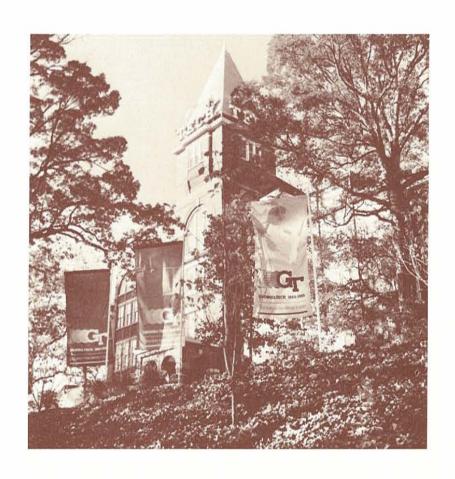
1984-85 Fact Book Georgia Tech

Office of the Vice President for Academic Affairs Georgia Institute of Technology Atlanta, Georgia 30332

Edited by Sue Palmer



PRESIDENTS OF GEORGIA TECH

1888 - 1896	Isaac S. Hopkins
1896 - 1905	Lyman Hall
1906 - 1922	Kenneth G. Matheson
1922 - 1944	Marion L. Brittain
1944 - 1956	Colonel Blake R. Van Leer
1957 - 1969	Edwin D. Harrison
1969 - 1972	Arthur G. Hansen
1972 - present	Joseph M. Pettit
1972 - present	Joseph M. Pettit

TABLE OF CONTENTS

INT	RODUCTION
	Georgia Tech - An Overview 1
	Statement of Purpose
	Board of Regents5
	Institutional and Professional Accreditation
	Administration
	Undergraduate Degrees Offered1
	Graduate Degrees Offered12
STU	JDENT - FACULTY PROFILES
	Freshman Profile
	Freshman National Merit Scholars
	Freshman National Achievement Scholars
	President's Scholarship Program
	Fall Quarter Undergraduate Enrollment by College, 1980 - 1984
	Engineering College Undergraduate Enrollment, Fall Quarters 1974, 1979, 1984 20
	Fall Quarter Graduate Enrollment by Degree Program, 1975 - 1984
	Fall Quarter Graduate Enrollment by College, 1980 - 1984
	Engineering College Graduate Enrollment, Fall Quarters 1974, 1979, 1984
	Enrollment by Georgia Counties, Fall Quarter 1984
	Enrollment by States, Fall Quarter 1984
	Enrollment by Foreign Countries, Fall Quarter 1984
	Degrees Awarded 1979 - 1984 (Summer-Spring)
	Average Fall Quarter Grade Point Averages 1979 - 1983 32
	Student Credit Hours Fall Quarter 1984
	Academic Faculty Profile
	Research Personnel Profile
	Total Employee Profile 36

TABLE OF CONTENTS (continued)

GE	ENERAL INFORMATION	
	Student Services	37
	Library	39
	Physical Facilities	40
	Financial Aid and Scholarships	41
	Summary of Major Programs of Student Financial Assistance	42
	Matriculation and Tuition Fees, Fall Quarters 1975 - 1984	43
	Cooperative Plan	44
	ROTC	45
	Information Technology	47
	Athletic Association	49
	Georgia Tech Foundation	52
	Corporate Relations and Placement	53
	Reported Starting Monthly Salaries	54
	Reported Post-Graduation Plans	56
	Alumni Association	57
	Geographical Distribution of Alumni	58
	Continuing Education	59
	Industrial Education	60
FIN	IANCES	
	Financial Data by Percentages	61
	Financial Data - Actual Revenues	64
	Financial Data - Actual Expenditures	
RES	SEARCH	
	Research at Georgia Tech	69
	Contract Administration	72
	Research Centers	
	Georgia Tech Research Institute	
	Advanced Technology Development Center	83

GEORGIA TECH - AN OVERVIEW



U.S. Supreme Court Justice Sandra Day O'Connor, first speaker in Georgia Tech's Centennial National Lecture Series

Georgia Tech celebrates its Centennial in 1985. The Centennial observance will be both a celebration of all that the Institute has become, as well as a reaffirmation of Tech's commitment to excellence. The South's foremost technological university, with its consistently high academic standards, expanding campus facilities, and vast research programs, is ready to meet the challenges of tomorrow.

The Georgia School of Technology was chartered by the General Assembly of the State of Georgia in 1885. Tech first opened its classroom doors on October 7, 1888. Eighty-five students enrolled that October, with a total enrollment of 129 by the end of the first year. These students pursued degrees in the only major offered, mechanical engineering. Even then, Tech courses were difficult to master, and only 28 members of the original October class earned degrees.

During the next few years, new degrees were offered in electrical engineering, civil engineering, and textiles. Gradually the curriculum broadened, and today Tech students can choose from a wide range of major fields in engineering, science, management, and architecture, at the bachelor's, master's, and doctoral degree levels.

GEORGIA TECH - AN OVERVIEW (continued)

On July 1, 1948, the Georgia School of Technology officially became the Georgia Institute of Technology. Tech's first two colleges also were formed at this time, the College of Engineering and the General College. Since then, the General College has become the College of Sciences and Liberal Studies, and the College of Management and the College of Architecture have been added. The College of Architecture is Tech's newest college addition, having been elevated from a school in 1975. Of the four colleges, the College of Engineering has by far the largest enrollment.

From an original two-building, five-acre campus, Tech has grown to 128 major buildings on more than 320 acres near downtown Atlanta. Construction was completed recently on a three-building complex for the College of Management and the School of Industrial and Systems Engineering. The first building of the Advanced Technology Development Center opened this year and is occupied at full capacity. Construction also has just been completed on a 560-bed dormitory.

The general growth and diversity of Tech is reflected in its student population. Total enrollment for Fall Quarter 1984 was 10,958 -- 8,730 undergraduate students, and 2,228 graduate students. Although the first woman student did not appear on the main campus as a day student until 1952, there now are 1,916 women undergraduates and 408 women graduate students. Within the total undergraduate student body there are 1,062 minority students and 249 international students. Of the graduate students enrolled, 215 are minorities and 560 are international students.

Tech is proud of the scholastic abilities of its students. Entering students have an average Scholastic Aptitude Test (SAT) score almost 300 points higher than the national average. The school has the fifth largest number of National Merit Scholars and the largest number of National Achievement Scholars of any publicly-supported institution in the United States. National Achievement Scholars, composed solely of black students, represent an honor equivalent to that of National Merit Scholars. Tech has the highest per capita enrollment of both National Merit and National Achievement freshman scholars of any public institution in the country.

Students who wish to combine industrial work experience with their classroom studies can enroll in Tech's "Cooperative Plan." This five-year program has been at Tech since 1912 and has more than 400 participating companies. In Fall Quarter 1984, over 2,100 students enrolled in this program.

GEORGIA TECH - AN OVERVIEW (continued)

Leading the instruction of Tech students are 526 faculty members -- 515 full-time instructional faculty and 11 part-time. Over 85 percent of the faculty hold Ph.D. degrees. In addition, the Georgia Tech Research Institute employs 565 full-time professional researchers in its five electronics and three resources laboratories. Together, Tech's faculty and staff make up approximately 2,800 of the Institute's community.

Students and faculty have access to a catalog collection of over 1,780,000 bibliographic units in the Price Gilbert Memorial Library to help them in their studies and research. Microtexts total 2,344,000; patents, 4,300,000; government documents include over 461,000 publications and 132,000 maps; and serial titles total 28,000, with 6,000 periodical titles. Approximately 75 percent of the total collection is in scientific or technical fields. Literature searches and other reference services are provided from more than 400 bibliographic and factual data bases. Membership in a twelve library consortium greatly extends available information sources.

Research is an integral part of the education process at Georgia Tech and has grown to \$95 million annually, including research in the academic colleges and the more applied research at the Georgia Tech Research Institute. Research activities are diversified and are centered in areas where the nation has a vital interest -- defense, energy, health and environment, and productivity.

Students about to graduate from Tech are encouraged to engage the services of the Office of Corporate Relations and Placement. The Office is very successful in helping graduates find jobs that best fit their qualifications. Employers from private industry who recruited through the Office in 1983-84, reported that the most sought after bachelor degree candidates were those in Electrical, Mechanical, Chemical, and Industrial and Systems Engineering. These employers reported an average salary offer of \$2,212 per month to graduates with bachelor degrees in engineering. In 1983-84, approximately 59 percent of 656 Tech graduates surveyed had finalized their post-graduation plans prior to graduation.

Georgia Tech alumni now total over 66,500, many of whom serve in prominent positions. Among these are Jimmy Carter, former U.S. President; Sam Nunn, Georgia Senator; John Portman internationally acclaimed architect; John Young and Richard Truly, astronauts; David C. Garrett, Jr., President, Delta Airlines; David S. Lewis, Chairman and Chief Executive Officer, General Dynamics; James D. Robinson, Chairman, American Express Co.; Malcolm T. Stamper, President, Boeing; and Cecil J. Silas, President and Chief Operating Officer, Phillips Petroleum Co.

STATEMENT OF PURPOSE

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.

This 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, and management. 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 areas of special 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;
- serve as a standard for excellence in the state, national, and international academic community in areas of special emphasis.

Source: Office of the President (approved by the Board of Regents June 7-8, 1983)

BOARD OF REGENTS

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. It is comprised of Georgia's 33 state-operated institutions--4 universities, 14 senior colleges, 15 junior colleges -- and is governed by a constitutional Board of Regents.

The Board of Regents of the University System consists of 15 members. The members--five from the state-at-large, one from each of the ten Congressional districts--are appointed by the Governor and are confirmed by the State Senate. The term of appointment of all members is seven years.

The Board's authority includes the government, control, and management of all aspects of operation and development of the University System.

The Board receives all state appropriations for the University System and allocates these appropriations to the institutions and institution-related agencies. Current membership of the Board of Regents is provided below:

REGENT	DISTRICT	TERM
John H. Anderson, Jr.	State-at-Large	1983-1990
Marie W. Dodd	State-at-Large	1981-1988
Jesse Hill, Jr.	State-at-Large	1978-1985
Joseph D. Greene	State-at-Large	1984-1991
John E. Skandalakis	State-at-Large	1981-1988
Arthur M. Gignilliat, Jr., Vice-Chairman	First	1983-1990
William T. Divine, Jr.	Second	1982-1989
John H. Robinson, III	Third	1979-1986
Jackie M. Ward	Fourth	1984-1991
Elridge W. McMillan	Fifth	1982-1989
Edgar L. Rhodes*	Sixth	1984-1985
Lloyd L. Summer, Jr.	Seventh	1980-1987
Thomas H. Frier, Sr.	Eighth	1978-1985
Sidney O. Smith, Jr., Chairman	Ninth	1980-1987
Julius F. Bishop	Tenth	1979-1986
*Filling unexpired term of former Regent Lama	r Plunkett	

STAFF OF THE BOARD OF REGENTS

Vernon Crawford, Chancellor
H. Dean Propst, Executive Vice Chancellor

Henry G. Neal, Executive Secretary
Jacob H. Wamsley, Fiscal Affairs/Treasurer
W. Ray Cleere, Academic Affairs
Frederick O. Branch, Facilities

Howard Jordan, Jr., Services Thomas F. McDonald, Student Services Harry B. O'Rear, Health Affairs Haskin R. Pounds, Research & Planning

Source: Office of the Board of Regents

INSTITUTIONAL AND PROFESSIONAL ACCREDITATION

Institutional Accreditation

Georgia Tech is accredited by the Southern Association of Colleges and Schools. A self-study was conducted this year and reaffirmation was awarded.

Professional Accreditation

The Accreditation Board for Engineering and Technology has awarded basic accreditation to the four-year engineering programs leading to the bachelor's degree in the following fields:

aerospace engineering ceramic engineering chemical engineering civil engineering electrical engineering engineering science and mechanics industrial engineering mechanical engineering nuclear engineering textile engineering

Advanced level accreditation has been given to the programs leading to the master's degree in the following fields:

ceramic engineering civil engineering electrical engineering environmental engineering industrial engineering mechanical engineering metallurgy nuclear engineering textile engineering

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 program leading to the degree Master of Architecture is accredited as a first professional degree by the National Architectural Accrediting Board.

The curriculum leading to the bachelor's degree in chemistry is accredited by the American Chemical Society.

All of the degree programs of the College 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; Bachelor of Science in Economics; and Master of Science in Management.

Source: Office of the Vice President for Academic Affairs

ADMINISTRATION

Office of the President

Joseph M. Pettit

James R. Stevenson E. Janice Gosdin-Sangster Homer C. Rice

Office of the Vice President for Academic Affairs

John H. Gibson

Jesse H. Poore

Henry C. Bourne, Jr.

E. Jo Baker William J. Lnenicka Jesse H. Poore Walter O. Carlson

William J. Gamble, Jr. Miriam A. Drake Frank E. Roper, Jr.

Office of the Vice President for Research

Thomas E. Stelson

Albert P. Sheppard, Jr. Jack M. Spurlock Walter O. Carlson Jerry L. Birchfield J. W. Dees Donald J. Grace A. Raymond Moore Robert M. Boyd

College of Sciences & Liberal Studies

Les A. Karlovitz

Thomas G. Tornabene
Robert A. Pierotti
C. S. Kiang
Raymond E. Miller
William F. Ames
Edward W. Thomas
Anderson D. Smith
Daniel S. Papp
Colonel Robert W. Bush
Colonel Richard D. Scharf
A. D. Van Nostrand
Louis J. Zahn
Gregory Colson
Captain Dennis Y. Sloan

James A. Reedy

President

Executive Assistant to the President
Assistant to the President/Administration
Assistant to the President/ Athletics
Assistant to the President/Employee Relations

& Affirmative Action

Assistant to the President/Information Technology

Vice President

Associate Vice President

Associate Vice President/Education Extension Associate Vice President/Information Technology Associate Vice President for Graduate Studies & Research

and Dean, Graduate Studies

Director, Minority Educational Development

Director, Library Registrar

NAMES OF THE PERSON OF THE PARTY.

