,602	

<sup>\*</sup> This summary includes only research and does not include other extramural support such as fellowships, training grants, sponsored instruction, and instructional equipment grants.

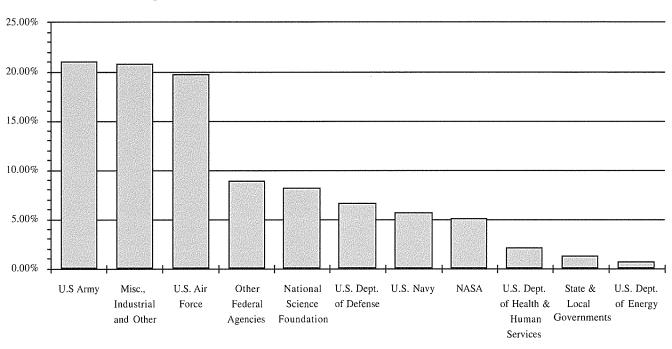
Table 6.3 Awards Summary by Unit, Fiscal Years 1988-93

Unit	1988	1989	1990	1991	1992	1993
			Number			
Engineering	234	474	368	388	434	417
Architecture	7	25	19	34	39	40
Computing			18	42	79	44
Ivan Allen	5	7	7	7	10	21
Sciences	130	150	113	120	153	150
Research Centers	74	133	97	92	70	63
GTRI	508	544	533	519	427	463
Total	941	1,333	1,155	1,202	1,212	1,198
			Amount			
Engineering	\$19,915,808	\$28,825,466	\$28,258,048	\$28,694,209	\$30,665,036	\$35,647,332
Architecture	141,294	577,958	611,851	1,235,037	1,490,093	2,533,126
Computing			1,849,778	2,141,690	5,185,111	2,449,236
Ivan Allen	537,881	686,302	852,566	717,153	568,712	1,152,568
Sciences	9,714,653	9,345,809	8,099,487	9,376,199	12,880,760	13,449,177
Research Centers	2,618,992	4,126,170	6,358,981	5,830,285	3,145,549	5,805,349
GTRI	86,077,763	84,709,065	86,653,674	96,192,238	72,540,673	84,237,814
Total	\$119,006,391	\$128,270,770	\$132,684,385	\$144,186,811	\$126,475,934	\$145,274,602

<sup>\*\*</sup>Except for the College of Engineering and totals, data are not directly comparable to previous years due to a major academic restructuring beginning in FY 1990.

Source: Office of Contract Administration

Fig. 6.1. Research Grants and Contracts by Awarding Agency, Fiscal Year 1993



Source: Office of Contract Administration

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Table 6.4 Awards Summary Detail, Fiscal Year 1993

		Proposals		Awards*
Unit	Numbe	er Amount	Number	Amount
College of Engineering				
Dean, College of Engineering	14	7,180,989	4	938,600
Aerospace	73	28,314,198	67	5,042,450
Chemical	51	11,752,324	37	2,262,467
Civil	88	16,154,817	52	2,720,381
Electrical	115	45,697,033	80	7,035,219
Industrial and Systems	36	6,122,862	38	2,642,186
Materials	55	11,092,437	29	
Mechanical	126		95	3,426,134
Textile and Fiber	120	18,919,584		9,055,721
Total	570	1,446,931 \$146,681,175	15 417	2,524,174 \$35,647,332
10141	570	Ψ1 10,001,173	117	Ψ55,047,552
College of Sciences				
Dean, College of Sciences	8	1,009,481	2	150,859
Biology	17	3,007,667	9	547,171
Chemistry	50	10,590,700	30	3,312,032
Earth and Atmospheric Sciences	41	9,804,677	43	5,908,220
Health Sciences	1	47,110	1	47,110
Mathematics	29	3,117,410	22	933,692
Physics	38	7,660,294	37	2,129,190
Psychology	8	3,513,175	6	420,903
Total	192	\$38,750,514	150	\$13,449,177
College of Architecture	50	\$4,533,706	40	\$2,533,126
College of Computing	71	\$22,279,146	44	\$2,449,236
Ivan Allen College	24	\$3,293,651	21	\$1,152,568
Research Centers	192	\$25,392,306	63	\$5,805,349
Georgia Tech Research Institute				
Office of the Director	21	9,270,469	18	4,364,404
Economic Development Laboratory	30	3,056,296	19	1,253,879
Advanced Threat Technology Laboratory	2	85,004	1	7,004
MW/Ant. Tech. Development Laboratory	52	17,590,563	37	3,367,804
Threat Systems Development Laboratory	16	8,638,478	19	9,958,709
Concepts Analysis Laboratory	30	15,159,117	32	14,681,562
Countermeasures Development Laboratory	5	730,718	7	391,385
Electronics & Computer Systems Laboratory	31	8,846,380	25	3,975,334
Radar Mod./Anal. Laboratory	47	109,906,653	38	3,077,244
Radar Systems App. Laboratory	28	14,473,917	30	6,125,632
Radar Instrumentation Dev. Laboratory				
	34	7,311,258	18	1,836,875
Aerospace Sci. & Tech. Laboratory	39	17,743,671	47	7,729,254
Communications Laboratory	25	17,704,210	22	2,363,402
Comp. Sc. and Inf. Tech. Laboratory	23	9,441,219	24	6,267,918
Electromag. Env. Effects Laboratory	38	2,956,793	28	2,945,926
Huntsville Research Laboratory	18	2,158,370	15	1,921,921
Signature Tech. Laboratory	27	21,103,772	16	5,412,002
Electro-optics and Physical Sciences Lab	54	34,347,545	43	6,267,647
Env. Sc. and Tech. Laboratory	21	3,992,732	7	998,531
Mat. Sc. and Tech. Laboratory	32	11,364,608	17	1,291,381
Total	573	\$315,881,773	463	\$84,237,814
Institute Total	1,672	\$556,812,271	1,198	\$145,274,602

<sup>\*</sup> Awards include only research and do not include other extramural support such as fellowships, training grants, sponsored instruction, and instructional equipment grants.

Source: Office of Contract Administration

## CONTRACT ADMINISTRATION

The Vice President for Research and Graduate Programs has the responsibility for all research programs conducted by the Georgia Institute of Technology. He works with the deans, directors, and other department heads in establishing research policies and procedures. In partnership with the Office of the President and the Georgia Tech Research Corporation (GTRC), the Office of Contract Administration (OCA) provides program development assistance as well as overall contract management for the research program at Georgia Tech. Organizationally, the department is administered through five operating divisions, reporting to the Associate Vice President for Research/Director of OCA. The Office of the Director is responsible for negotiating indirect cost (overhead) rates and for the design and maintenance of an interactive automated database. The database, which integrates all contract administration functions, is used for management control and reporting. The database is used to produce and distribute a variety of periodic management reports including: a) a monthly listing of all deliverables due the following month, b) a quarterly overdue deliverables report, c) a monthly report of all research activity, and d) a monthly report of cost-sharing commitments. In addition, specialized (ad hoc) reports are prepared on request.

The **Program Initiation Division** (**PID**) provides assistance that leads to the submission of formal proposals, including review and interpretation of contract requirements, determination of appropriate contract terms, and establishment of any precontract agreements. PID is responsible for submitting all proposal and grant applications for sponsored research and instruction from the Georgia Tech Research Corporation and the Georgia Institute of Technology. PID contracting officers review proposals and cost estimates for compliance with sponsor requirements and Institute policies, and prepare the business portion of proposals. PID serves as the sponsor's point of contact for business matters during the evaluation process, negotiates the final terms of the contract or grant, and signs, in conjunction with an officer of GTRC, the resulting agreement. In addition, PID handles contract modifications which increase the funding of existing projects.