Vice President Associate Vice President Associate Vice President

Associate Vice President for Graduate Studies & Research Director, Advanced Technology Development Center

Director, Advanced Technology Developm Director, Contract Administration Director, Georgia Tech Research Institute Director, Research Communications Director, Radiological Safety

Dean

Director, School of Applied Biology Director, School of Chemistry

Director, School of Geophysical Sciences

Director, School of Information & Computer Science

Director, School of Mathematics

Director, School of Physics

Acting Director, School of Psychology Director, School of Social Sciences Head, Department of Air Force ROTC Head, Department of Army ROTC Head, Department of English

Head, Department of Modern Languages

Head, Department of Music Head, Department of Navy ROTC

Head, Department of Physical Education & Recreation

ADMINISTRATION (continued)

College of Engineering

William M. Sangster

W. Denney Freeston, Jr. Arnold L. Ducoffe Joseph L. Pentecost Gary W. Poehlein Stephen Antolovich John E. Fitzgerald Demetrius T. Paris Milton E. Raville Michael E. Thomas

John A. Brighton Albin F. Turbak

College of Architecture

William L. Fash John A. Kelly Frank A. Beckum

College of Management

Gerald J. Day Andrew J. Cooper, III

Marilu H. McCarty

Graduate Studies

Walter O. Carlson

Helen E. Grenga

Office of the Registrar

Frank E. Roper, Jr. William F. Leslie Jerry L. Hitt

> William T. Lee M. Jo McIver James L. Garner

Library

Miriam A. Drake Helen R. Citron

Education Extension

William J. Lnenicka Clifford R. Bragdon William H. Hitch Dean

Associate Dean

Director, School of Aerospace Engineering Director, School of Ceramic Engineering Director, School of Chemical Engineering

Associate Director, Metallurgy Director, School of Civil Engineering Director, School of Electrical Engineering

Director, School of Engineering Science & Mechanics Director, School of Industrial & Systems Engineering

Director, School of Mechanical Engineering Director, School of Textile Engineering

Dean

Associate Dean Assistant Dean

Acting Dean

Assistant Dean/Administration
Assistant Dean/Academic Programs

Associate Vice President, Graduate Studies & Research

and Dean, Graduate Studies
Director, Graduate Cooperative Program

Registrar

Associate Registrar Director, Admissions Director, Financial Aid Director, Registration

Director, Undergraduate Recruiting

Director

Associate Director

Associate Vice President/Education Extension

Director, Continuing Education Director, Cooperative Division

ADMINISTRATION (continued)

Information Technology

Jesse H. Poore

John M. Gehl S. Payne Lenoir, Jr. Jerry W. Segers Gary G. Watson

Associate Vice President / Assistant to the President for Information Technology Director, Special Projects Acting Director, Computing Services Director, Telecommunications & Networking Director, Information Systems and Applications

Georgia Tech Research Institute

Donald J. Grace

Gerald J. Carey Howard G. Dean, Jr. Robert G. Shackelford James C. Wiltse David S. Clifton, Jr. N. Walter Cox Fred L. Cain Hans O. Spauschus Edward K. Reedy Samuel T. Alford Robert P. Zimmer Sidney I. Firstman

Director

Associate Director Associate Director Associate Director Associate Director Director, Economic Development Laboratory Acting Director, Electromagnetics Laboratory Director, Electronics & Computer Systems Laboratory Director, Energy & Materials Sciences Laboratory Director, Radar & Instrumentation Laboratory Director, Systems & Techniques Laboratory Director, Systems Engineering Laboratory Director, Technology Applications Laboratory

Interdisciplinary Programs

Frederick A. Rossini

John H. Myers Jack M. Spurlock Thomas G. Tornabene Satyanadham Atluri Bernd Kahn Robin B. Gray

Stephen Antolovich Eric J. Clayfield David S. Clifton Michael E. Thomas John A. White John W. Hooper Ratab A. Karam Melvin W. Carter Richard J. L. Martin Joan Pettigrew & A. D. Van Nostrand Associate Director, Interdisciplinary Programs and Director,

Technology Policy and Assessment Center Director, Center for Architectural Conservation

Director, Bioengineering Center

Director, Biotechnology Research Center Director, Computational Mechanics Center Director, Environmental Resources Center

Director, Center for Excellence in Rotary Wing Aircraft Technology

Director, Fracture & Fatigue Research Laboratory Director, Georgia Minerals & Mining Research Institute

Director, Georgia Productivity Center Director, Health Systems Research Center Director, Materials Handling Research Center Director, Microelectronics Research Center Director, Nuclear Research Center Director, Radiological Protection Center Director, Rehabilitation Technology Center Directors, Center for Research in Writing

Office of Contract Administration

J. W. Dees

Milton P. Stombler

Director

Associate Director

ADMINISTRATION (continued)

Business & Finance

Richard Fuller, Jr.

Clyde D. Robbins Jon M. Gearhart

C. Evan Crosby Victoria R. Fash Howard J. Fretwell, Jr. Joel Hubbard H. T. Marshall G. Les Petherick James L. Priest David O. Savini

Jack Vickery Roger E. Wehrle

Campus Planning

Clyde D. Robbins

David O. Savini

Institute Relations & Development

Warren Heemann

Cecil R. Phillips John P. Culver Dell B. Sikes Robert H. Rice Mary E. Stoffregen Catherine C. Inabnit James B. Osborne Mary K. Murphy Charles E. Harmon Robert N. Leitch Thomas L. Vitale Barbara B. Rose

Dean of Students

James E. Dull

Edwin P. Kohler Barry D. Birckhead W. Miller Templeton Carole E. Moore James A. Strickland Gary J. Schwarzmueller M. Jo Benson-Ivey Roger E. Wehrle J. Nicholas Gordon

Advanced Technology Development Center

Jerry L. Birchfield H. Wayne Hodges Vice President

Associate Vice President/Facilities

Associate Vice President/Finance and Acting Director,

Purchasing & Property Control Associate Vice President/Budgets Director, Information Services

Director, Personnel

Director, Accounting Services Director, Internal Auditing Director, Environmental Safety Director, Physical Plant Director, Campus Planning Director, Campus Safety

Director, Auxiliary Enterprises

Vice President

Director, Campus Planning

Vice President

Associate Vice President/Public Relations Assistant Vice President/Special Events Assistant Vice President/Fund Raising Executive Director, Alumni Association Director, Accounting & Administration Director, Constituency Research

Director, Corporate Relations and Placement

Director, Foundation Relations Director, News Bureau Director, Planned Giving Director, Publications Director, Development

Dean

Associate Dean

Assistant Dean/Fraternity Affairs Assistant Dean/International Students Assistant Dean/Women's Activities Director, Counseling & Career Planning Director, Housing

Director, New Student & Parent Programs

Director, Student Center Director, Student Health

Director

Associate Director

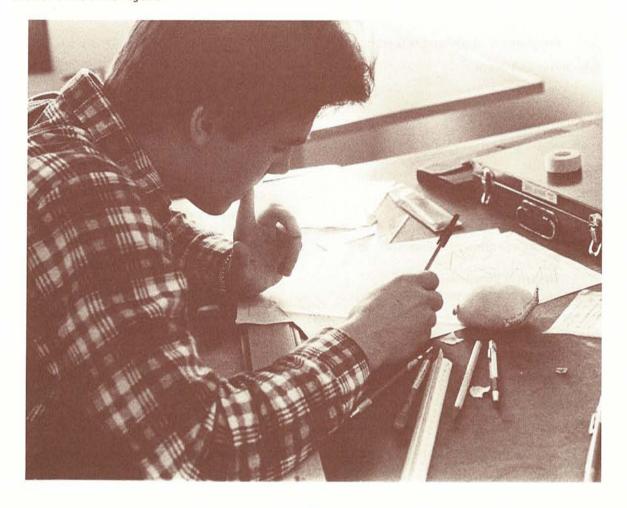
UNDERGRADUATE DEGREES OFFERED

The Georgia Institute of Technology at present offers curricula leading to the following undergraduate degrees:

Bachelor of Aerospace Engineering
Bachelor of Ceramic Engineering
Bachelor of Chemical Engineering
Bachelor of Civil Engineering
Bachelor of Electrical Engineering
Bachelor of Engineering Science
& Mechanics
Bachelor of Industrial Engineering
Bachelor of Mechanical Engineering
Bachelor of Nuclear Engineering
Bachelor of Textile Engineering
Bachelor of Science
Bachelor of Science
Bachelor of Science in Applied Biology
Bachelor of Science in Applied
Mathematics

Bachelor of Science in Applied Physics
Bachelor of Science in Applied Psychology
Bachelor of Science in Building Construction
Bachelor of Science in Chemistry
Bachelor of Science in Economics
Bachelor of Science in Health Physics
Bachelor of Science in Information &
Computer Science
Bachelor of Science in Industrial Design
Bachelor of Science in Management
Bachelor of Science in Management Science
Bachelor of Science in Physics
Bachelor of Science in Physics
Bachelor of Science in Textile Chemistry

Bachelor of Science in Textiles



GRADUATE DEGREES OFFERED

Programs of study and research leading to the Master of Science degree are offered in the following disciplines:

Aerospace Engineering

Architecture

Atmospheric Sciences

Biology

Ceramic Engineering

Chemical Engineering

Chemistry

City Planning

Civil Engineering Electrical Engineering

Engineering Science & Mechanics

Environmental Engineering

Geophysical Sciences Health Physics

Health Systems

Industrial & Systems Engineering Information & Computer Science

Management Mathematics

Mechanical Engineering

Metallurgy

Nuclear Engineering Operations Research

Physics Psychology Statistics

Technology & Science Policy

Textile Chemistry
Textile Engineering

Textiles

Programs of study and research leading to the Ph.D. degree are offered in the following disciplines and areas:

Aerospace Engineering

Architecture

Biology

Ceramic Engineering

Chemical Engineering

Metallurgy

Chemistry

Civil Engineering

Environmental Engineering

Economics

Electrical Engineering

Engineering Science & Mechanics

Geophysical Sciences

Atmospheric Sciences

Industrial & Systems Engineering

Operations Research

Information & Computer Science

Management

Mathematics

Mechanical Engineering

Nuclear Engineering

Physics

Psychology

Textile Engineering

Student/Faculty Profiles



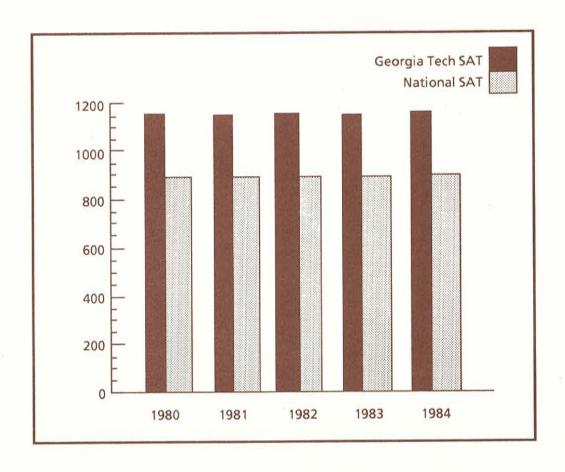
DESIGNING TOMORROW TODAY

FRESHMAN PROFILE FALL QUARTER 1984

PERCENTILE	HIGH SCHOOL AVERAGE	SAT* VERBAL	SAT* MATHEMATICS	SAT* TOTAL
		FALL 1984		
90	4.0	643	735	1,378
80	3.9	608	704	1,312
70	3.8	577	680	1,257
60	3.7	555	662	1,217
50	3.6	533	641	1,174
40	3.5	514	623	1,137
30	3.4	494	604	1,098
20	3.2	471	581	1,052
10	3.0	440	550	990
AVERAGE	3.5	532	636	1,168
		FALL 1980		
90	4.0	647	731	1,378
80	3.9	604	700	1,304
70	3.8	579	675	1,254
60	3.7	557	657	1,214
50	3.6	533	638	1,171
40	3.5	511	618	1,129
30	3.3	489	600	1,089
20	3.2	465	574	1,039
10	3.0	431	541	972
AVERAGE	3.5	531	631	1,162
***				,,,,,,

^{*}Scholastic Aptitude Test

FRESHMAN PROFILE FALL QUARTER 1984 (continued)



YEAR	GEORGIA TECH AVERAGE SAT*	NATIONAL AVERAGE SAT*
1984	1168	897
1983	1156	893
1982	1160	893
1981	1158	890
1980	1162	890

^{*}Scholastic Aptitude Test

FRESHMAN NATIONAL MERIT SCHOLARS

Numerical					
Rank			1981/	1982/	1983/
1983-84	<u>Institute</u>	Type	1982	1983	1984
1	Harvard/Radcliffe Colleges	Private	268	295	297
2	University of Texas	Public	118	130	223
3	Princeton University	Private	149	190	197
4	Texas A & M University	Public	149	190	172
5	Yale University	Private	140	171	156
6	Rice University	Private	143	172	155
7	Stanford University	Private	79	107	139
8	Northwestern University	Private	99	142	126
9	Washington University	Private	128	111	122
10	Michigan State University	Public	100	98	118
11	M.I.T.	Private	88	152	117
12	University of Chicago	Private	95	84	105
13	University of Florida	Public	93	105	102
14	Georgia Tech	Public	104	116	94
15	Carleton College	Private	76	98	85
16	Ohio State University	Public	81	72	78
17	University of Michigan	Public	54	45	64
18	Case Western Reserve	Private	54	56	62
19	Brown University	Private	36	57	61
20	University of Minnesota	Public	52	44	59

1983 National Merit Scholars as a Percent of Freshman Class, Public Schools

		Enrollment	Merit Scholars	Percentage of Freshman Class
1	Georgia Tech	1,589	94	5.9
2	University of Florida	3,076	102	3.3
3	University of Texas	8,266	223	2.7
4	Texas A & M University	7,142	172	2.4
5	Michigan State University	6,020	118	2.0
3 4	University of Texas Texas A & M University	8,266 7,142	223 172	2.7 2.4

Source: Office of the Director, Financial Aid

FRESHMAN NATIONAL ACHIEVEMENT SCHOLARS

Numerical					
Rank			1981/	1982/	1983/
1983-84	<u>Institute</u>	Type	1982	1983	1984
1	Harvard/Radcliffe Colleges	Private	74	47	40
2	Stanford University	Private	20	37	30
3	M.I.T.	Private	26	17	29
4	Georgia Tech	Public	20	24	28
5	Princeton University	Private	26	26	26
6	University of Texas	Public	10	15	26
7	Yale University	Private	22	23	17
8	Brown University	Private	17	14	16
9	Northwestern University	Private	24	17	14
10	University of Michigan	Public	12	16	14
11	University of Pennsylvania	Private	14	10	14
12	Duke University	Private	8	16	13
13	University of Florida	Public	10	10	13
14	University of Virginia	Public	11	10	13
15	Howard University	Private	9	5	10
16	Rensselaer Polytechnic Institute	Private	4	1	10
17	Cornell University	Private	17	8	9
18	Florida State University	Public	9	6	9
19	Iowa State University	Public	1	5	9
20	University of North Carolina	Public	11	8	9

Source: Office of the Director, Financial Aid



Georgia Tech Society of Black Engineers

PRESIDENT'S SCHOLARSHIP PROGRAM

	<u>Georgia</u>	<u>Out-of-State</u>	Total
	1984-85	Freshman Scholars ¹	
Male	25	7	32
Female	10	2	12
Total	35	9	44
	Mean HSA 3.92	Mean SAT 1433	
	1983-84	Freshman Scholars ²	
Male	15	5	20
Female	7 -	0	7
Total	22	5	27
	Mean HSA 3.94	Mean SAT 1419	
	1982-83	Freshman Scholars ³	
Male	8	2	10
Female	3	1	4
Total	11	3	14
	Mean HSA 3.91	Mean SAT 1422	
	1981-82	Freshman Scholars	
Male	5	0	5
Female	1	0	1
Total	6	0	6
	Mean HSA 3.98	Mean SAT 1465	
	Progra	ım Total/Average	
0.000.00	Page 6	N D	
Male	54	14	68
Female	22	3	25
Total	76	17	93
	Mean HSA 3.92	Mean SAT 1429	

¹ States represented: AL, CA, FL, GA, KY, LA, SC, TN, VA, WI. ² States represented: AL, FL, GA, SC.