The **Program Administration Division (PAD)** has the responsibility for monitoring active grants and contracts. Upon receipt of a signed agreement from PID, an initial in-depth review of the award documents takes place and relevant initiation forms are prepared and distributed. Complete project files are established and maintained for the duration of the program. All post-award project modifications to existing programs are processed by PAD so long as there is no increase in funding. PAD is also responsible for the preparation, monitoring, and closeout of subcontracts and consulting agreements issued by Georgia Tech. Liaison with project sponsors is maintained by PAD contracting officers through responses to contractual situations or requests on day-to-day administrative matters. Responsibilities include monitoring programs to see that potential problems in meeting contractual obligations (i.e., assurance of satisfactory performance, submission of all deliverables, etc.) are called to the attention of Georgia Tech management in a timely manner.

The Contracting Support Division (CSD) provides a multitude of services internally to OCA as well as to the entire university. CSD researches the literature and publicizes announcements of funding opportunities. CSD orders and distributes requests for proposals (RFPs) and assists individual researchers in program development activities. Two newsletters, *Research News and Research Opportunities*, are published by this division. CSD distributes all proposals and deliverable reports and serves as the filing center for project files and progress reports, pending receipt of final reports, and subsequent submission to the archives section of the Georgia Tech Library. CSD is responsible for all closeout actions, i.e., submission of final billing and research property and patent reports, accounting for the disposition of classified documents, and verification that deliverable requirements have been satisfied. CSD is also responsible for the preparation and administration of Small Business Administration (SBA) subcontracting plans.

The **Legal Division** advises and assists the Institute on a variety of legal matters. It provides services internally to OCA in the areas of intellectual property law and government contract negotiations. It provides advice to the entire Institute in the areas of public procurement, technology and software licensing and protection, copyright assignment, contract law, risk management and insurance, technology export control, real estate leasing, state and federal laws and regulations, and other matters of general law. The Legal Division also serves as a central repository for the Institute's real estate leases and software licenses.

The **Printing and Photographic Center (PPC)** is the only organized replication facility on the campus of Georgia Tech. Its printing and photographic departments serve not only the needs of the rapidly expanding research activities, but those of the academic units as well. Faculty and students benefit from its modern quick copy facility and research copy center where reports and other documents are reproduced and assembled. A layout section is available to assist in translating concepts into plate-ready material for printing. Supporting the press facility is a copy camera capable of making enlargements or reductions of engineering drawings or photographs and a typesetting unit. The photographic department is equipped with a wide variety of cameras for either in-house or research laboratory use. PPC is well-equipped to meet the instructional, research, and administrative requirements of a major academic institution.

Source: Office of the Director, Contract Administration

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### GEORGIA TECH RESEARCH CORPORATION

Founded in 1937, the Georgia Tech Research Corporation (GTRC) is a state chartered not-for-profit corporation serving Georgia Tech as a University System of Georgia approved cooperative organization. By charter GTRC "...shall be operated exclusively for scientific, literary and educational purposes...conduct laboratories, engage in scientific research, and distribute and disseminate information resulting from research...". GTRC is an IRS section 501(c)(3) tax exempt organization and is located on campus in the Centennial Research Building.

GTRC serves as the contracting agency for all of the sponsored research activities at Georgia Tech. It also licenses all intellectual property (patents, software, trade secrets, etc.) created at Georgia Tech. All funds collected by GTRC are used to support various Georgia Tech programs requested by the Institute and as approved by the GTRC Board of Trustees.

Table 6.5 Revenues, Fiscal Years 1991-93

Revenue	1993	1992	1991
Sponsored Research	\$135,897,399	\$130,330,545	\$131,254,266
License and Royalty	2,285,185	1,760,698	178,815
Investment	123,110	292,502	624,125
Total Revenue	\$138,305,694	\$132,383,745	\$133,666,550

In addition to paying for sponsored research costs, license and royalty fees, and all corporate operating expenses during Fiscal Year 1993, GTRC provided more than \$5.9 million to Georgia Tech in the form of grants and funded support programs.

Table 6.6 Grants and Funded Support Programs, Fiscal Year 1993

Support	Amount	
	Operations	
Equipment and facilities grants	\$2,000,000	
Equipment matching grant	1,000,000	
Equipment leasing expenses	244,893	
Contingency and liability support	220,204	
Focused Research Program grant	200,000	
Total	\$3,665,097	
Personnel,	, Recruiting, and Development	
Senior research leadership/incentive grants	\$1,150,000	
Contract development/technology transfer expenses	280,500	
Woodbury Research Site	85,722	
Ph.D. support and tuition assistance programs	182,837	
Foreign travel and professional society support	131,583	
Promotional expenses/Georgia Research Alliance	175,476	
Faculty computer purchase program	95,911	
New faculty moving expenses	96,616	
Faculty and staff recognition/awards program	42,383	
Total	\$2,241,028	
Total Support	\$5,906,125	

Additionally, GTRC assists Georgia Tech in obtaining quality research space, enters into long-term leases for specialized research equipment, and conducts other research support programs as requested by the Institute.

Source: GTRC Vice President and General Manager

# GEORGIA TECH RESEARCH CORPORATION

Table 6.7 Officers Name	Office
Tume	Office
Kenneth G. Taylor	Chair
James G. Roche	Vice Chair
John P. Crecine	President
Ronald M. Bell	Vice President and General Manager
Michael E. Thomas	Vice President for Research
Richard H. Truly	Secretary
W. Denney Freeston	Treasurer
Table 6.8 Trustees	
Trustee	Title
Dr. William M. Beckenbaugh	V.P. of Technical Staff and Director of Corporate Manufacturing Research Center, Motorola Inc.
Mr. Edward C. Brady	Consultant, Strategic Perspectives, Inc.
Dr. John A. Copeland	V.PSystems Engineering, Hayes Microcomputer Products, Inc.
Dr. John P. Crecine	President, Georgia Tech
Mr. Ben J. Dyer	Chair, Intellimedia Corp.
Mr. J. Thomas Gresham	President, Callaway Foundation, Inc.
Dr. Richard A. Matula	President, Institute of Paper and Science Technology
Dr. Thomas J. Malone	President, Milliken & Co.
Mr. Thomas J. Murrin	Dean, School of Business, Duquesne University
Dr. Demetrius T. Paris	V.P. for Research and Graduate Programs, Georgia Tech
Dr. James G. Roche	Corp. V.P. for Advanced Development and Planning, Northrop Corporation
Mr. Julius C. Shaw	Chair, Shaw Industries, Inc.
Dr. Albert P. Sheppard, Jr.	Professor of Mathematics, Florida Southern College
Mr. William T. Smith, Jr.	V.P. and Area Manager, IBM
Mr. Kenneth G. Taylor	Engineering Consultant, Simons-Eastern Consultants
Dr. Michael E. Thomas	Executive V.P., Georgia Tech
Dr. John A. White	Dean of Engineering, Georgia Tech
	Emeritus Trustees
Dr. Ernest A. Ballif	Former Senior V.P. Engineering and Research, Whirlpool Corp.
Dr. James E. Boyd	Former Director, Georgia Tech Research Institute
Dr. William B. Harrison	Former Senior V.P., Southern Company Services
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Dr. Ernest A. Ballif	Former Senior V.P. Engineering and Research, Whirlpool Corp.
Dr. James E. Boyd	Former Director, Georgia Tech Research Institute
Dr. William B. Harrison	Former Senior V.P., Southern Company Services
Mr. E. E. Renfro III	Former Director, Nuclear Operations, Florida Power Corporation
Mr. Glen P. Robinson, Jr.	Former Chair, Scientific-Atlanta

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To stimulate cooperation in emerging areas of education and research, Georgia Tech has established a network of more than 50 centers that cut across traditional academic disciplines. Drawing upon human and technical resources throughout the university, the centers provide an interdisciplinary setting for addressing basic and applied problems of interest to government and private enterprise. They also provide a mechanism for interdisciplinary thrusts in graduate and undergraduate education.

The management of these centers is coordinated through the Office of Interdisciplinary Programs (OIP). Centers are established and terminated as needs and opportunities change. Tech's centers involve faculty from academic colleges and from the Georgia Tech Research Institute (GTRI). GTRI provides additional flexibility to research at Georgia Tech and complements the academic programs.

All of Tech's interdisciplinary centers perform sponsored research on a contractual basis. Industry affiliate memberships are also available through several of the centers. Membership benefits include: special access to Tech's broad technical resources; cooperative research programs: and timely technical reports and preprints. A brief description of each of the centers follows:

The Apparel Manufacturing Technology Center (AMTC), established in 1988, has as its primary objective to develop and transfer advanced manufacturing technology to the U.S. apparel manufacturing industry, with particular emphasis on modernizing firms which contract with the U.S. Defense Logistics Agency (DLA). Major activities of the center are to establish and operate a pilot plant to demonstrate advanced manufacturing technology; establish and operate a service to disseminate information on new technologies and their application to the U.S. apparel industry; conduct short-term research projects for developing new technology for improving management, manufacturing productivity, and competitiveness in the U.S. apparel industry; and establish a coalition of apparel industry members to advise and support the AMTC.

The Advanced Technology Development Center (ATDC) was formed in 1980 by the Governor and General Assembly to increase the high technology business base in Georgia. ATDC fulfills this objective by providing business assistance to start-up technology companies, supporting technology commercialization ventures, and assisting in economic development efforts in key technological areas around the state. Headquartered in Atlanta, the ATDC promotes the development of advanced technology-based companies throughout Georgia.

The mission of the **Bioengineering Center** (BEC) is to foster, nurture, and encourage involvement in campus activities that support and expand the intersection between the engineering disciplines and the life sciences. To accomplish this mission, faculty and staff undertake research programs and offer educational opportunities in which engineering principles are applied to problems in biology and medicine. Additionally, activities related to technology transfer and economic development are undertaken.

The Biosciences Center (BSC) is a focal point at Georgia Tech for research in molecular biology, microbiology, biochemistry, bio-

Source: Office of the Vice President for Interdisciplinary Programs

physics, and biochemical engineering. Major projects include bioreactor design, environmental toxicology, immobilization technology, industrial microbiology, molecular genetics, and pharmaceuticals.

The mission of Center for Architectural Conservation (CAC) is to identify, collect, interpret, and apply appropriate information to support the conservation of older and historic buildings. There are approximately 100 million buildings in the U.S. and many of these are older and historic. The owners of these buildings often have great difficulty making sound repair and rehabilitation decisions because they lack accurate information about their own resources and about treatment materials and techniques. Major activities consist of developing standardized and automated methodologies for evaluating older buildings and or archaic materials. Several PC-based applications have been developed for national programs of building evaluation and the first expert system has been created in the historic preservation field.

Research and educational activities at the Center for Computational Materials Science (CCMS) involve faculty, research scientists, postdoctoral fellows, visiting scholars and students. The main research activities focus on large-scale computer simulations of materials systems and processes of fundamental and technological significance. These activities include molecular dynamics simulations of growth and properties of finite and extended materials systems, surface and interfacial phenomena, tribology, lubrication and wear mechanisms, dynamics and rheology of confined polymers, reaction mechanisms of environmental and biological relevance, high-energy impact phenomena, nanocrystalline systems, transport and conductivity with and without the influence of strong magnetic fields in mesoscopic metallic and semiconductor systems, and molecular design of novel materials.

The Center for Dynamical Systems and Nonlinear Studies (CDNS) was established to strengthen the existing research activities in the School of Mathematics with special focus on dynamical systems, differential equations, nonlinear analysis, and applications. Most research of the Center and affiliated faculty is devoted to the dynamical systems defined by ordinary, functional, and partial differential equations. Specific topics emphasized are stability, nonlinear oscillations, bifurcations, singular perturbations, asymptotic behavior, fractals, image compression, scientific visualization, stability of matter, Schroedinger operators, dynamics of numerics, and numerical analysis.

The Composites Education and Research Center (CERC) coordinates educational programs and promotes interdisciplinary research on the design, manufacture, and application of composite materials. These activities incorporate polymeric, metallic, and ceramic fibers and matrices. The Composites Manufacturing Research Program is one focus within CERC.

In 1982, the U.S. Army selected Georgia Tech as one of the three American universities to house a **Center of Excellence in Rotary Wing Aircraft Technology** (CERT). Vertical lift technology, increasingly vital to the Army, has lagged behind fixed wing aircraft. To bridge this gap, the center explores new concepts in helicopter design, including aerodynamics, aeroelasticity, structures and materials, and flight mechanics and controls.

The Center for High Yield Pulp Science (CHYPS) was established to gather industrial support for mechanical pulping research and development. Industrial sponsors are invited to join an exciting new research initiative designed to improve U.S. competitiveness in the areas of high yield pulp science. The initiative, an alliance of the collective expertise and talents of the Georgia Institute of Technology, the Institute of Paper Science and Technology (IPST), and the Herty Foundation, has created a unique opportunity to develop and promote the use of high yield pulps in the U.S.

The Industry/University Cooperative Center for Information Management Research (CIMR), developed at the University of Arizona and the Georgia Institute of Technology, supports research that integrates information systems concepts in to end-user computing research. Emphasis is placed on the application of information systems theory, both technical and managerial, to current and future business and government environments.

Computer Integrated Manufacturing Systems (CIMS) is a graduate certificate program for students interested in manufacturing. Students enrolled in the CIMS program pursue a graduate degree (e.g., M.S., M.E., M.S.I.E.), in one of nine participating academic units (Schools of Aerospace Engineering, Chemical Engineering, Civil Engineering, Electrical Engineering, Industrial and Systems Engineering, Mechanical Engineering, Textile and Fiber Engineering, Management, and the College of Computing). The CIMS certificate is awarded by the College of Engineering to those students who receive their graduate degrees and meet an additional set of CIMS requirements. Thus, the CIMS certificate is an enhancement to an existing degree program, not a substitute for a degree.

Established in 1991, the **Center for International Standards and Quality** (CISQ) assists Southeastern firms to understand and meet quality assurance standards necessary for successful exporting to Europe, the Pacific Rim, and elsewhere. Services consist of providing information on and updating of standards, training in standards-related topics, technical assistance to firms, and research projects on issues related and quality standards.

The Center for International Strategy, Technology, and Policy (CISTP) of Georgia Tech is a multidisciplinary policy and research organization working with business, government, and academic institutions around the world to develop policy recommendations and information on a range of international issues. CISTP hosts conferences, conducts research, and publishes reports and other documents in four fields of concentration: the Pacific Rim and Asia, Europe, and global media, and communications in international relations.

The Computational Mechanics Center (CMC) is a world recognized center of excellence in the field of computational modeling of complex mechanical phenomena. This multidisciplinary center, which combines mathematics, theoretical mechanics and computational algorithm implementation, currently performs broad-based, state-of-the-art research in the following areas: micromechanically based constitutive development of advanced engineering materials such as monolithic ceramics and ceramic composites; three-dimensional static and dynamic fracture mechanics of advanced

materials which exhibit nonlinear constitutive response, such as phase transformations and brittle microcracking; instabilities in non-linear material deformation, such as shear banding, multiscale space structure dynamics and control through embedded actuators; two- and three-dimensional modeling of fluid structure interactions with thick composite shells; and distributed damage site interaction as found in structural aging, especially those found in aircraft and computational modeling of manufacturing processes, such as forging and residual stress-related phenomena.

The primary purpose of the **Composites Manufacturing Research Program** (CMRP) is to promote multidisciplinary, undergraduate and graduate education, and research in the area of composites manufacturing and testing. This is accomplished through the Institute-wide Composites Manufacturing Laboratory in the Manufacturing Research Center. The lab consists of a 5,000 square foot high-bay area, which houses industrial polymer and composites processing equipment, and a 1,000 square foot chemistry and non-destructive testing laboratory.