Source: President's Scholarship Committee

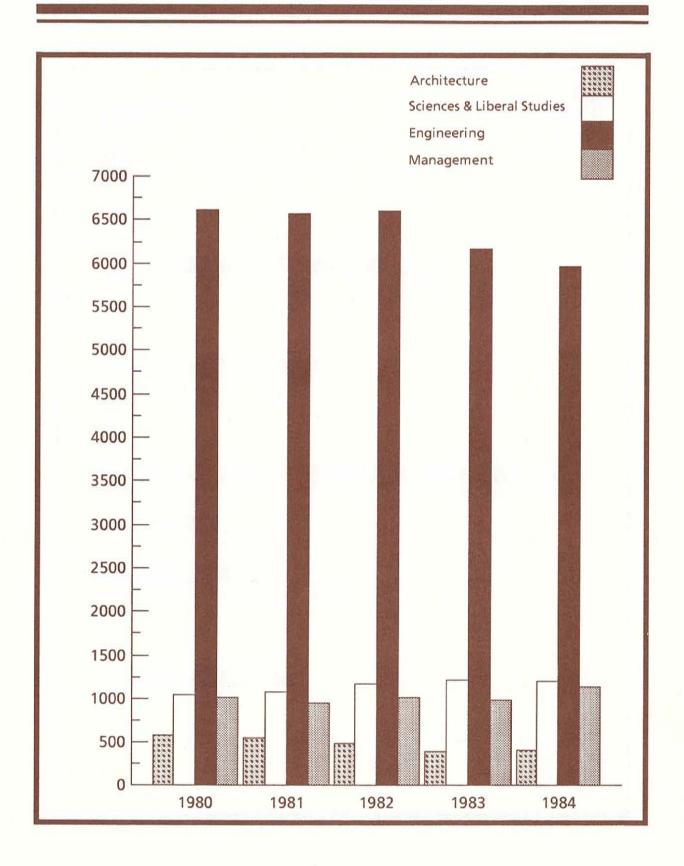
³ States represented: GA, NC.

FALL QUARTER UNDERGRADUATE ENROLLMENT BY COLLEGE 1980-1984

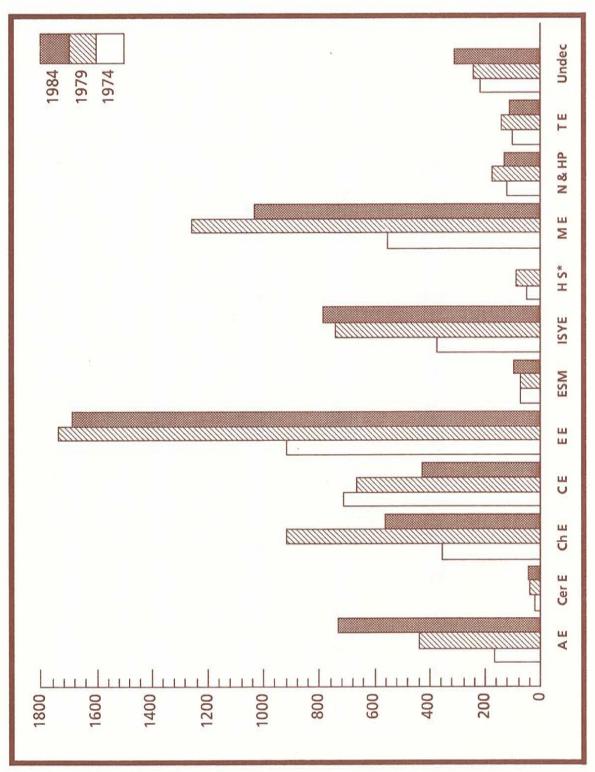
									22.5	
	19	980	19	81	198	2	19	983	198	4
	Male	Female	Male	Female	Male	Female	Male	<u>Female</u>	Male !	Female
			ARCI	HITECT	URE					
TOTAL ARCHITECTURE	454	141	429	136	366	129	299	102	314	109
			ENG	INEERI	NG					
Aerospace	409	54	488	64	557	59	572	67	661	77
Ceramic	25	7	34	9	39	15	29	14	37	11
Chemical	667	238	633	217	593	225	504	205	392	175
Civil	532	92	461	96	389	82	350	75	362	68
Electrical	1,619	188	1,597	190	1,754	228	1,639	235	1,476	216
Engineering Science & Mechanics	65	17	68	22	56	21	68	17	83	17
Health Systems	34	49	26	39	26	42	*	*	*	*
Industrial and Systems	546	234	506	268	486	269	501	271	512	277
Mechanical	1,190	119	1,204	118	1,166	136	986	110	924	113
Nuclear & Health Physics	121	13	122	12	115	18	112	19	112	22
Textile	64	46	51	36	39	24	53	36	76	42
Undecided Engineering	234	57	241	78	193	71	248	64	260	54
TOTAL ENGINEERING	5,506	1,114	5,431	1,149	5,413	1,190	5,062	1,113	4,895	1,072
			MAN	IAGEM	ENT					
TOTAL MANAGEMENT	718	303	657	288	692	322	700	291	785	356
	SC	CIENCES	& LIBE	RAL ST	UDIES (COSAL	S)			
Applied Biology	70	41	58	42	41	29	48	45	52	56
Chemistry	63		53	22	40		49		52	29
Geophysical Sciences	1	0	0	0	0	0	0	0	0	0
Information & Computer Science	339	153	414	159	494	205	460	191	437	164
Mathematics	41	23	26	19	25	15	57	25	62	38
Physics	154	17	135	16	113	23	121	22	137	16
Psychology	14	25	10	21	9	20	15	24	16	25
Undecided COSALS	68	26	66	31	82	45	83	49	64	51
TOTAL COSALS	750	303	762	310	804	369	833	383	820	379
INSTITUTE SUBTOTAL	7,428	1,861	7,279	1,883	7,275	2,010	6,894	1,889	6814	1916
INSTITUTE TOTAL	9,	289	9,	162	9,2	85	8,	783	873	30

^{*} Effective July 1, 1983, Health Systems merged with Industrial and Systems Engineering.

FALL QUARTER UNDERGRADUATE ENROLLMENT BY COLLEGE 1980-84 (continued)



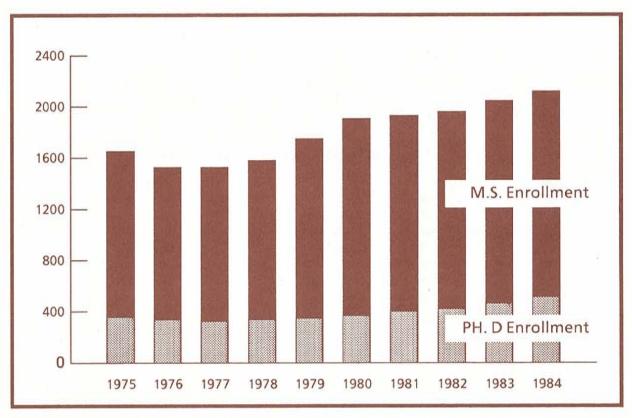
ENGINEERING COLLEGE UNDERGRADUATE ENROLLMENT FALL QUARTERS 1974,1979,1984



*Effective July 1, 1983 Health Systems merged with Industrial & Systems Engineering.

FALL QUARTER GRADUATE ENROLLMENT BY DEGREE PROGRAM 1975-1984*

	Archi	tecture	Eng	neering	Mana	gement	Science Liberal S		Tot	al
	M.S.	Ph.D	M.S.	Ph.D	M.S.	Ph.D	M.S.	Ph.D	M.S.	Ph.D
1975	134	0	665	186	241	7	255	166	1295	359
1976	136	0	615	184	185	3	261	154	1197	341
1977	160	2	608	164	178	1	255	160	1201	327
1978	174	0	657	181	135	1	284	155	1250	337
1979	215	0	765	190	118	1	312	160	1410	351
1980	220	0	867	205	124	2	335	163	1546	370
1981	221	1	856	236	111	8	342	162	1530	407
1982	213	3	867	253	141	9	326	163	1547	428
1983	232	7	903	261	157	15	291	188	1583	471
1984	224	9	946	292	118	5	316	219	1604	525



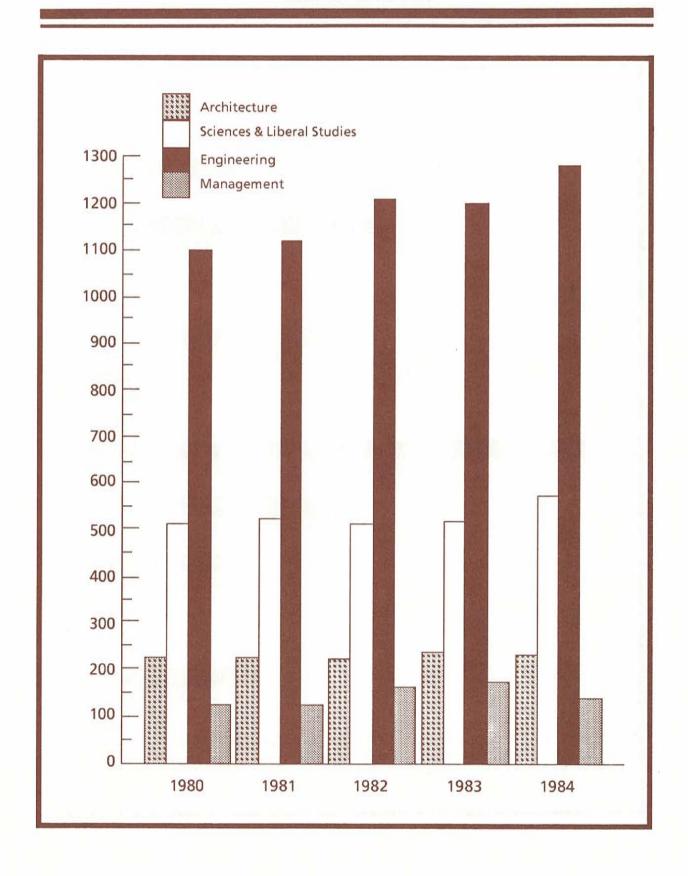
^{*}Includes both full and part time Ph.D and M.S. students; does not include special students.

FALL QUARTER GRADUATE ENROLLMENT BY COLLEGE 1980-1984

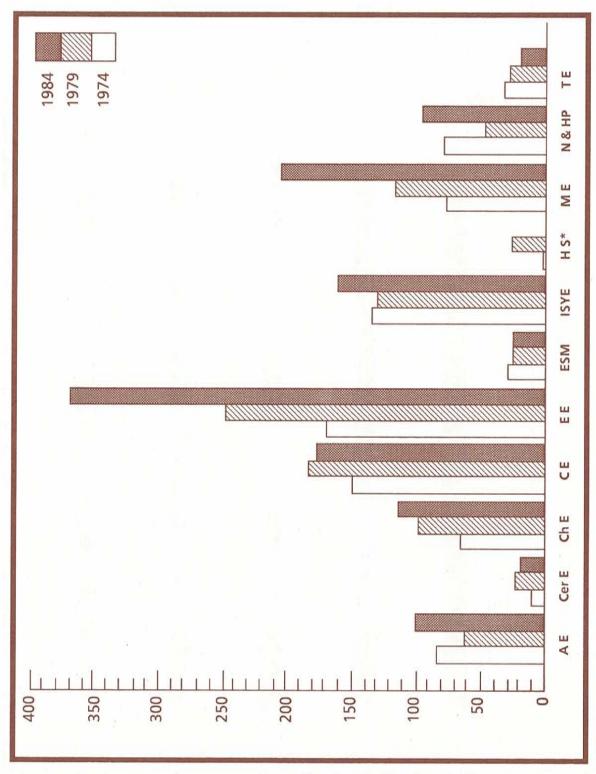
		1980		1981	1	982		1983	1	984
	Male	<u>Female</u>	Male	<u>Female</u>	Male	Female	Male	Female	Male	Femal
				ARC	HITECT	TURE				
TOTAL ARCHITECTURE	172	53	162	64	164	56	171	73	159	75
				ENG	INEER	ING				
Aerospace	62	2	66	3	76	9	84	8	93	8
Ceramic	18	4	14	3	12	4	11	3	16	2
Chemical	75	10	90	15	93	19	97	21	99	14
Civil	156	13	147	20	147	20	147	13	158	19
Electrical	353	25	350	19	356	61	360	31	336	34
Engineering Science & Mechanics	23	3	18	4	24	4	19	5	19	5
Health Systems	12	12	11	7	14	8	*	*	*	*
ndustrial and Systems	119	24	119	22	117	19	135	30	126	35
Mechanical	106	5	120	5	116	9	146	5	193	11
Nuclear & Health Physics	45	13	57	9	60	18	56	8	77	18
Textile	15	9	18	8	16	11	16	5	15	4
TOTAL ENGINEERING	984	120	1,010	115	1,031	182	1,071	129	1132	150
				MAN	AGEM	ENT				
OTAL MANAGEMENT	93	34	91	31	116	47	123	54	109	31
		sc	IENCES	& LIBE	RAL ST	UDIES (COSAL	S)		
Applied Biology	11	8	12	7	16	15	15	10	18	14
Chemistry	69	22	63	27	60	31	60	35	66	34
Geophysical Sciences	57	11	54	11	42	12	45	10	42	12
nformation & Computer Science	165	52	160	55	164	43	171	39	185	48
Viathematics (18	4	16	4	21	4	23	8	35	9
Physics	62	1	63	8	54	4	48	8	42	8
Psychology	23	13	22	15	24	15	23	18	24	23
echnology & Science Policy & Undeclared	0	0	6	1	8	2	6	3	8	4
TOTAL COSALS	405	111	396	128	389	126	391	131	420	152
STITUTE SUBTOTAL	1,654	318	1,659	338	1,700	411	1,756	387	1,820	408
NSTITUTE TOTAL	1.9	72	1,9	197	2,11	1	2.1	43	2.2	28

^{*} Effective July 1, 1983, Health Systems merged with Industrial and Systems Engineering.

FALL QUARTER GRADUATE ENROLLMENT BY COLLEGE: 1980-84 (continued)



ENGINEERING COLLEGE GRADUATE ENROLLMENT FALL QUARTERS 1974,1979,1984



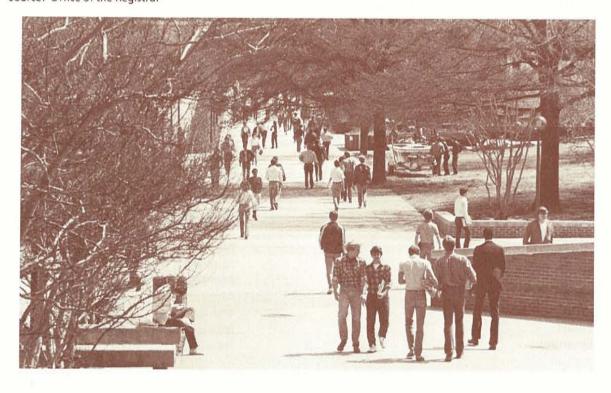
*Effective July 1, 1983 Health Systems merged with Industrial & Systems Engineering.

ENROLLMENT BY GEORGIA COUNTIES FALL QUARTER 1984

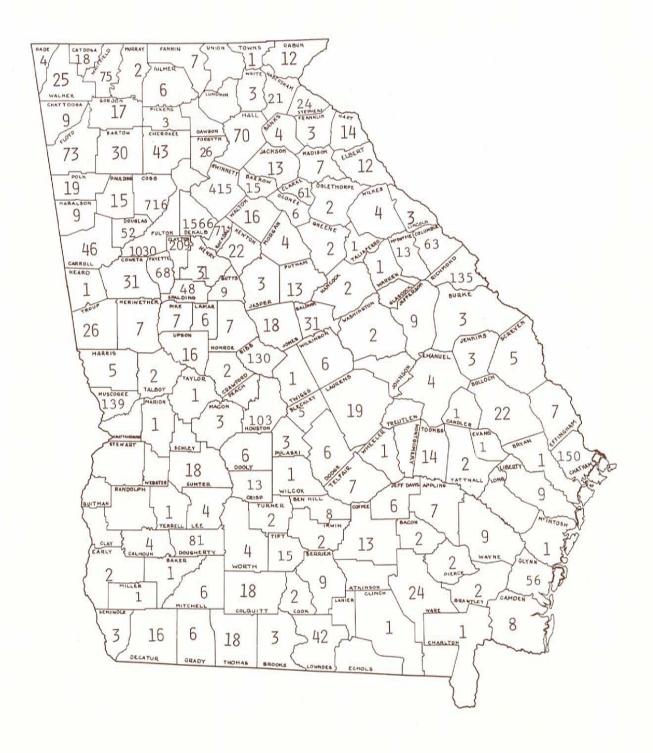
	<u>Undergrad</u>	Grad	<u>Total</u>	Unde	rgrad	Grad	Total
Appling	6	1	7	Evans	1	0	1
Bacon	2	0	2	Fannin	6	1	7
Baker	1	0	1	Fayette	64	4	68
Baldwin	30	1	31	Floyd	65	8	73
Banks	4	0	4	Forsyth	23	3	26
Barrow	15	0	15	Franklin	2	1	3
Bartow	30	0	30	Fulton	800	230	1,030
Ben Hill	7	1	8	Gilmer	6	0	6
Berrien	9	0	9	Glynn	54	2	56
Bibb	122	8	130	Gordon	15	2	17
Bleckley	5	0	5	Grady	6	0	6
Brantley	2	0	2	Greene	1	1	2
Brooks	2	1	3	Gwinnett	357	58	415
Bryan	0	1	1	Habersham	20	1	21
Bulloch	20	2	22	Hall	62	8	70
Burke	2	1	3	Hancock	2	0	2
Butts	8	1	9	Haralson	9	0	9
Calhoun	4	0	4	Harris	4	1	5
Camden	8	0	8	Hart	14	0	14
Candler	1	0	1	Heard	1	0	1
Carroll	39	7	46	Henry	30	1	31
Catoosa	18	0	18	Houston	98	5	103
Charlton	0	1	1	Irwin	2	0	2
Chatham	129	21	150	Jackson	9	4	13
Chattooga	9	0	9	Jasper	3	0	3
Cherokee	36	7	43	Jeff Davis	6	0	6
Clarke	55	6	61	Jefferson	8	1	9
Clayton	196	13	209	Jenkins	3	0	3
Clinch	1	0	1	Jones	17	1	18
Cobb	587	129	716	Lamar	6	0	6
Coffee	13	0	13	Laurens	18	1	19
Colquitt	18	0	18	Lee	4	0	4
Columbia	61	2	63	Liberty	9	0	9
Cook	2	0	2	Lincoln	3	0	3
Coweta	31	0	31	Lowndes	34	8	42
Crawford	2	0	2	Macon	3	0	3
Crisp	12	1	13	Madison	7	0	7
Dade	4	0	4	Marion	1	0	1
Decatur	15	1	16	McDuffie	12	1	13
DeKalb	1,330	236	1,566	McIntosh	0	1	1
Dodge	6	0	6	Meriwether	7	0	7
Dooly	6	0	6	Miller	1	0	1
Dougherty	74	7	81	Mitchell	6	0	6
Douglas	50	2	52	Monroe	7	0	7
Early	2	0	2	Morgan	4	0	4
Effingham	6	1	7	Murray	2	0	2
Elbert	9	3	12	Muscogee	130	9	139
Emanuel	4	0	4	Newton	21	1	22

ENROLLMENT BY GEORGIA COUNTIES FALL QUARTER 1984 (continued)

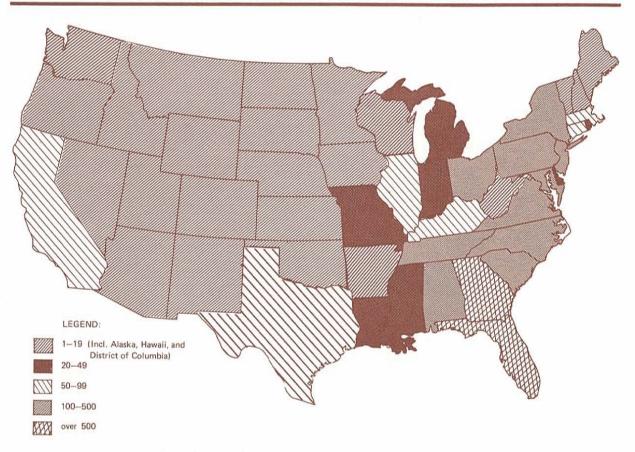
	<u>Undergrad</u>	Grad	Total	Und	lergrad	Grad	Total
Oconee	4	2	6	Terrell	1	0	1
Oglethorpe	2	0	2	Thomas	17	1	18
Paulding	12	3	15	Tift	14	1	15
Peach	18	0	18	Toombs	12	2	14
Pickens	3	0	3	Towns	0	1	- 1
Pierce	2	0	2	Troup	20	6	26
Pike	7	0	7	Turner	2	0	2
Polk	17	2	19	Twiggs	1	0	1
Pulaski	2	1	3	Upson	15	1	16
Putnam	12	1	13	Walker	24	1	25
Rabun	12	0	12	Walton	15	1	16
Richmond	113	22	135	Ware	20	4	24
Rockdale	64	7	71	Warren	1	0	1
Screven	4	1	5	Washington	1	1	2
Seminole	3	0	3	Wayne	8	1	9
Spalding	47	1	48	Wheeler	1	0	1
Stephens	21	3	24	White	3	0	3
Sumter	17	1	18	Whitfield	70	5	75
Talbot	2	0	2	Wilcox	1	0	1
Taliaferro	1	0	1	Wilkes	3	1	4
Tattnall	2	0	2	Wilkinson	6	0	6
Taylor	1	0	1	Worth	4	0	4
Telfair	6	1	7				
				TOTAL	5,567	878	6,445



ENROLLMENT BY GEORGIA COUNTIES FALL QUARTER 1984 (continued)



ENROLLMENT BY STATES FALL QUARTER 1984



	Undergrad	Grad	Total		Undergrad	Grad	Total
Alabama	176	42	218	Nebraska	0	2	2
Alaska	2	2	4	Nevada	2	0	2
Arizona	5	2	7	New Hampshire	11	2	13
Arkansas	14	4	18	New Jersey	130	27	157
California	41	29	70	New Mexico	2	7	9
Colorado	4	9	13	New York	252	52	304
Connecticut	59	7	66	North Carolina	154	49	203
Delaware	7	7	14	North Dakota	1	1	2
District of Columbia	7	2	9	Ohio	100	29	129
Florida	714	118	832	Oklahoma	5	2	7
Georgia	5,567	878	6,445	Oregon	1	1	2
Hawaii	8	1	9	Pennsylvania	111	35	146
Idaho	0	0	0	Rhode Island	8	5	13
Illinois	42	30	72	South Carolina	179	40	219
Indiana	22	9	31	South Dakota	0	1	1
lowa	5	5	10	Tennessee	175	50	225
Kansas	5	3	8	Texas	30	38	68
Kentucky	81	12	93	Utah	2	2	4
Louisiana	29	18	47	Vermont	10	2	12
Maine	8	2	10	Virginia	117	37	154
Maryland	167	28	195	Washington	6	5	11
Massachusetts	55	16	71	West Virginia	15	3	18
Michigan	28	11	39	Wisconsin	7	7	14
Minnesota	11	1	12	Wyoming	2	1	3
Mississippi	26	5	31	Other U.S. Territorie	s		
Missouri	21	13	34	& Possessions	56	14	70
Montana	1	2	3	TOTAL	8,481	1,668	10,149

ENROLLMENT BY FOREIGN COUNTRIES FALL QUARTER 1984

<u>U</u>	ndergrad	Grad	Total	<u>Unde</u>	rgrad	Grad	<u>Total</u>
Algeria	0	7	7	Japan	3	10	13
Antigua	1	0	1	Jordan	3	0	3
Australia	1	0	1	Kampuchea	1	0	1
Bahrain	1	0	1	Korea	11	51	62
Bangladesh	1	0	1	Lebanon	19	14	33
Barbados	1	0	1	Malaysia	2	2	4
Bermuda	0	1	1	Mexico	2	9	11
Bolivia	0	1	1	Nepal	0	1	1
Brazil	5	4	9	Netherlands	2	2	4
British Indian Ocean	1	0	1	Netherlands W. India	es 1	0	1
Burma	0	1	1	Nicaragua	5	1	6
Cameroon	1	1	2	Nigeria	1	9	10
Canada	5	6	11	Norway	1	0	1
Chile	1	2	3	Pakistan	5	6	11
China (People's Republic)	0	40	40	Panama	11	2	13
Colombia	18	22	40	Paraquay	2	0	2
Costa Rica	1	3	4	Peru	5	9	14
Cuba	3	0	3	Philippines	1	5	6
Cyprus	3	4	7	Poland	0	2	2
Dominican Republic	0	4	4	Portugal	0	2	2
Ecuador	12	5	17	Saudi Arabia	0	3	3
Egypt (United Arab Republi	c) 1	12	13	Senegal	0	1	1
El Salvador	4	3	7	Singapore	2	1	3
Ethiopia	1	0	1	South Africa	1	3	4
Finland	2	2	4	Soviet Union	1	0	1
France	0	10	10	Spain	1	0	1
Germany (West)	12	9	21	Sri Lanka	0	3	3
Ghana	2	2	4	Sweden	1	1	2
Greece	7	22	29	Switzerland	2	7	9
Guatemala	1	0	1	Syria	1	4	5
Haiti	1	1	2	Taiwan (Rep. of China)	9	93	102
Honduras	13	2	15	Tanzania	0	1	1
Hong Kong	3	9	12	Thailand	2	9	11
Hungary	0	1	1	Trinidad	2	2	4
Iceland	0	1	1	Tunisia	0	2	2
India	10	45	55	Turkey	0	15	15
Indonesia	0	3	3	United Kingdom	10	4	14
Iran	5	32	37	Venezuela	13	10	23
Iraq	0	3	3	Vietnam	5	0	5
Ireland	0	3	3	Yugoslavia	0	1	1
Israel	1	7	8	Zambia	1	0	1
Italy	3	4	8 7 4	Zimbabwe	Ó	1	1
Jamaica	2	2	4	and the same and t			
3-1 - 5-R1	<u> </u>	=		TOTAL	249	560	809
Source: Office of the Registra	ar			district production	o mania.W .		T. F. S.