The Center for Optical Science and Engineering (COSE) coordinates a broad spectrum of research in optical materials, optical physics, optical devices, optical integration, optical systems, and optical education. Among the large number of ongoing programs, one project that is particularly noteworthy is the Center for High Angular Resolution Astronomy (CHARA). CHARA is a joint project with Georgia State University that will construct an optical phased array of telescopes providing the angular resolution of a 400 meter diameter telescope at optical wavelengths.

The primary goal of the **Construction Research Center** (CRC) is to support U.S. industry in all aspects of construction technology and information exchange. The center performs construction research and provides a full spectrum of services to industry relating to technology transfer, information retrieval, and education and training programs.

Created in 1980, the Center for Rehabilitation Technology (CRT) designs, develops, and evaluates adaptive devices and equipment to assist disabled persons by removing functional barriers in the workplace, home, and community environment. The center combines the talents of its core staff with those of faculty and students throughout the University System of Georgia and works in close collaboration with rehabilitation counselors in Georgia's Department of Human Resources.

The Center for Sustainable Technology (CST) is created to respond to the challenge of sustainable development and conduct a comprehensive and cooperative examination of strategies to shorten the learning curve on sustainable technologies. In collaboration with the World Engineering Partnership for Sustainable Development (WEPSD), the CST will help build an interdisciplinary coalition whose professional objectives and ethics support the goals of sustainable development and encourage the development of an international network of Centers for Sustainable Technology.

The objective of the CALS Technology Center (CTC) is to promote the accomplishments of CALS (Computer-aided Acquisition, Logistics and Supportability) tasks by government and indus-

Source: Office of the Vice President for Interdisciplinary Programs



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try in the U.S. The Center provides national and regional leadership in the development of CALS standards, technology, and practice for the exchange of product and process information among government and industrial organizations.

In Early 1986, the Atlanta University Center, Inc. and the Georgia Institute of Technology (AUC/GIT) signed an agreement for the mutual exchange of professionals with the China Association for International Exchange of Personnel (CAIEP) of the People's Republic of China (PRC). The China/U.S. Professional Exchange Program (CUPEP) has been established by AUC/GIT to administer and conduct the placement of Chinese Scientists, engineers, manager, etc., in appropriate placement of U.S. professionals in China. The purpose of this mutual exchange is to acquire and foster greater understanding between the peoples and cultures of the PRC and the U.S. It is believed through understanding and personal contact, that friendship and trust will flow. Ultimately, the enhancement of economic, scientific, and technological development and the strengthening of friendly cooperation between the two countries will result.

The objectives of the Energy Analysis and Diagnostic Centers (EADC) are two-fold: to provide energy conservation assistance to small and medium-sized manufacturing plants located in the Southeast; and to give engineering students first-hand experience in manufacturing technologies, energy use and energy conservation techniques. The Center has been sponsored by the U.S. Department of Energy for 15 years. Georgia Tech is one of 22 universities that participate in this program. The EADC's were mentioned in the 1991 National Energy Strategy as a proven program for promoting energy conservation. Manufacturers consistently implement over 50 percent of the recommendations identified by the EADCs.

The primary objectives of the Georgia Tech Economic Development Administration's University Center (EDAUC) are to stimulate the expansion and diversification of existing industry, support the formation of new, economically sound enterprises, and encourage the development and expansion of enterprises owned by minority individuals. The EDA Center is currently focused on serving Georgia's existing industry. The specific objective of this effort is to assist communities with the establishment/maintenance of an existing industry program.

Georgia Tech's **Economic Development Institute** (EDI) advances economic development in the state and regional communities, and improves the competitiveness of industry and business. EDI contributes to the economic well-being of Georgia and the Southeast through transfer of technologies and innovative management practices via new enterprise development, and by researching for, and responding to economic development needs of communities and local, state, and federal governments. As Georgia Tech's single entry point to campuswide economic development resources, EDI coordinates outreach activities throughout the institute and applies appropriate technical resources where needed.

Emory University School of Medicine and the Georgia Institute of Technology, recognizing the increasing importance of an interdisciplinary approach to problems of health care, established the Emory/Georgia Tech Biomedical Technology Research Center (EM/GT). The purpose of the Center is to create and sustain an environment in which collaborative research and education in the medical, biological, engineering, and physical sciences can flourish, and through which advances in research will be transferred to the delivery of health care.

The Environment Resources Center (ERC) is comprised of the Georgia Water Research Institute (GWRI) and the Environment Radiation Laboratory (ERL). GWRI organizes and administers water resources research projects throughout Georgia, with assistance from the University of Georgia's Institute of Natural Resources. The Environmental Radiation Laboratory performs radiation measurements of samples taken throughout the state, and studies the impact and movement of radioactivity in the environment

The mission of the Fluid Properties Research Institute (FPRI) is to measure, predict, and disseminate data on thermophysical properties and phase equilibria of fluids and fluid mixtures. The institute has the capability to study a wide range of materials including organic chemicals, pharmaceuticals, molten salts, and concentrated electrolytes. Applications include process design, safe operation, and environmental control.

Research is carried out at Georgia Tech in areas of physics and engineering that are essential to magnetic fusion. The Fusion Research Center (FRC) provides an intellectual focus and stimulation for fusion-related educational and research activities, provides external recognition via the distribution of technical reports, provides a computer connection to the national Fusion Computing Network, maintains a research library of international reports, provides seed money for proposal development and support for graduate students, and hosts fusion-related meetings. Primary areas of faculty and student research during the past year were plasma transport processes, fusion reactor design, plasma diagnostics and experimentation, and plasma edge physics data.

The Georgia Center for Advanced Telecommunications Technology (GCATT), a unique partnership of industry, academia, and government, is a part of the Governor's high tech economic development initiative, the Georgia Research Alliance. GCATT's overall mission is to provide focus to university-based research that helps shape, support, and promote the state's advanced telecommunications industry. GCATT's specific missions are: to further economic development in Georgia; to advance the quality and cost-effectiveness of education, health care, and human services; to conduct basic and applied research in advanced telecommunications; and to further the development of enlightened public policies. Through these efforts, GCATT provides a common meeting ground for collaborative work among the converging telecommunications, cable television, computing, consumer electronics, and content industries.

The **Center for Geographic Information Systems** (GIS) (and Spatial Analysis Technologies) is a collective effort on the part of academic and research faculty to provide a multidisciplinary organization committed to continuing research vitality and education in

Source: Office of the Vice President for Interdisciplinary Programs

GIS and related activities throughout Georgia and the nation. Research is focused on innovations in spatial data collection, management, and new techniques to analyze and use these data.

The GIT/MCG Biomedical Research and Education Program is a component of the Bioengineering Center. Georgia Tech and the Medical College of Georgia have missions with synergistic potential in areas where the application of engineering principles can enhance medical research and education, technology transfer, and economic development. This program helps to encourage interinstitutional interactions in which faculty and students at both universities undertake collaborative activities that promote the synergism inherent to the fields of medicine, allied health, and engineering.

The Georgia Procurement Assistant Center (GPAC) was formed to assist Georgia businesses in obtaining federal government contracts. The center is Department of Defense funded so there is no charge for services such as location of government buying activities, the purchase of specified items, assistance with preparation of required forms, computer matching of government opportunities, determination of the volume and price of previously contracted products/services, assistance in understanding bid process and terminology, assistance in bid and proposal preparations, access to federal specifications and standards, access to federal acquisition regulations or assistance in quality control programs.

The primary mission of the **Georgia Productivity** and **Quality Center** (GPQC) is to assist business and industry by creating, identifying, and supporting strategies which improve organizational productivity and quality, and enhance the work environment of employees. Established in 1975, the center assists companies in the development and implementation of improvement plans by focusing in the areas of management, product quality, employee evolvement, and technology utilization.