DEGREES AWARDED BY COLLEGE 1979-1984 (Summer-Spring)

		BACHELO	RS		
College	1979-80	1980-81	1981-82	1982-83	1983-84
ARCHITECTURE					
Total	130	119	111	109	104
ENGINEERING					
Aerospace	37	45	66	68	80
Ceramic Chemical	6 137	7 137	10 154	7 162	10 160 5
Civil	162	136	162	153	103
Electrical	237	329	326	349	404
Engineering Science & Mechanics	14	11	10	12	12
Industrial & Systems Health Systems	140 24	216 26	234 19	263 22	208 4
Mechanical	212	289	321	317	293 2
Nuclear & Health Physics	38	15	22	21	22
Textile	22	31	28	18	15
Total	1,029	1,242	1,352	1,392	1,315
MANAGEMENT					10000
Total	287	277	301	297	2563
SCIENCES AND LIBERAL STUDIES (COSALS)					
Applied Biology	15	15	16	16	12
Chemistry	23	15	25	20	13
Information & Computer Science Mathematics	44 9	56 15	61 10	85 5	88 12
Physics	35	43	45	39	40
Psychology	9	9	14	6	4
Total	135	153	171	171	169
		MASTER	S		
ARCHITECTURE					
Total	78	70	116	68	73
ENGINEERING					
Aerospace	9	11	16	11	22
Ceramic	4	11	6	5	5
Chemical Civil	25 59	27 75	22 47	33 58	18 60
Electrical	109	122	171	140	159
Engineering Science & Mechanics	8	9	7	4	4
Industrial & Systems	34	53	49	37	69 3
Health Systems	12 36	16	6	8	5
Mechanical Nuclear & Health Physics	19	47 16	43 23	48 31	52 25
Textile	8	7	8	6	7
Total	323	394	398	381	426
MANAGEMENT					
Total	51	58	43	44	82 2
SCIENCES AND LIBERAL STUDIES (COSALS)					
Applied Biology	1	4	1	3	4
Chemistry	6	9	4	7	6
Geophysical Sciences	12	17	24	9	10
Information & Computer Science Mathematics	58 7	80 6	69 5	48 4	62 4
Physics	9	12	20	12	16
Psychology	6	5	8	9	3
Social Sciences		20 - 20 - 20 - 20 - 20 - 20 - 20 - 20 -	-	2	2
Total	99	133	131	94	113

DEGREES AWARDED BY COLLEGE 1979-1984 (continued)

		The last
ы	11.5	ı n
	-	

College	<u>1979-80</u>	1980-81	1981-82	1982-83	1983-84
ENGINEERING					
Aerospace	6	8	7	13	83
Ceramic	6 2		í	1	• -
Chemical	3	1		6	7
Civil	3	4	5	6	,
Electrical	6	4	3	4	0 2
Engineering Science & Mechanics	-	i	3	2	0 -
Industrial & Systems	4	3	4	9	5 83 3 9 Z
Mechanical	4	3 3	3	3	7
Nuclear & Health Physics	6	5	1	3 9 3 6	6
Textiles	_	Ĭ	1	-	1
Total	34	29	31	51	54
MANAGEMENT					
Total	1	<u></u>		-	4
SCIENCES AND LIBERAL STUDIES (COSALS)					
Chemistry	14	9	14	5	15 [
Geophysical Sciences	1	1		2	1
Information & Computer Science		3	2	2	1
Mathematics	12	3	2	2 2 3 9	-
Physics	5	3	8	9	1
Psychology Total	3 23	2 21	28	2 23	8 3 26
	FIVE '	YEAR SUMI	MARY		
Architecture					
Bachelors	130	119	111	109	104
Masters	78	70	116	68	73
Total	208	189	227	177	177
Engineering					
Bachelors	1,029	1,242	1,352	1,392	1,315
Masters	323	394	398	381	426
Doctorate	34	29	31	51	54
Total	1,386	1,665	1,781	1,824	1,795
Management					
Bachelors	287	277	301	297	256
Masters	51	58	43	44	82
Doctorate Total	1 339	0 335	344	0 341	4 342
Sciences & Liberal Studies					5-12
Bachelors	135	153	171	474	160
Masters	99	133	171 131	171 94	169
Doctorate	23	21	28	23	113
Total	257	307	330	288	26 308
Institute					
Bachelors	1,581	1,791	1,935	1,969	1,844
Masters	551	655	688	587	694
Doctorate	58	50	59	74	84
Total	2,190	2,496	2,682	2,630	2,622

31

AVERAGE FALL QUARTER GRADE POINT AVERAGES 1979-1983

	1979	1980	1981	1982	1983		
	UNDERGRADUATE						
Freshman							
Architecture	2.4	2.5	2.3	2.2	2.3		
Engineering	2.4	2.6	2.6	2.5	2.5		
Management	2.1	2.1	2.2	2.1	2.2		
Sciences & Liberal Studies	2.3	2.5	2.4	2.4	2.4		
Total	2.4	2.4	2.5	2.5	2.4		
Sophomore							
Architecture	2.3	2.4	2.4	2.5	2.5		
Engineering	2.5	2.6	2.6	2.5	2.6		
Management	2.2	2.3	2.3	2.3	2.3		
Sciences & Liberal Studies	2.5	2.5	2.6	2.6	2.6		
Total	2.4	2.5	2.6	2.3	2.6		
Junior							
Architecture	2.4	2.5	2.6	2.5	2.5		
Engineering	2.5	2.6	2.6	2.6	2.6		
Management	2.3	2.5	2.6	2.4	2.5		
Sciences & Liberal Studies	2.7	2.8	2.7	2.6	2.6		
Total	2.5	2.6	2.6	2.5	2.6		
Senior							
Architecture	2.5	2.6	2.6	2.5	2.6		
Engineering	2.6	2.7	2.5	2.7	2.7		
Management	2.4	2.5	2.5	2.5	2.5		
Sciences & Liberal Studies	2.7	2.8	2.8	2.8	2.7		
Total	2.6	2.7	2.7	2.7	2.7		
Total Undergraduate							
Architecture	2.4	2.5	2.5	2.5	2.5		
Engineering	2.5	2.6	2.6	2.6	2.6		
Management	2.3	2.4	2.4	2.4	2.4		
Sciences & Liberal Studies	2.5	2.6	2.6	2.6	2.6		
Total	2.4	2.6	2.6	2.6	2.6		
			GRADUATE				
All Graduate Students							
Architecture	3.3	3.3	3.3	3.3	3.3		
Engineering	3.4	3.4	3.4	3.4	3.4		
Management	3.2	3.2	3.4	3.4	3.4		
Sciences & Liberal Studies	3.4	3.4	3.4	3.4	3.4		
Total	3.3	3.4	3.4	3.4	3.4		

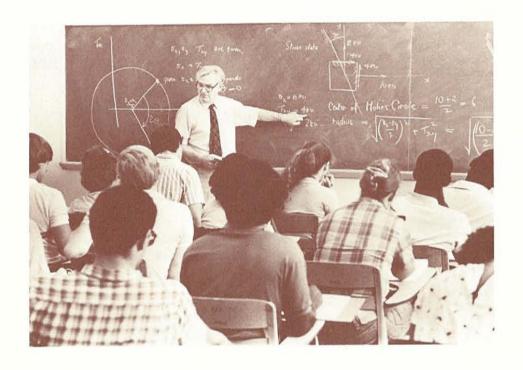
Source: Office of the Registrar

STUDENT CREDIT HOURS* FALL QUARTER 1984

	LOWER DIVISION	UPPER DIVISION	GRADUATE DIVISION	TOTAL
Architecture				
Fall Quarter, 1984	2,587	2,833	2,337	7,757
Total of Previous Year 1	5,728	8,923	7,184	21,835
Engineering				
Fall Quarter, 1984	7,414	38,307	12,244	57,965
Total of Previous Year ¹	21,887	134,812	38,779	195,478
Management				
Fall Quarter, 1984	4,271	7,271	1,853	13,395
Total of Previous Year 1	15,089	22,840	6,317	44,246
Sciences and Liberal Studies				
Fall Quarter, 1984	65,850	18,437	5,128	89,415
Total of Previous Year 1	188,551	59,919	15,813	264,283
Institute				
Fall Quarter , 1984	80,122	66,848	21,562	168,532
Total of Previous Year 1	231,255	226,494	68,093	525,842

^{*}Student credit hours produced reflect the number of credit hours per course multiplied by the number of students in the course. The number of credit hours per course are calculated by (1) weighting courses with labs so that Total Credit Hours = Number of Lecture Hours + ½ Number of Lab Hours and (2) for courses without labs, Total Credit Hours = Total Course Hours.

Source: Office of the Registrar



¹Total of Previous Year reflects student credit hours produced for Fall, Winter, Spring, and Summer Quarters 1983-1984.

ACADEMIC FACULTY PROFILE*

(As of June, 1984)

DISTRIBUTION BY RANK

	Professor	Associate Professor	Assistant <u>Professor</u>	Instructor	Lecturer	Total
Full-Time Teaching Faculty	224	163	117	8	3	515
General Administrators	15	1	1	0	0	17
Academic Administrators	37	7	0	0	0	44
Librarians	1	7	2	0	0	10
On-Leave	1	5	5	0	0	11
Part-Time Faculty ^a	_2	3	_4	<u>1</u>	1	11
Total	280	186	129	9	4	608

DISTRIBUTION BY HIGHEST DEGREE

Full-Time Teaching Faculty	<u>Doctorate</u> 452	Ed. Spec/ Master's	Bachelor	Total 515
General Administrators	16	1	0	17
The annual transfer and the first annual transfer and the second		-	0	17
Academic Administrators	38	5	4	44
Librarians	0	10	0	10
On-Leave	10	1	0	11
Part-Time Faculty ^a	_4	_5	_2	11
Total	520	77	11	608

DISTRIBUTION BY RACE AND SEX

	Black <u>Male</u>	White <u>Male</u>	Other Male	Black Female	White Female	Other Female	Total
Full-Time Teaching Faculty	4	445	32	4	29	1	515
General Administrators	0	14	0	0	3	0	17
Academic Administrators	0	42	2	0	0	0	44
Librarians	0	2	0	1	7	0	10
On-Leave	0	9	0	0	1	1	11
Part-Time Faculty ^a	0	_10	0	0	_1	0	11
Total	4	522	34	5	41	2	608

^{*}Includes only those persons with academic rank.

Source: Office of the Vice President for Academic Affairs

^aIncludes 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.

RESEARCH PERSONNEL PROFILE

(As of September, 1984)

		Full-Time		art-Timea	
	GTRI	Academic	GTRI	Academic	Total
RESEARCH FACULTY					
		DISTRIBU	JTION BY TI	TLE	
47					
Principal E/S/T/A ^b	63	5	7	0	75
Senior E/S/T/A	189	25	14	4	232
Research II E/S/T/A	149	59	3	2	213
Research E/S/T/A	162	50	12	3	227
Post Doctoral Fellows	2	28	0	0	30
Total	565	167	36	9	777
7		DISTRIBU	TION BY DE	GREE	
Doctorate	96	73	11	5	185
First Professional ^C	2	3	0	1	6
Masters	265	39	10	2	316
Bachelors	192	42	12	1	247
Other	6	5	0	0	11
No Degree	4	5	3	0	12
Total	565	167	36	9	777
		DISTRIBUTIO	N BY RACE	AND SEX	
Black Males	8	6	0	1	15
White Males	496	116	31	3	646
All Other Males	7	25	1	5	38
Black Females	1	2	0	0	3
White Females	53	16	4	0	73
All Other Females	0	2	0	0	2
Total	565	167	36	9	777
GRADUATE RESEARCH A	ASSISTANTS		78	532	610

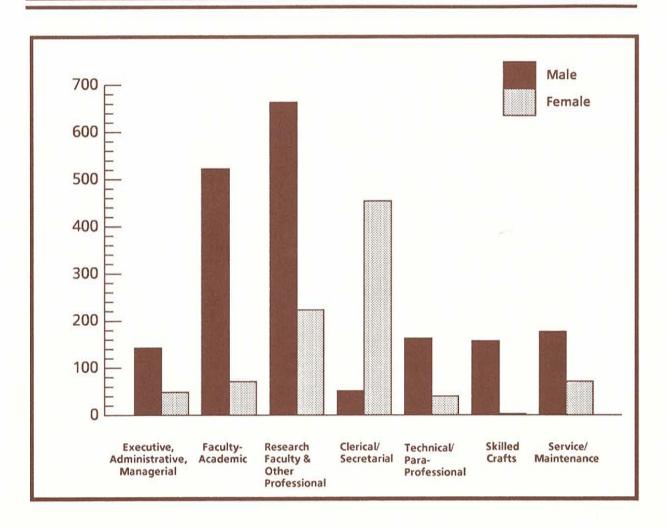
^a Includes Hourly, Temporary, and Adjunct and Visiting Faculty ^b Engineer/Scientist/Technologist/Associate

Source: Office of the Vice President for Research

C Includes J.D.'s and M.D's

TOTAL EMPLOYEE PROFILE

(As of April, 1984)



EEO Code	Category	W	<u>hite</u>	Bla	ick	Oth	er ^a	To	tal
		Male F	emale	Male F	emale	Male Fe	emale	Male	Female
1	Executive, Administrative, Managerial	136	41	8	9	0	0	144	50
2	Faculty-Academic ^b	493	65	3	7	29	1	525	73
3	Research Faculty & Other Professionals	635	202	14	20	15	2	664	224
4	Clerical and Secretarial	33	337	18	109	1	10	52	456
5	Technical and Para-Professional	152	36	9	2	2	2	163	40
6	Skilled Crafts	117	3	39	1	2	0	158	4
7	Service and Maintenance	49	13	129	59	0	0	178	72
	TOTAL	1615	697	220	207	49	15	1884	919

^aIncludes Hispanic, Asian, and Native Americans.

Source: Work Force Analysis

b_{Includes librarians.}

General Information



DESIGNING TOMORROW TODAY

STUDENT SERVICES

Georgia Tech seeks to provide services and activities to encourage and assist students in their physical development and to develop their capabilities both as professionals and as human beings. Specific programs include:

Housing. Twenty-four 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. The Off-Campus Housing Office provides information to more than 1,000 students per year.

<u>Health Services</u>. 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 thirty patients.

The staff consists of six 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 medical and dental specialties; their services are available on a feefor-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.

<u>Food Services</u>. Six dining locations, catering services and a meal plan are available to all students.

<u>Campus Police</u>. 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 continuous basis. The Campus Police can be reached at telephone number 894-2500.

<u>Counseling Services</u>. 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, and a library of film strips, videotapes and cassettes containing information about careers.

STUDENT SERVICES (continued)

Recreation. The Callaway Student Athletic Complex features two multi-purpose gymnasiums for basketball, volleyball, and badminton. Other areas include weight training for men and women, table tennis, racquetball/handball/squash courts, and a 25-meter swimming pool with connecting diving well. The building houses the Intramural Department and the Physical Education Department

<u>Student Center</u>. The Student Center contains facilities and staff services for all types of outof-classroom special interest and social programs. A professional program staff 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, a hair styling salon and a quick copy center.

<u>Fraternities and Sororities</u>. Located on the campus are thirty-two national social fraternities, with total membership of 1,700, and seven national social sororities, with a membership of 425.

<u>Student Organizations</u>. Opportunities are provided for student participation in a variety of officially recognized groups. Besides the traditional student newspaper, yearbook, and radio station, there are approximately 23 sports/recreation organizations; 86 special interest groups; 13 religious organizations; 36 departmental, professional, and honor societies; and 10 national honor societies. Over 5,000 students are involved in one or more student organizations.

<u>New Student/Parent Programs</u>. The student/parent orientation program informs new students and their parents of academic programs and requirements and familiarizes them with Tech traditions and the activities and services available on campus.

Source: Office of the Dean of Students



Dedication of Woodruff Residence Hall, Fall 1984

LIBRARY

The Price Gilbert Memorial Library's scientific, engineering, architectural, and management collection includes over 1,780,000 bibliographic units and 2,344,000 microtexts.

The library has a collection of over 4,300,000 patents, the largest in the Southeast. The library acquires research reports from the National Technical Information Service, the U. S. Department of Energy, and the National Aeronautics and Space Administration. It is a depository for publications issued by the U. S. Government Printing Office and for maps issued by the U. S. Defense Mapping Agency, Topographic and Aerospace Center, U. S. Geological Survey, and the U. S. National Oceanic Survey.

Currently, over 28,000 serials, including 6,000 periodicals, are received, approximately 75 percent of which are in scientific and technical fields. Especially strong is the collection of abstracts, indices, and bibliographies for science and engineering.

The catalog record of the library collection has been converted to computer output microfilm (COM). The COM catalog is located on each floor of the library, in selected dormitory areas, in the Student Center, and in each academic and research department. Twice daily, books and other library documents are delivered to requesting faculty. The Georgia Tech library participates in consortium with eleven other libraries in the Atlanta area and in Athens, Georgia, and offers a union catalog of the holdings of all member libraries. Borrowing reciprocity between Georgia Tech and Georgia State University provides the students and faculty of each institution with direct access to the collections of both libraries.

The library's vast store of information is also available to individuals and businesses outside the Georgia Tech community. The on-demand information service offered is financed from fees charged for services rendered. Available are computer or manual search services, copying services, and loan services.

Source: Office of the Director, Price Gilbert Memorial Library



PHYSICAL FACILITIES

SQUARE FOOTAGE BY FUNCTIONAL AREA FALL,1984

INSTRUCTION		
General Academic	950,528	950,528
ORGANIZED RESEARCH		
Research Center (GTRI) Individual or Project Research	313,611 270,044	583,655
PUBLIC SERVICE		
Community Education	18,897	18,897
ACADEMIC SUPPORT		
Libraries Audio/Visual Computing Support Academic Administration & Personnel Development	140,576 2,540 18,221 	167,407
STUDENT SERVICES		
Social and Cultural Development Counseling and Career Guidance Student Support	288,114 5,320 751,435	1,044,869
INSTITUTIONAL SUPPORT		
Executive Management Fiscal Operations General Administration Services Logistical Services Physical Plant Operations Faculty and Staff Services Community Relations	10,700 25,187 18,264 22,564 65,377 7,700 10,738	160,530
INDEPENDENT OPERATIONS		
Outside Agencies Investment Property	16,862 	45,512
UNASSIGNED		
Scheduled for Renovation	48,736	48,736
BUILDING SERVICES		
Circulation, Mechanical, Construction, Custodial	1,624,273	1,624,273
GRAND TOTAL		4,644,407

Source: Office of the Vice President for Planning

FINANCIAL AID AND SCHOLARSHIPS

Private industry, businesses, foundations, and individuals as well as state and federal governments, provide a wide spectrum of scholarship, grant, loan, and work awards for deserving Georgia Tech students. Federal programs of assistance increased this year by more than \$300,000 over 1982-83, principally in the areas of College Work-Study and National Direct Student Loans. Scholarships, including the Georgia Tech-sponsored National Merit and National Achievement awards, also increased by \$180,000 to an all time high of \$1.57 million.

Approximately two-thirds of our total student assistance is derived from federal allocations and through Guaranteed Student Loans, which are guaranteed and subsidized by the federal government. Over the last five years Institute scholarship support has increased 82%, with substantial dollars being directed toward attracting and rewarding students who are outstanding in their academic and leadership performance.

For the 1983-84 academic year, Georgia Tech enrolled 362 Merit Scholars and 86 Achievement Scholars. These students are selected through national competition based primarily on their Preliminary Scholastic Aptitude Test scores. The Scholars are selected without regard to financial need; however, the values of individual awards are determined by the financial circumstances of the families. For the 1983-84 school year, Georgia Tech ranked 14th in the nation in National Merit enrollment and 4th in National Achievement standing. Georgia Tech continues to rank number one among public schools in the percentage of National Merit and National Achievement freshman enrolled.

In 1981, Georgia Tech awarded President's Scholarships for the first time, honoring exceptional young people with demonstrated intellectual talents, outstanding leadership ability, and a desire to meet the challenge of the future. The concept behind the President's Scholarship Program is to retain Georgia's brightest students and attract them to Georgia Tech, and to encourage outstanding non-Georgians to attend Tech. The awards are the most prestigious scholarships available to entering freshmen, and some of them provide total costs (for Georgia residents). The program fosters and rewards academic excellence, enriches the classroom environment, and enhances the academic image of the Institute. In the 1984-85 academic year, ninety-one students are enrolled in the program.

Source: Office of the Director, Financial Aid

SUMMARY OF MAJOR PROGRAMS OF STUDENT FINANCIAL ASSISTANCE

	1982-83		1983-84	
	NUMBER OF	AMOUNT OF	NUMBER OF	AMOUNT OF
	<u>AWARDS</u>	AWARDS	AWARDS	AWARDS
GEORGIA TECH AWARDS				
National Direct Students Loans	1,309	\$469,458	1,109	\$608,626
Supplementary Ed. Oppor. Grants	587	240,038	541	229,974
College Work-Study Program	171	167,207	278	415,117
Pell Grants	1,273	1,189,779	1,111	1,140,729
SUBTOTAL Federal Funds	3,340	2,066,482	3,039	2,394,446
Georgia Tech National Merit	308	163,976	284	201,730
Georgia Tech National Achievement	45	42,078	37	26,005
SUBTOTAL Merit/Achievement	353	206,054	321	_227,735
Institutional Scholarships	1,421	1,183,971	1,413	1,341,404
Short Term Loans	1,486	922,654	1,304	843,185
Emergency Loans	37	3,567	60	8,021
SUBTOTAL GEORGIA TECH AID	6,637	4,382,728	6,137	4,814,791
OUTSIDE AWARDS				
Georgia Incentive Scholarships	605	179,500	589	173,600
Miscellaneous Scholarships	650	625,243	594	584,598
Miscellaneous Grants	54	32,889	43	34,279
Georgia Guaranteed Loans	947	1,991,425	850	1,772,256
Guaranteed Loans - Other States	985	2,148,289	898	2,159,344
Miscellaneous Loans	24	36,094	27	45,553
SUBTOTAL OUTSIDE AID	3,265	5,013,440	3,001	4,769,630
TOTAL	9,902	\$9,396,168	9,138	\$9,584,421

Source: Office of the Director, Financial Aid

ROTC SCHOLARSHIPS: 1983-84 Academic Year

ROTC Scholarships pay tuition, academic fees, and subsistence. Currently, the scholarship is worth \$2,401 per year to Georgia residents and \$5,161 to non-residents.

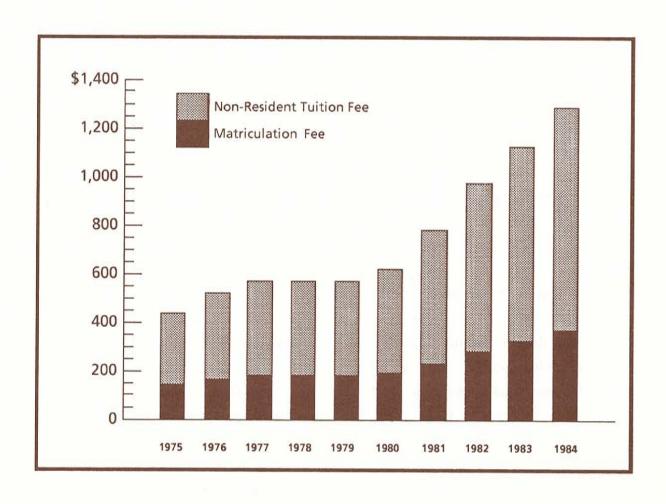
Average Number of Students on Scholarships

Total Amount of Scholarships \$1,741,300

409

Source: Office of the Commanding Officer, Navy ROTC

MATRICULATION AND TUITION FEES FALL QUARTERS 1975-1984



Year	Matriculation Fee* (Resident & Non- Resident)	Non-Resident Tuition Fee*	Total Non- Resident Fee* (Matriculation & Tuition)
1975	\$145	\$295	\$440
1976	168	354	522
1977	185	389	574
1978	185	389	574
1979	185	389	574
1980	195	430	625
1981	236	550	786
1982	285	696	981
1983	328	800	1,128
1984	377	920	1,297

^{*}These fees are for full-time students.

COOPERATIVE PLAN

Since 1912, Georgia Tech has offered a five-year cooperative program to those students who wish to combine industrial work experience with classroom studies. 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 which is completed by regular four-year students. Graduates of the program are awarded a degree in their particular field of specialization with the designation "Cooperative Plan."

Industrial work gives cooperative students an opportunity to develop their career interests and to become more confident in their career choices. Students also are given an opportunity to develop skills in human relations 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.

The Georgia Power Company was one of the first employers of cooperative plan students. Among the more than 400 companies who participate are the Georgia Power Company, the Georgia Tech Research Institute, DuPont de Nemours & Co., Inc., Lockheed-Georgia Company, the Tennessee Valley Authority, the State of Georgia, General Electric Company, Westinghouse Electric Company, IBM Corporation, ITT Rayonier, Inc., Combustion Engineering, Inc., Tennessee Eastman Company, Hughes Aircraft Company, Philip Morris U.S.A., NASA, Columbia Nitrogen Company, and General Motors Corporation.

Cooperative Division Five-Year Comparison

	1979-1980	1983-1984	Percent Increase
Cumulative Enrollment	2,113	2,355	11%
Student Graduates	236	369	56%

Number of Cooperative Students by Major: Fall Quarter 1984

Aerospace Engineering	119	Information & Computer Science	185
Ceramic Engineering	10	Management	111
Chemical Engineering	189	Mathematics	9
Chemistry	12	Mechanical Engineering	376
Civil Engineering	76	Nuclear Engineering	35
Electrical Engineering	727	Physics	21
Engineering Science & Mechanics	25	Textile Engineering	21
Industrial & Systems Engineering	197		C7 (2.74)
		Total	2,113

Source: Office of the Director, Cooperative Division

ROTC

ARMY ROTC

The program for Army ROTC was established at Georgia Tech in June, 1916. Today nearly 100 students representing each of Tech's major schools and disciplines participate in a military science curriculum that integrates the classroom with adventure training experiences. In addition to its regular four-year scholarship program, Army ROTC provides two and three-year competitive scholarships to Tech students, whether previously enrolled in ROTC or not. These scholarships pay tuition and all academic-related fees plus \$100 per month while the student is enrolled in military science. Sixty-five of today's participants are under full tuition Army scholarships. Students enrolled in Army ROTC, both scholarship and non-scholarship, may participate in the Cooperative Degree program.

Army ROTC is available for both men and women. 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 as well. The Advanced curriculum focuses on leadership in a particular environment, ethics, and American defense policies.

Upon successful completion of ROTC, Tech graduates advance to a wide range of officer specialities that maximize individual talents and academic backgrounds. Commissions as Lieutenant are awarded to branches of service designated, and commissioned service is executed as a member of either the Regular (Active) Army, the U.S. Army Reserve, or the U.S. Army National Guard.

NAVY ROTC

The Navy ROTC Unit at Georgia Tech is one of the original six Naval ROTC units established in 1926. The Tech unit is one of the largest in the country; currently enrollment stands at approximately 350, including 100 midshipmen cross-enrolled with other Metropolitan Atlanta colleges and universities. Over seventy-five percent of the midshipmen are on scholarship (tuition and fees, books, uniforms, and \$100 per month); virtually all will earn a scholarship prior to entry into the junior year. Standard two and four-year programs are offered, but entry into the Navy ROTC College Program can be made anytime prior to the junior year. Successful completion leads to a commission as a Second Lieutenant, U.S. Marine Corps or Ensign, U.S. Navy. Challenging and

ROTC (continued)

rewarding careers await the new officers in Naval Aviation, Nuclear Power, Submarine and

Surface Line as well as Marine Corps ground or aviation.

AIR FORCE ROTC

An Army Air Corps ROTC unit was established at Georgia Tech in September, 1946. When

the Air Force gained separate and independent status under the National Security Act of 1947,

the unit became part of the U.S. Air Force.

All phases of Air Force ROTC are open to both men and women. Students enrolled in the

four-year program may compete for four, three, or two-year scholarships. The Air Force ROTC

program at Georgia Tech consists of a General Military Course and a Professional Officer Course.

The General Military Course covers the development of air power and the contemporary Air

Force in the context of U.S. military organization, and is generally taken during the freshman and

sophomore years. The Professional Officer Course covers Air Force management, leadership, and

American defense policy and is taken during the junior and senior years.

Students from Agnes Scott, Southern Tech, Georgia State, Morehouse, Clark, Morris Brown,

and Spelman may take Air Force ROTC on the Georgia Tech campus and are eligible to compete

for scholarships. Air Force ROTC enrollment at Georgia Tech is normally 300 students, of which

about 200 have full scholarships. Each year, approximately 50 graduates are commissioned as

Second Lieutenants into the U.S. Air Force.