The Graphics Visualization & Usability Center (GVUC) conducts research and teaches courses in computer graphics, user interfaces, scientific data visualization, computer animation, medical imaging, image processing and understanding, and the ability of humans to perceive images and to effectively employ user interfaces. As an interdisciplinary center, intellectual foundations are drawn from computer science, mathematics, psychology, industrial and systems engineering, and computer engineering. Associated with the center is the Scientific Visualization Laboratory, a campus-wide service of Client Services/OIT, providing state-of-the-art computer graphics facilities to the Georgia Tech campus.

Research interests of the **Health Systems Research Center** (HSRC) include the design, implementation, and evaluation of health care delivery systems. Established in 1969, HSRC activity has included such diverse environments as emergency medical services, rural health care delivery, health maintenance organization development, corporate health promotion, and international health care.

In 1993, the **Institute for Bioengineering and Bioscience** (IBB) was established at Georgia Tech, bringing together biochemistry, bioengineering and biology. The Institute includes the Bioengineering Center, the Biosciences Center, and the Emory/Georgia

Tech Biomedical Technology Research Center. Through the renovation of existing buildings, a Bio-Complex will open on the Georgia Tech campus in 1996. This will house the new Institute for Bioengineering and Bioscience.

The Indoor Environment Research Consortium (IERC) is a university-based consortium between Georgia Tech, Virginia Polytechnic Institute and State University (VPI), and Emory University. The IERC's purpose is to create and sustain an environment that will nurture interdisciplinary research, education, technology transfer, and economic development in the physical, engineering, behavioral, medical and biological sciences.

Research in the **Logistics Optimization Center** (LOC) is directed towards developing and integrating new technologies in computational optimization, geographic information systems, and network design. Problems currently being addressed include: intermodal network design, shipment planning, crew scheduling and fleet assignment, cross-docking, distribution system design, load planning, shipment consolidation, acquisition planning, telecommunication network design, production scheduling, traffic management, and mobile health care network design. The Center has a substantial basic research program focused on developing computational optimization concepts. There are also research efforts directed toward development of fourth generation modeling languages and geographic information systems. This technology is applicable to a wide range of decision support situations in manufacturing and service industries.

Manufacturing Research Center (MARC) is a facility that supports the manufacturing oriented research, development, and educational objectives of Georgia Tech. The opening of this facility in November 1991 comes at a time when federal and state governments increasingly recognize the importance of manufacturers to a healthy economy. It is also a time when industry is seeking additional assistance to meet global competitive challenges. The Center provides new opportunities for industry, academia, and government to collaborate in pursuit of state an national objectives to strengthen the U.S. industrial base and to meet the competitive demands of the international market place. The environment within MARC encourages interdisciplinary programs and a team approach to problem solving.

The Material Handling Research Center (MHRC) was established in 1982 as part of the National Science Foundation's I/ UCRC program. It is the nation's only Center devoted exclusively to research in material management. It conducts nearly \$3 million/year of research on four U.S. campuses. Each year the Center conducts a variety of research in such areas as flexible automation, intelligent systems, manufacturing, warehousing, and logistic systems. The results of these projects allow the MHRC member companies to improve their productivity in the movement, storage, and control of material.

Typical programs at Microelectronics Research Center (MiRC) include the growth and characterization of compound semiconductor materials, aniscotropic etching, very large scale integration (VLSI) chip design, laser annealing, integrated optics, and

Source: Office of the Vice President for Interdisciplinary Programs



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superlattice structures. The center is benefiting from a \$15 million grant from the State of Georgia along with an equal amount of matching funds from other sources. These monies have allowed the construction of an \$11 million building to house the center's activities and the acquisition of highly sophisticated instrumentation.

The Multimedia Technology Laboratory (MMTL) is responsible for the development of the interactive presentation systems which were used to help sell Atlanta's bid for the 1996 Summer Olympic Games. The technology being developed by the Laboratory is anticipated to have a wide application to such requirements as instructional technology, distance learning, presentation systems technology, and any area that involves state-of-the-art multimedia technology. The Laboratory is working in a wide range of computing and communications technologies, developing the "tools" required to integrate video, audio, and computer technologies for unique applications. The Laboratory makes wide use of both graduate and undergraduate students and works cooperatively with a number of other units of the Institute.

The Mechanical Properties Research Laboratory (MPRL) addresses mechanical behavior problems in a wide range of materials including metals, ceramics, polymers, and composites. The laboratory houses some of the most modern mechanical test analytical instruments available. Research capabilities include tensile, fatigue, fracture toughness and creep testing, X-ray diffraction, scanning and transmission electron microscopy, ion implantation, and quantitative image analysis.

The Nuclear Research Center (NRC) consists of two major facilities: a five megawatt research reactor and a hot cell laboratory. Ongoing research includes trace element analysis, neutron radiography, food preservation, agricultural science, and the production of radioisotopes for medical and industrial use. The center also assists industry by training personnel in the use of radiation monitoring equipment and in handling radioactive substances.

A coordinated Office of Environmental Science, Technology, and Policy (OESTP) has been established at Georgia Tech to facilitate more than 200 faculty to address regional, national, and global critical environmental issues. Waste minimization, environmental restoration technology, advanced energy conservation technology, state-of-the-art sensor instrumentation development (e.g., OH radical and other tracers), coordinated field studies and economic assessment provide an integrated base for comprehensive policy studies. This infrastructure and pool of talents are unique in the nation. Also, linkages are being made between the environmental and energy defense policy via the Strategic Environmental Research Programs.

The development of polymeric materials with specific performance requirements depends on the chemical structure of the polymer as well as how the polymer is processed. The **Polymer Education and Research Center** (PERC) focuses on the role that processing plays in meeting and exceeding performance related properties. Ongoing research ranges from polymerization through fabrication and analysis of polymeric products. PERC is also

responsible for coordinating and promoting educational and research activities in polymers among six schools and GTRI at Georgia Tech.

The primary objective of the **Southeastern Trade Adjustment Assistance Center** (STAAC) is to provide management and technical assistance to Southeastern manufacturing firms who experience declines in sales and employment due to competition from imported products. Major activities include assistance to firms in preparing applications for program services and submitting to the U.S. Department of Commerce (DOC); performing diagnostic analysis study of eligible firms to assess strengths and weaknesses, and providing competitive assessment of all of the firm's functional areas including manufacturing, sales and marketing, finance and accounting, and management practices; developing a recovery strategy to help the firms regain a competitive position; and assisting in implementation recovery strategies.

The **Specialty Separations Center** (SSC) develops and applies modern high-tech separation methods to industrially and socially important problems. Applications include environmental control, energy, biotechnology, pharmaceuticals, fine chemicals, electronic materials, polymers, food processing, pulp and paper, and textiles. This work is collaborative between Georgia Tech scholars in chemical engineering, chemistry, biology, and environmental studies

The Technology Policy and Assessment Center (TPAC) was formed to undertake research on major technology policy issues that face our society. Participants in the center are bound by a common interest in the policy and societal aspects of science and technology. Typical areas of investigation involve the assessment of technology and its impact, socio-economic development, costbenefit analysis, and strategies for the management of scientific and technological development. A major initiative is under way to identify emerging technologies and attendant opportunities.

The Transportation Research and Education Center (TREC) was established in 1991 to promote multidisciplinary research and education in transportation. Center faculty and research staff are dedicated to examining the role transportation plays in the social and economic fabric of society. In addition, the Center promotes the investigation of new transportation technologies and their likely environmental, financial, and societal impacts.

The mission of the University Center of Excellence for Photovoltaics Research and Education (UCEP) is, first, to improve the fundamental understanding of the science and technology of advanced photovoltaics (PV) devices; second, to fabricate record high efficiency solar cells; and third, to provide training and enrich the educational experiences of students in this field.