Sources: Office of the Commanding Officer, Army ROTC

Office of the Commanding Officer, Navy ROTC

Office of the Commanding Officer, Air Force ROTC

46

INFORMATION TECHNOLOGY

INFORMATION TECHNOLOGY

Information technology has by now become an integral and crucial part of virtually all administrative, instructional, and research units of the Georgia Institute of Technology. These widely dispersed information processing activities are coordinated and given policy guidance by the Assistant to the President for Information Technology acting at the direction of the Executive Committee on Information Technology (ECIT). The ECIT is comprised of the Executive Assistant to the President and the Vice Presidents for Academic Affairs, Research, and Business and Finance. The following three administrative units are directly engaged in providing the Institute with information technology facilities and services.

OFFICE OF COMPUTING SERVICES (OCS)

The Office of Computing Services offers facilities management services for computer operations dispersed throughout the campus. In addition, OCS is responsible for the operation of a central computing facility to provide effective, efficient, and conveniently accessible computing services and resources to students, faculty, and staff in support of education, research, and administration. The facility consists currently of two Control Data CYBER 170/855 systems that share a large pool of disk storage. Coupled to these two systems is a large IBM 4381 configuration. Attached is an array of magnetic tape units, disk drives, data communications devices, and printing devices, including a Xerox 9700 high-speed laser printer. All of the devices are accessible remotely from anywhere on campus through the Georgia Tech data communications network (GTNET).

OCS provides a number of support services, including an office automation support group, a microcomputer support group, a computer maintenance facility, and a training staff that puts on numerous seminars and class presentations for the Georgia Tech community. In the near future, the training staff will be enlarged to include specialists who can provide assistance to faculty, staff, and students who wish to use remotely located supercomputers.

INFORMATION SYSTEMS AND APPLICATIONS (ISA)

To carry out Georgia Tech's mission in education, research, and public service, the Administration must have reliable information available upon which to base its decisions. The purpose of Information Systems and Applications is to provide well-defined, highly responsive information systems for administrative use. In carrying out this mission, ISA has four broad objectives:

INFORMATION TECHNOLOGY (continued)

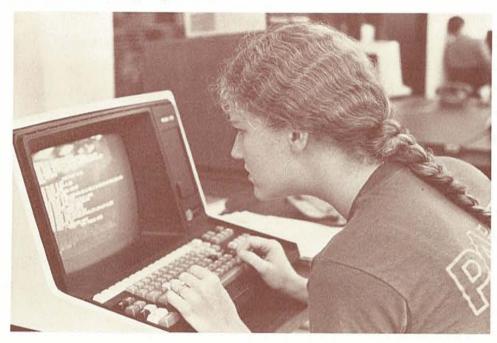
- To define the future software environment under which Georgia Tech will operate
- To find, evaluate, and implement new software packages that meet current needs
- To integrate the existing systems to achieve data administration
- To evolve into an Information Center

OFFICE OF TELECOMMUNICATIONS AND NETWORKING (OTN)

The Office of Telecommunications and Networking was established in recognition of the increasing convergence of computer and communication technologies. OTN's major function is to coordinate telecommunication and network activities on the Georgia Tech campus. The office is responsible for identifying and analyzing services needed by Tech in connection with voice, data, and video communications. OTN consists of two major departments: Services and Engineering. The Services Department determines service needs and develops plans for implementation. The Engineering Department focuses on installation and maintenance of the service.

OTN's activities include: voice telephone service, computer-to-computer communications, terminal-to-computer communications, video transmission systems, electronic mail, office automation networks, broadband computer network, national network service offerings, discipline-oriented networks, and inter-university networks.





ATHLETIC ASSOCIATION

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

The Athletic Association is made up of the following departments: Sports Medicine, Facilities, Football, Basketball, Non-Revenue Sports, Business Office, Ticket Office, Academic Advisor, Sports Promotion, and Sports Information and Media Relations offices. In addition, the Alexander-Tharpe Fund does fund raising in support of intercollegiate athletics. The Fund offers scholarships and other forms of assistance for student athletes at Tech.

The Georgia Tech Athletic Association is a service organization for several constituent groups: the Tech student-athletes, student body, faculty and staff, alumni and friends, sports media and general community. The primary purpose of the Athletic Association is to direct each student-athlete towards growing as a total person, earning a meaningful degree, becoming a good citizen, and developing as an athlete. The basic obligation to 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 Georgia Tech athletic tradition is almost as old as the school itself and continues to be an important part of the Tech heritage. The first football team was formed in 1892 and from that initial season until 1903 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 was named. Over the last 79 years Tech has had only seven full-time head football coaches: John Heisman, Bill Alexander, Bobby Dodd, Bud Carson, Bill Fulcher, Pepper Rodgers, and Bill Curry.

The Tech football history is indeed rich and includes such notable events as three national championships (1917, 1928, and 1952), 22 bowl game appearances (14 wins, 8 losses) and 41 All-Americans. The Tech legend includes more than football, however, and many other great names have made sports history at Georgia Tech--Bobby Jones (golf), Roger Kaiser and Rich Yunkus (basketball), and Ed Hamm (track-world record holder and Olympic performer). Tech was well represented at the 1984 Summer Olympic Games with students Antonio McKay, gold and bronze

ATHLETIC ASSOCIATION (continued)

medal winner in track and field, Mark Smith, fencer, and Gordon Scarlett, swimmer.



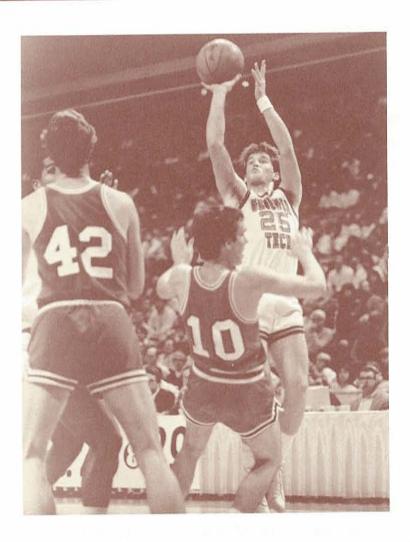
Antonio McKay

The Georgia Tech Athletic program includes 15 intercollegiate athletic teams (10 men's and 5 women's). During the 1983-84 school year 312 student-athletes competed in these sports.

Head Coaches	Number of Participants
Jim Morris	36
Bobby Cremins	11
Mike Spino	7
Bill Curry	100
Puggy Blackmon	15
Bill Beavers	15
Herb McAuley	19
Gery Groslimond	9
Buddy Fowlkes	25
Lowell Lange	19
Head Coaches	Number of Participants
Bernadette McGlade	11
	10
	15
	10
Terry Chambers	10
	Jim Morris Bobby Cremins Mike Spino Bill Curry Puggy Blackmon Bill Beavers Herb McAuley Gery Groslimond Buddy Fowlkes Lowell Lange Head Coaches Bernadette McGlade Mike Spino Terry Chambers Julie Wrege

^{*}Bernadette McGlade is the Coordinator of Women's Athletics.

ATHLETIC ASSOCIATION (continued)



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.

Group	Number of Participants
Band	185
Pep Band	47
Reckettes	20
Cheerleaders	15
Solid Gold	30
Student Trainers	8
Student Managers	11
Stadentinanagers	

Source: Office of the Director, Athletic Association

GEORGIA TECH FOUNDATION

The Georgia Tech Foundation, Inc. was chartered in 1932 to "promote in various ways the cause of higher education in the state of Georgia; to receive capital 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 non-profit corporation which 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 thirty individuals distinguished by success in their chosen profession and their long-time interest in, service to, and support of the Institute. The trustees are elected to six-year terms, with no limit on the number of terms they can serve. They meet the first Tuesday of each month except July and August. Sixteen emeritus trustees continue to advise the Foundation and actively support the Institute.

The office of the Foundation is located in the L. W. "Chip" Robert Alumni/Faculty House on North Avenue.

The net equity of the Foundation as of June 30, 1984 was \$35,028,089. The Foundation provides monies for:

- (1) supplements to faculty salaries;
- (2) faculty professional and curriculum development;
- (3) faculty and staff recruiting;
- (4) student loans, scholarships, and fellowships, such as National Merit Scholars, National Achievement Scholars, and President's Scholars;
- (5) various other special projects.

Elected Officers

George W. Felker III, President L. Travis Brannon, Jr., Vice-President Robert H. Ferst, Treasurer

Source: Office of the Vice President, Institute Relations and Development

CORPORATE RELATIONS AND PLACEMENT

The Office of Corporate Relations and Placement is located in the Fred W. Ajax Placement Center on Hemphill Avenue. This office serves the Georgia Tech community with a variety of services, including opportunities for full-time employment, as well as part-time, temporary, and summer employment. One of the primary objectives of the office is to assist students in determining career objectives and in attaining career and employment goals.

The Office of Corporate Relations and Placement maintains a library which includes information on specific employers, governmental services, and special publications related to employment. In addition, 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.

Other services of the Office of Corporate Relations and Placement include seminars on the employment process, resume' preparation, effective interviewing techniques, and letter writing campaigns. In addition, the office issues a resume' book and maintains an open resume' file for employer review.

The office also assists in the planning, implementation, and administration of programs that encourage effective corporate-university relations. This service also includes stimulating and encouraging corporate support through financial grants, fellowships, scholarships, faculty support, and equipment.

Over 700 employers annually interact directly with the Office of Corporate Relations and Placement. These employers represent a substantial number of the Fortune 500 corporations, as well as many regional organizations.





REPORTED STARTING MONTHLY SALARIES

The average starting monthly salary offers shown reflect only those Fall 1983 - Summer 1984 graduates who received employment offers in private industry through the Office of Corporate Relations and Placement. These offers were computed from employer correspondence only. Only curricula with some available data are listed.

		<u>HIGH</u>	LOW	AVERAGE	NUMBER
CURRICULUM	DEGREE	OFFER	OFFER	OFFER	OF OFFERS
Aerospace Engineering	Bachelors	\$2,500	\$1,950	\$2,225	18
	Masters	2,752	2,610	2,681	2
Applied Biology	Doctorate	2,395	2,395	2,395	1
Applied Mathematics	Doctorate	3,500	3,500	3,500	Ĭ
Building Construction	Bachelors	1,875	1,875	1,875	1
Ceramic Engineering	Bachelors	2,425	2,425	2,425	ī
Chemical Engineering	Bachelors	2,750	1,675	2,350	108
	Masters	2,725	2,300	2,566	30
	Doctorate	3,340	3,100	3220	2
Chemistry	Bachelors	1,960	1,205	1,513	5
	Doctorate	2,875	2,875	2,875	1
Civil Engineering	Bachelors	2,275	1,660	1,833	16
Electrical Engineering	Bachelors	2,678	1,675	2,307	216
	Masters	3,000	1,940	2,598	84
	Doctorate	3,300	2,080	2,821	3
Engineering Science and Mechanics	Bachelors	2,366	2,116	2,236	5
Industrial and Systems Engineering	Bachelors	2,400	1,651	2,158	83
	Masters	3,083	1,960	2,554	14
	Doctorate	3,333	2,625	3,033	4
Information & Computer Science	Bachelors	2,755	1,750	2,215	32
	Masters	2,858	2,208	2,498	17
Management	Bachelors	2,150	1,223	1,707	50
	Masters	2,583	2,000	2,303	6
Management Science	Bachelors	\$1,825	\$1,583	\$1,704	2

REPORTED STARTING MONTHLY SALARIES (continued)

CURRICULUM	DEGREE	HIGH OFFER	LOW	AVERAGE OFFER	NUMBER OF OFFERS
	and the same	OTTEN	OTTER	OTTER	OI OITERS
Mechanical Engineering	Bachelors	\$2,500	\$1,680	\$2,204	119
	Masters	2,700	1,980	2,425	11
Nuclear Engineering	Bachelors	2,240	2,240	2,240	1
	Masters	2,500	2,450	2,475	2
	Doctorate	3,150	3,150	3,150	1
Operations Research	Masters	2,650	2,650	2,650	1
Physics	Bachelors	2,500	2,210	2,326	5
	Masters	2,600	2,417	2,532	3
	Doctorate	3,459	2,500	2,948	4
Textile Engineering	Bachelors	2,292	1,875	2,038	10
	Masters	2,500	1,583	2,235	6
Textile Management	Bachelors	1,792	1,792	1,792	Ĭ
Textiles	Masters	2,333	2,333	2,333	1
TOTAL NUMBER OF OFFERS REPO	ORTED:				967

AVERAGE MONTHLY OFFERS

DEGREE	19	982-83	19	983-84	PERCENT CHANGE
	Offer	No. Offers	Offer	No. Offers	(In avg. mo. offers)
All B.S. Degrees	\$2,125	482	\$2,198	673	+ 3.4
All B.S. Excluding Engineering	1,883	41	1,921	95	+ 2.0
B. in Engineering	2,160	430	2,212	578	+ 2.4
B. in Management	1,694	11	1,707	52	+0.1
All M.S. Degrees	2,323	91	2,420	177	+4.2
M.S. in Engineering	2,334	75	2,505	151	+7.3
All Ph.D Degrees	2,563	12	2,710	17	+5.7

Source: Office of the Director, Corporate Relations and Placement

REPORTED POST-GRADUATION PLANS

Summary of post-graduation plans for 1983-1984 Georgia Tech graduates who reported their plans to the Office of Corporate Relations and Placement.