Source: Office of the Vice President for Interdisciplinary Programs

The Georgia Tech Research Institute (GTRI) is a nonprofit, client-oriented applied research organization that is an integral part of Georgia Tech. It was chartered by the Georgia General Assembly in 1919 and activated in 1934. GTRI plans and conducts focused programs of innovative research, education, and economic development that advance the global competitiveness of Georgia, the region, and the nation. Working closely with academic colleges and interdisciplinary centers in areas of research, education, and service, GTRI will be a vital force in establishing Georgia Tech as the premier technological university of the twenty-first century.

#### Staff

The GTRI staff has expertise in most recognized fields of science and technology. As of December 30, 1993 (the last date for which statistics are available), GTRI had 1,086 employees, including 494 full-time engineers and scientists, and about 273 full-time support staff members. The other employees include faculty members, students, and consultants who work in the research program on a part-time basis. This reduction in the size of the research staff since last year is attributable in large part to the transfer of economic development faculty and staff to the Georgia Tech Economic Development Institute.

#### **Recent Research Funding Trends**

GTRI programs account for approximately two-thirds of Georgia Tech's sponsored research volume. External support trends at GTRI showed signs of recovery in the fiscal year 1993. Contract grants and awards rose by 17.1 percent, from last year's \$75 million level to an annual volume of \$87.9 million. This change represents a return to the range that GTRI averaged over the five years preceding FY '92. The accomplishment was particularly impressive, given the continuing financial problems experienced by many other contract research organizations in the United States.

GTR1's total expenditures in FY '93 declined by 1 percent to a level of \$98.2 million. The distribution of contract sponsors showed relatively small changes. DoD's share of the total sponsorship base dropped slightly, from 82 percent to 77 percent, while industrially supported R&D rose from 11 percent to 16 percent of the total.

### **Strategic Directions**

In 1993, GTRI took a fresh look at the direction of its operation in the light of changing national defense needs, the increasing competitiveness of the global economy, social crises, and emerging technological trends. The strategic plan that resulted from these discussions identified 19 goals and 30 strategies for reaching GTRI's goals.

In broad terms, the organization intends to maintain its current strong base of defense-sponsored research while becoming a more active participant in federal efforts to develop commercial uses for defense technologies. The transfer of technology to Georgia and U.S. businesses remains one of GTRI's highest priorities. Plans call for the continuation of strong initiatives in environmental technology, advanced transportation, and electronics manufacturing.

#### Organization

GTRI's activities are coordinated with the research conducted in Georgia Tech's academic colleges and interdisciplinary research centers through the Institute's executive vice presidents.

In 1993, GTRI carried out an administrative restructuring that has improved the organization's ability to pursue its objectives and to accommodate the current period of funding uncertainty. The restructuring has consolidated some of GTRI's research laboratories and streamlined the Office of the Director.

GTRI reduced its laboratories from 18 to 8 units. The current labs have focused technical missions and are linked to one another by a smaller number of coordinated program thrusts. Interaction among these units is common, and joint teams can be formed readily in areas of mutual interests and expertise to provide optimum service to the client. Management structures are centralizing to a number of across-the-board functions, including internal research, quality assurance, strategic planning, program development, and professional growth.

The eight laboratory units and descriptions of their primary activities are as follows:

Aerospace Sciences Laboratory (AERO). This laboratory performs research in computational fluid dynamics, wind tunnel testing, aircraft structural analysis, high speed flight, rotorcraft, and aeroacoustics. This research is funded by NASA, the U.S. Army, the U.S. Air Force, the Advanced Research Projects Agency, Federal Highway Administration, and private industry. Current research contracts in AERO include acoustics (NASA, USAF, and Ford Motor Company), aerodynamic configuration analysis (NASA, USAF, and Lockheed), computational fluid dynamics (NASA and USAF), aircraft structures (USAF), flight performance analysis (USAF), flight test management (USAF), electric ground vehicles (ARPA), and Intelligent Vehicle/Highway Systems (Federal Highway Administration).

Electronic Systems Laboratory (ELSYS). This laboratory works in the broad areas of concepts analysis, countermeasures development, and electronic support measures. In concepts analysis, ELSYS serves Georgia Tech as a focal point for development and evaluation of electronic defense concepts. Major activities involve advanced concepts analysis, test and evaluation, modeling and simulation, special-purpose instrumentation systems, and human factors studies. In countermeasures development, the laboratory places emphasis on the development, analysis, and test and evaluation of electronic countermeasures and counter-countermeasures techniques and hardware. Researchers in the lab's electronic support measures division develop new and improved methods for detecting, identifying, and classifying electromagnetic signals, and the means for coordinating countermeasure responses.

Electro-Optics, Environment, and Materials Laboratory (EOEML). This laboratory's mission is one of research, technical assistance, and outreach technology transfer in a broad range of disciplines. These research areas include: analysis, simulation, and testing of military electro-optical systems; development of high

Source: Office of the Vice President and Director, Georgia Tech Research Institute



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temperature materials, polymers and coatings, zeolites, and metallurgy; environmental research and monitoring; occupational safety and health; and electro-optic device and component design and development.

Huntsville Research Operations (HRO). This laboratory is located in Huntsville, Alabama, and is primarily supported by the U.S. Army Missile Command (MICOM) in its radar and missile simulation efforts. However, HRO has also performed work for the U.S. Army Strategic Defense Command and for private industry in Huntsville. The lab is a multidisciplinary organization with research interests in battlefield automation simulation and analysis, aeronautical simulation, analysis and modeling of complete missile systems, sensor and fuze simulation and analysis, and simulation support of special MICOM compartmented classified programs. Other research involves field and hardware-in-the-loop testing of air defense weapons equipment, war gaming and force-on-force simulations, guidance and control simulations, logistics decision support technology, and the development of computer graphics software.

Information Technology and Telecommunications Laboratory (ITTL). This laboratory provides computer-based solutions to unique and complex problems involving information processing, storage, representation, and exchange. ITTL's information technology program conducts sponsored research in software engineering, information management systems, artificial intelligence, computer graphics, decision support systems, simulation and modeling, database management and design, network management and design, human-computer interface, and hardware and software design. ITTL's telecommunications division develops and evaluates communications systems for the Department of Defense, other government organizations, business, and industry. These researchers are particularly well qualified in tactical communications, communications surveillance and disruption, communications networks, radiolocation and direction-finding, propagation analysis, and communications antennas.

#### Sensors and Electromagnetic Applications Laboratory (SEAL)

This laboratory conducts wide-ranging research, with major specialties in radar systems development, electromagnetic environmental effects, performance modeling and simulation, and microwave and antenna technology. Radar systems programs focus on the development, analysis, and evaluation of radar systems, electronic counter-countermeasures techniques, avionics integration, non-cooperative target identification, vulnerability analysis, signal processing techniques, and photonic applications. In electromagnetic environmental effects, SEAL researchers analyze, measure, and control electromagnetic interactions between elements of electronic systems and between these systems and their environment. The lab's specialists in microwave and antenna technology develop, analyze, and test new and existing antenna systems, and antenna metrology. Finally, researchers at SEAL have a broad base of expertise in acoustics applications, including non-cooperative target recognition, underwater sensing, and non-destructive missiles testing.

**Signature Technology Laboratory (STL).** This laboratory has more than 20 years of direct and applied research experience in electromagnetic materials, metrology, electromagnetic analysis,

and antenna development. STL research involves signature problems in the visual, infrared, and radiofrequency spectra. Specific areas of expertise include infrared measurement and modeling, radar cross section measurement and analysis, multi-and hyperspectral signature phenomenology, computer-controlled infrared and visual or micro/millimeter wave measurement systems, dielectric/magnetic material testing in adverse environments, and test instrumentation development.

Systems Development Laboratory (SDL). This laboratory has long been active in research on radar and related technologies in support of national defense preparedness. A major element of this research is focused on providing accurate simulations of foreign radar systems and associated subsystems that are regarded as threats to national security. The experience gained in this areas over nearly two decades of work with foreign systems analysis and development is a capability not duplicated at any other university research center. SDL also has achieved a national reputation for its expertise in radar cross section measurements, millimeter wave technology, radar system development, and physical security applications. Collaboration between laboratories and initiatives beyond the scope of a single lab's operations are facilitated by GTRI's Program Development and Advanced Concepts Offices.

In addition, the GTRI Fellows Council was established last year to assess and recommend future technological directions for GTRI's research program. This group is composed of a small number of the organization's most senior and distinguished research faculty.

#### **Research Directions**

Over the past few decades, GTRI has established international standing for its excellence in defense electronics. More than three-quarters of the organization's research is still sponsored by the Department of Defense, but changing national needs have resulted in a greater diversification of GTRI's research priorities. Major research thrusts include the following topics:

- · Aerospace Sciences and Technology
- Acoustics
- Communications and Information Technology
- Economic Development
- · Educational Technology
- Electromagnetic Environmental Effects
- Electronic Defense
- Energy Development
- Environmental Science and Technology
- Infrared/Electro-optics
- Intelligence and National Policy
- · Manufacturing Technology
- Materials Sciences
- Medical Electronics
- Microelectronics and Applications
- · Modeling and Systems Analysis
- Radar
- Sensor Fusion
- Simulation Systems
- Technology Transfer
- Test and Evaluation
- Transportation

Source: Office of the Vice President and Director, Georgia Tech Research Institute

#### Locations and Facilities

GTRI is headquartered on the Georgia Tech campus, with most of its offices and laboratories located in the Centennial Research Building, the Baker Research Building, the Electronics Research Building, and the O'Keefe Building. GTRI also operates a major off-campus leased facility approximately fifteen miles from Georgia Tech, in Cobb County.

Other staff members provide on-site research and liaison activities for sponsors at field offices in the Eglin Air Force Base, Florida; the Army Missile Command in Huntsville, Alabama; the Warner Robins Air Logistics Center in Georgia; Fort Monmouth, New Jersey; Dayton, Ohio; Arlington, Virginia; and Ridgecrest, California.

Facilities include laboratories in electronics, computer science and technology, the physical sciences, and most branches of engineering. A 30-acre field test site for research in electromagnetics, radio-direction finding, and propagation studies is located at GTRI's Cobb County facilities, along with a 1,300-foot far-field antenna test range and radar cross-section ranges, including one with a turntable capable of holding objects of up to 100 tons. GTRI also has a 14-acre satellite communications station near Atlanta that is being leased for use by research faculty. It includes two 105-foot-diameter dish antennas and a 14,000 square foot building.

Research operations are facilitated by a major high-speed electronic network utilizing micro-mini-and mainframe computers, with hundreds of users across the campus.

#### Interaction within the Tech Community

GTRI enriches the Georgia Tech research environment for faculty and students by conducting externally sponsored, applications-oriented research programs that benefit the state, region, and nation. These programs, led by full-time research faculty, have resulted in major technological advances for national defense, civilian needs, and industrial competitiveness, and have provided students with valuable career experiences. The integral role of GTRI in the Georgia Tech community includes collaborative research with academic faculty, courses originated by GTRI faculty, and joint service efforts.

Collaboration is strong between the faculties of GTRI and the academic schools and departments. In FY '93, 22 GTRI researchers held appointments as adjunct faculty members at Georgia Tech, and 31 held shared or joint appointments. GTRI faculty served on 32 thesis advisory committees, and 93 taught continuing education courses.

During FY '93, almost 400 students participated in GTRI research activities, including 133 graduate research assistants, 25 graduate co-ops, 23 graduate assistants, and 190 undergraduate students.

GTRI faculty and staff also collaborate with academic schools and departments as students. In FY '93, 39 research faculty members were pursuing doctoral degrees, while 77 were at work on master's degrees.

#### Service to Georgia

GTRI plays a vital role in helping Georgia Tech stimulate economic development in Georgia. Through Tech's 13 regional offices, business, industry, and community organizations tap an array of technical resources at GTRI and academic units of the Institute. This assistance takes many forms such as:

- · Helping start-up companies;
- Helping established firms solve technical and management problems;
- · Helping communities attract new industry; and
- Helping industry and communities to eliminate environmental hazards.

During FY '93, GTRI's economic development laboratory merged into Georgia Tech's new Economic Development Institute (EDI). This organization will provide a single entry point to all of Tech's economic development, technology transfer, and new enterprise development activities. GTRI will participate in EDI programs in areas of technology needs assessment, environmental sciences, industrial hygiene, and materials science.

Source: Office of the Vice President and Director, Georgia Tech Research Institute



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Table 6.9 Staff

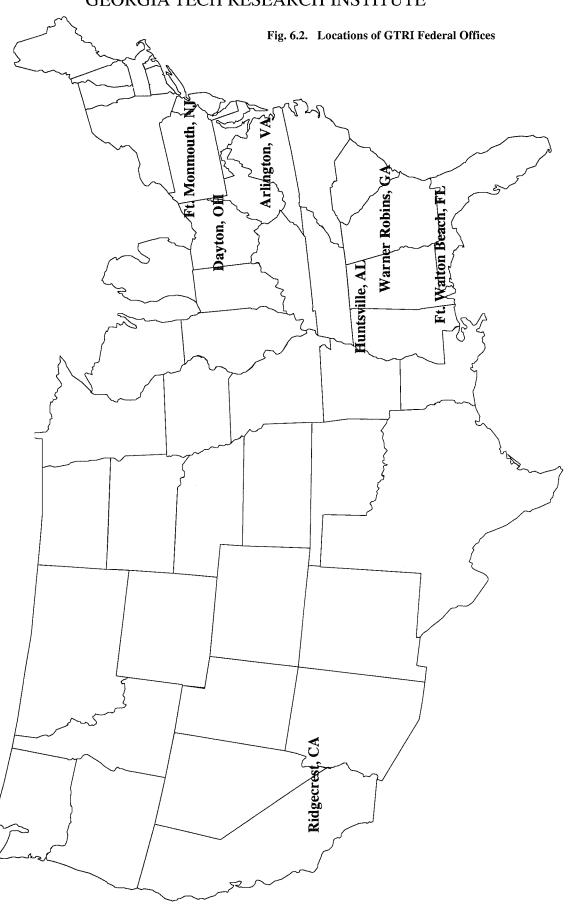
Research Budgeted	Number	Percentage	
Professional			
By Highest Degree			
Doctoral*	120	20.5%	
Master's	358	61.1%	
Bachelor's	103	17.6%	
Other	3	0.5%	
No Degree	2	0.3%	
Total Professional	586		
Support Permanent			
Total Support Permanent	315		
Total Research Budget	901		
Research Non-budgeted			
Professional			
By Highest Degree			
Doctoral	11	25.6%	
Master's	24	55.8%	
Bachelor's	7	16.2%	
Other	1	2.3%	
No Degree	0		
Total Professional	43		
Support Temporary			
Total Support Temporary	77		
Total Research Non-budgeted	135		
Graduate Research Assistants/Graduate Co-ops	116	×	
Graduate Assistants	6		
Co-op Students	126		
Student Assistants	51		
Non-Tech Students	9		
Total Student Assistants	308		
Total Staff	1,252		
* Includes I.D.s and M.D.s			

<sup>\*</sup> Includes J.D.s and M.D.s

Table 6.10 Research Facilities

Facility	Square Footage	
On-campus Research Space	345,144	
Off-campus Research Space	185,181	
Total	530,325	

Source: Office of the Vice President and Director, Georgia Tech Research Institute



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Fig. 6.3. GTRI Research Expenditures Dollars in Millions

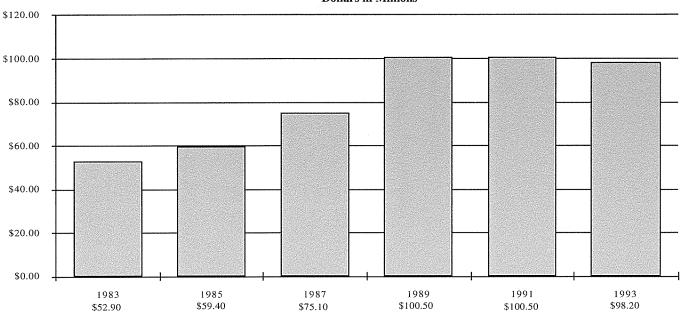
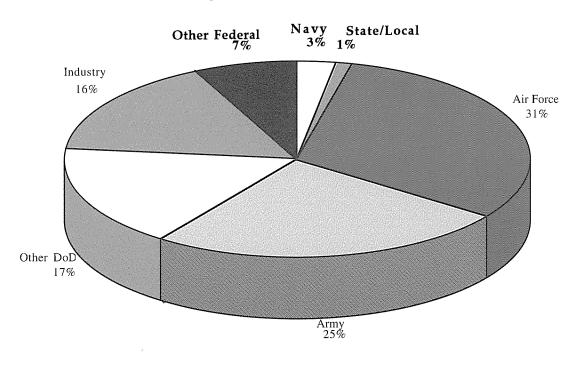


Fig. 6.4 Major GTRI Sponsors



### ADVANCED TECHNOLOGY DEVELOPMENT CENTER

The Advanced Technology Development Center (ATDC) was created in 1980 by the Governor and the General Assembly to increase the technology business base of Georgia. An innovative plan linking the ATDC to Georgia Tech and the University System of Georgia opened the door for research, business assistance, and technology commercialization programs to be brought together to assist start-up technology companies to strengthen Georgia's high-technology industry.

Now, as part of the new Economic Development Institute (EDI), the ATDC operates the Technology Business Center on the Georgia Tech campus where early stage companies enjoy a strong entrepreneurial working environment, access to professional business consulting, contact with university research faculty, and modern office and laboratory facilities with central staff support. For established high-technology companies, the ATDC provides detailed information about state resources, access to facilities and personnel in the state's University System, office/industrial space of the Georgia Tech campus, and opportunities to team up in the development of new processes and products with ATDC's early-stage companies.

Supplementing other programs at Georgia Tech, the ATDC provides commercialization assistance to move technology into the marketplace more rapidly. These efforts help to develop potential new products based on research strengths at Georgia Tech. ATDC assistance includes conducting market research, drawing up business plans, researching sources of capital, and bringing together all of the elements needed to launch and sustain a new business.

The ATDC also assists in economic development efforts in key technological areas around the state of Georgia. The ATDC/Augusta focuses on health science, telecommunications, environmental sciences, electronics, and software development. The ATDC/Warner Robins is working to encourage the development of new defense and aerospace technology firms. The ATDC provides assistance to entrepreneurs throughout the state through the field offices of EDI's Industrial Extension Service.

Early stage companies are selected for ATDC membership based upon their application of new technologies in products, processes, or services; quality of the management team; product marketability; and growth potential. Special consideration is given to companies engaged in developing new technologies in telecommunications, computer hardware, software development, biotechnology, microelectronics, aerospace, instrumentation, advanced materials, and information systems.

Once accepted into the program, the ATDC provides an integrated set of services to support new firms during their critical early years. The ATDC offers assistance with:

- · Business planning and management;
- Development and implementation of financing, marketing, and manufacturing strategies;
- · Contacts into the Georgia business community for key accounting, financial, legal, and similar business services;
- Access to sophisticated equipment and services on the Georgia Tech campus;
- Attractive space for laboratory, research and development, office and light manufacturing uses and shared administrative support services, office machines, and conference rooms;
- Access to technical consultants, students, and facilities within the University System of Georgia.

The ATDC continually provides assistance to member companies as they progress in their early stages of growth; as the companies grow and flourish, new jobs and new opportunities are created. The eventual goal is for each company to graduate from the program as a successful business enterprise. Many businesses formed at the ATDC are now major employers in Georgia.

Start-up technology-based companies which feel they may benefit from the ATDC program should contact an ATDC representative for more information.

Source: Office of the Director, Advanced Technology Development Center



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### ECONOMIC DEVELOPMENT INSTITUTE

#### A New Direction for Economic Growth

Today's economy demands that universities stand at the leading edge of applying research and knowledge for economic growth. To better promote such growth, Georgia Tech has formed the Economic Development Institute (EDI) to house all of the school's economic development, technology transfer, and new enterprise development activities. EDI offers a single access point for companies, communities, government agencies, and other universities seeking technical assistance or information from Georgia Tech.

#### EDI's Mission is Three-fold

- to provide strong, proactive management for Georgia Tech's economic development activities
- to encourage faculty and student participation in the economic development process
- to develop programs that will advance the economic well-being and global competitiveness of Georgia, the Southeast, and the nation.

#### **New Structure**

Established in July 1993, EDI has regrouped Georgia Tech's economic development programs into four broad headings plus appropriate support services, such as data search and dissemination:

- New Enterprise Development
- Industrial Outreach
- Technology Transfer
- Technology and Science Policy

Eventually, it will have one phone number for contacting any person, program, or center at Georgia Tech. Also, the new organization will facilitate access to other Georgia Tech units or individuals linked to economic development, including such areas as environmental sciences, materials analysis, computer science, workplace safety, agricultural technology, and electrical engineering.

#### **New Initiatives for Economic Development**

EDI plans several initiatives to further business and economic development throughout the state. One is the University/Industry Partnership which, by means of matching funds supplied by several companies, will conduct research supporting statewide economic development. Another involves the Faculty Liaison Program which would better enable faculty members to work on technical assistance projects. Still another entails expanding the number of regional offices from 13 to 20 to better serve companies and communities statewide.

Georgia Tech's Economic Development Council, formed in 1990, will play an active and ongoing role in EDI's overall operation, meeting regularly to define economic development objectives and frame strategies for reaching them.

### A Record of Accomplishment

Although EDI is new, the programs and organizations from which it springs are well-established. Georgia Tech has a long tradition of assisting industry and government. The Industrial Development Branch (later the Economic Development Laboratory) started in 1956. Its highly regarded Industrial Extension Service dates back to 1961. The Advanced Technology Development Center, a business incubator for high-tech start-up firms, was launched in 1980.

The new organization's units and programs have a solid record of achievement. For example:

- EDI's Industrial Extension Service assists more than 1,000 companies and communities each year via 12 regional offices located throughout the state, and 1 regional center located in Warner Robins.
- In any one year, the Advanced Technology Development Center works with some two dozen start-up firms. In 1992, its 57 member and graduate companies posted \$195.8 million in revenues and provided 1,294 jobs.
- The Georgia Procurement Assistance Center has helped 1,200 Georgia firms compete in the federal marketplace since its inception in 1985. Contracts awarded total \$85 million to Georgia companies.
- EDI energy engineers, by means of on-site audits and subsequent conservation recommendations, have saved Georgia companies and institutions millions of dollars in energy costs over the past 15 years.
- Reports produced by the Economic Development Research Program have been used to help recruit industry for Georgia, such as four
  oriented strand board plants, a cold-storage facility, an aerospace plant, and a hardwood remanufacturing operation.
- the Southeastern Trade Adjustment Assistance Center, designed to help manufacturers hurt by competition with imported goods, since 1978, has provided technical and management assistance to more than 373 regional firms with sales totaling over \$1.6 billion and employment exceeding 52,000.

Source: Office of the Director, Economic Development Institute

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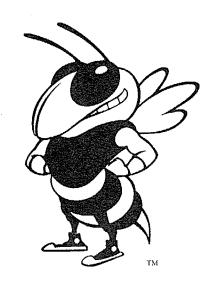
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