September 1983 Graduates

College	Number Reporting	Accepted Employment	Graduate School	Entering Military	Continuing Search
Architecture	0	0(0%)	0 (0%)	0 (0%)	0 (0%)
Engineering	65	39 (60%)	3 (5%)	1 (1%)	22 (34%)
Management	4	3 (75%)	0 (0%)	0 (0%)	1 (25%)
Sciences & Liberal Studies	10	7 (70%)	1 (10%)	0 (0%)	2 (20%)
Total	79	49 (62%)	4 (5%)	1 (1%)	25 (32%)
		December 1983 G	iraduates		
Architecture	1	1 (100%)	0 (0%)	0 (0%)	0 (0%)
Engineering	62	29 (47%)	2 (3%)	5 (8%)	26 (42%)
Management	8	3 (38%)	0 (0%)	1 (12%)	4 (50%)
Sciences & Liberal Studies	16	7 (44%)	2(12%)	0 (0%)	7 (44%)
Total	87	40 (46%)	4 (4%)	6 (7%)	37 (43%)
		March 1984 Gra	aduates		
Architecture	0	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Engineering	88	31 (35%)	5 (6%)	1 (1%)	51 (58%)
Management	2	1 (50%)	1 (50%)	0 (0%)	0 (0%)
Sciences & Liberal Studies	17	7 (41%)	1 (6%)	0 (0%)	9 (53%)
Total	107	39 (36%)	7 (7%)	1 (1%)	60 (56%)
		June 1984 Grad	duates		
Architecture	5	3 (60%)	2 (40%)	0 (0%)	0 (0%)
Engineering	291	168 (58%)	11 (4%)	9 (3%)	103 (35%)
Management	39	15 (39%)	2 (5%)	0 (0%)	22 (56%)
Sciences & Liberal Studies	48	22 (46%)	3 (6%)	0 (0%)	23 (48%)
Total	383	208 (54%)	18 (5%)	9 (2%)	148 (39%)
		Total 1983-1984 G	Graduates		
Architecture	6	4 (67%)	2 (33%)	0 (0%)	0 (0%)
Engineering	506	267 (53%)	21 (4%)	16 (3%)	202 (40%)
Management	53	22 (42%)	3 (5%)	1 (2%)	27 (51%)
Sciences & Liberal Studies	91	43 (47%)	7 (8%)	0 (0%)	41 (45%)
Total	656	336 (51%)	33 (5%)	17 (3%)	270 (41%)

Source: Office of the Director, Corporate Relations & Placement

ALUMNI ASSOCIATION

The Georgia Tech Alumni Association was chartered originally in June, 1908. The Association is a not-for-profit organization whose policies, goals, and objectives are guided by a Board of Trustees consisting of thirty-six elected alumni members. Its mission, as stated in its charter, is to assist and support the Institute with particular emphasis and concentration of its resources and energy on serving the alumni; to produce graduates with competence, maturity, and balance; to create institutional pride within the entire family; to develop and enhance its public image; and to meet its needs by raising funds.

As a service organization, the Alumni Association accomplishes its missions by publishing the Georgia Tech Alumni Magazine and Tech Topics, the alumni newspaper; by organizing and supervising alumni clubs throughout the United States and in international locations; and by designing and presenting alumni programs, such as homecoming events, workshops, and seminars. Young alumni are encouraged to become involved in the affairs of the Association and the Institute through participation in campus programs, senior orientation, and the career advisory service for students. The Association also maintains the official alumni statistical records and files in order that communication with alumni, who presently number over 66,500, may be accomplished with accuracy and completeness. Monetary support is provided to the Institute by alumni and friends, through their participation in the Association's Annual Roll Call.

The Alumni Association also provides opportunities for employment for both alumni and graduating seniors through its Alumni Placement Service. Since 1936 this office has provided industry, business, and government with an excellent source of well educated, broadly experienced candidates for employment. This office is funded through contributions to the Annual Roll Call and by companies who utilize the service.

The Alumni Placement staff have been innovative in their efforts to provide a progressive placement service. In addition to publishing the <u>Alumni Placement Bulletin</u>, several new programs have been established. This year saw the first Annual Alumni Career Conference and the addition of a Career Section in <u>Tech Topics</u>. The offices of the Alumni Association are located in the L.W. "Chip" Robert, Jr. Alumni/Faculty House on North Avenue.

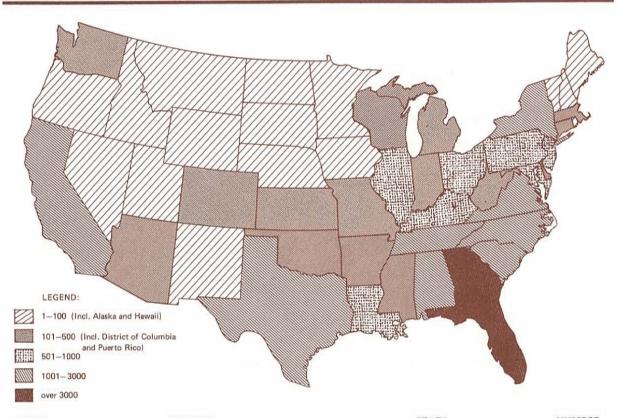
Alumni Association Officers

E. Rembert DuBose, President M. Lamar Oglesby, Past President Geoffrey C. Gill, President-Elect Ben Dyer, Vice-President Lawton M. Nease, Treasurer

Source: Office of the Director, Alumni Association

GEOGRAPHICAL DISTRIBUTION OF ALUMNI

(As of July, 1984)



STATE	NUMBER
Alabama	1,739
Alaska	32
Arizona	193
Arkansas	177
California	1,900
Colorado	312
Connecticut	423
Delaware	221
District of Columbia	131
Florida	4,510
Georgia	21,903
Hawaii	47
Idaho	32
Illinois	521
Indiana	232
Iowa	59
Kansas	110
Kentucky	358
Louisiana	781
Maine	28
Maryland	893
Massachusetts	429
Michigan	273
Minnesota	89
Mississippi	396
Missouri	350
Montana	14

STATE	NUMBER
Vebraska	50
Vevada	42
New Hampshire	55
New Jersey	792
New Mexico	90
New York	1,132
North Carolina	1,816
North Dakota	7
Ohio	757
Oklahoma	179
Oregon	69
Pennsylvania	755
Puerto Rico	243
Rhode Island	50
South Carolina	1,609
South Dakota	3
Tennessee	2,005
Texas	2,331
Utah	36
Vermont	19
Virginia	1,681
Washington	234
West Virginia	139
Wisconsin	101
Wyoming	18
Foreign Countries	1,034

51,400

TOTAL COUNTED

(This figure includes only those alumni whose location is known.)

Source: Office of the Director, Alumni Association

CONTINUING EDUCATION

The Department of Continuing Education serves as the Institute's primary educational outreach to both the public and private sector. It is the Institute's designated unit for non-credit instruction, delivered through workshops, conferences, seminars, and video-courses. The department also serves the community by delivering graduate level courses and degree programs to on-site locations through the videobased instructional system.

Diverse programming includes courses in:

Management Computer Applications Health and Safety Electronics Energy New Technology Issues

Economic Development Business and Economics Applied Science Engineering Industrial Applications

Program faculty come from all of the four Colleges at Georgia Tech: Engineering, Architecture, Management, and Sciences and Liberal Studies. They also come from the Georgia Tech Research Institute, the Advanced Technology Development Center, and from various research centers in the Office of Interdisciplinary Programs.

Programs are conducted on the Georgia Tech campus, at public meeting facilities, hotels, or at company sites. Length of programs vary from one to ten days.

Through the public service activities of Continuing Education, Georgia Tech's resources in teaching and research are brought to the attention of local, state, regional, national, and international communities. They receive continuously updated information on new ideas, issues, technologies, and developments.

PROGRAM INFORMATION*

Number of:	1979-80	1980-81	1981-82	1982-83	1983-84
Programs	106	117	163	221	221
Participants	4,689	4,802	4,758	6,039	6,976
States Represented**	49	***	48	48	50
International Participants	576	***	661	580	392
Ga. Residents	2,101	***	2,414	3,089	3,331
Ga. Counties Represented	90	***	112	98	119
Institutional Continuing Education Units (CEU's)	15,911	24,877	23,913	25,627	19,983

^{*}This table represents all public service activity officially reported to Continuing Education, in addition to programs sposored by the department.

***Figures not available.

Source: Office of the Director, Continuing Education

^{**}Includes the Canal Zone, Puerto Rico, and Virgin Islands.

INDUSTRIAL EDUCATION

Industrial Education, part of the Georgia Tech Research Institute, provides human resource development activities to Georgia's industrial community. This department offers the resources and technical expertise at Tech to individual firms when solutions to problems are needed. A wide variety of seminars, workshops, and conferences has been provided for textile, food processing, automobile, and other industries.

For over sixty-six years, the department has helped industrial firms through training and educational services. Some recent in-plant training activities have included workshops on supervisory skill development. With the help of this training, one company was able to reduce its turnover rate from 66.6% to 21.9% in two years. Another project involved the development of realistic training programs using analytical methods, which resulted in streamlining and greatly reducing the cost of one firm's training program. Other workshops have encompassed the topics of safety and health, human relations, labor relations, management awareness, and instructor training.

Five-Year Summary of In-Plant Classes
Administered & Conducted by Industrial Education

	1979-80	1980-81	1981-82	1982-83	1983-84
Number of Classes	192	221	197	160	118
Number of Students Enrolled	2,809	3,525	3,305	4,223	2,430
Number of Participating Plants	69	73	61	69	46
Total Pupil Hours	50,714	71,562	63,362	40,137	23,169
Certificates	1,645	1,503	1,782	797	1,206

Source: Office of the Director, Georgia Tech Research Institute

Finances



GEORGIA TECH 1885-1985

DESIGNING TOMORROW TODAY

FINANCIAL DATA BY PERCENTAGES

The consolidated expenditures for 1983-84 were \$191,983,105, including an increase of \$20,951,581 - 12.3 percent over total actual expenditures in the 1982-83 fiscal year of \$171,031,524.

The breakdown of actual expenditures by percentage of the total amount expended on the various items for a five year period is:

	ACTUAL EXPENDITURES						
	79-80	80-81	81-82	82-83	83-84		
Instruction	16.7	15.6	15.9	15.1	14.6		
Research	13.9	12.7	12.8	13.2	12.5		
Public Services		.1	.3	.2	.3		
Academic Support	4.4	4.3	4.6	5.1	4.7		
Student Services	1.2	1.2	1.3	1.1	1.0		
Institutional Support	8.0	7.8	8.3	7.8	11.0		
Operation of Plant	7.4	6.6	6.2	6.4	5.9		
Sponsored Operations	27.0	26.4	25.7	30.8	30.4		
Scholarships & Fellowships	1.5	1.5	1.3	2.1	2.1		
Auxiliary Enterprises	7.9	7.6	7.4	7.7	6.9		
Georgia Tech Athletic Association, Inc.	2.7	2.5	2.6	3.0	3.4		
Student Activities	.8	.7	.7	.6	.7		
Georgia Tech Foundation, Inc.	3.5	2.4	4.1	2.9	2.5		
Georgia Tech Research Corporation	2.1	1.8	1.8	2.3			
Unexpended Plant Fund	2.9	8.8	7.0	1.7	2.3		
TOTAL	100%	100%	100%	100%	1.7		

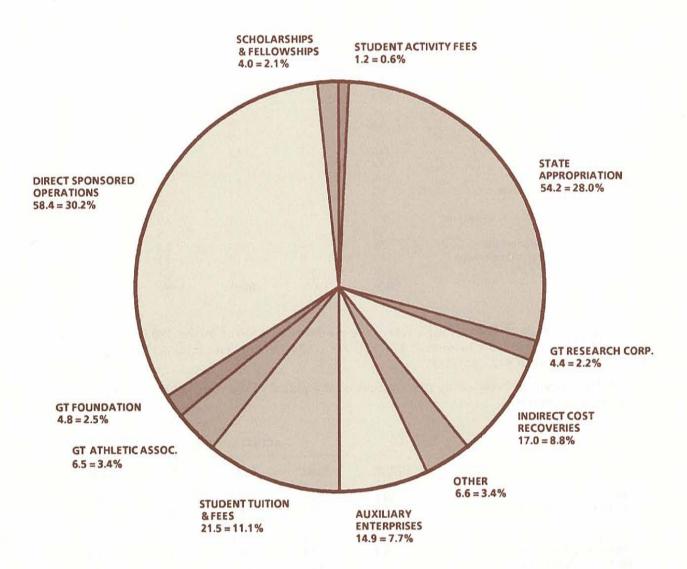
Georgia Institute of Technology's total revenue from all sources in the 1983-84 fiscal year is \$193,533,339, including an increase of \$21,921,507 - 12.8 percent over total actual revenue in the 1982-83 fiscal year of \$171,611,832.

The breakdown of revenue by percentages of the actual amount in 1983-84, compared with the prior four years is:

	ACTUAL REVENUE						
	79-80	80-81	81-82	82-83	83-84		
State Appropriation	29.2	32.1	30.9	25.8	28.0		
Student Tuition & Fees	11.0	11.5	10.9	11.7	11.1		
Endowment	.9	1.5	1.9	9	7		
Gifts & Grants	1.0	.2	.9	5	.,		
Indirect Cost Recoveries	9.3	8.6	8.4	8.9	8.8		
Sponsored Operations	26.7	26.2	25.5	30.7	30.1		
Scholarships & Fellowships	1.4	1.5	1.3	2.1	2.1		
Auxiliary Enterprises	9.0	8.7	8.5	8.0	7.7		
Georgia Tech Athletic Association, Inc.	2.6	2.5	2.6	3.0	3.4		
Student Activities	.9	7	.6	7.0	.6		
Georgia Tech Foundation, Inc.	3.5	2.3	4.1	2.9	2.5		
Georgia Tech Research Corporation	2.0	1.8	1.8	2.3	2.3		
Other Sources	2.5	2.4	2.6	2.5	0.00		
TOTAL	100%	100%	100%	100%	100%		

FINANCIAL DATA BY PERCENTAGES (continued)

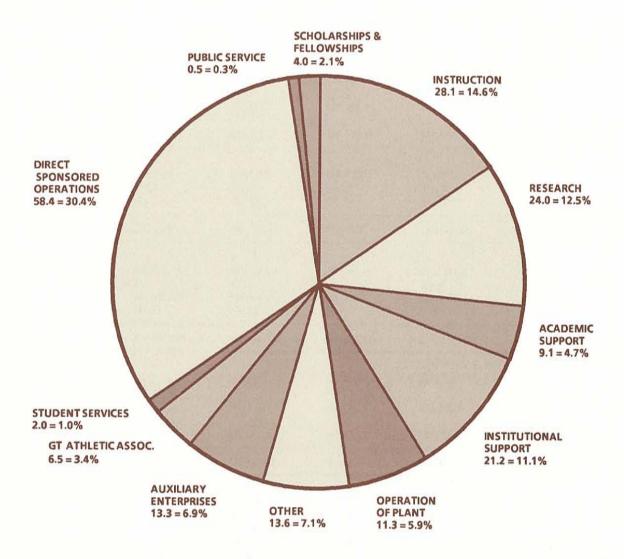
CONSOLIDATED REVENUE BY SOURCE FISCAL YEAR 1983 - 84: \$193.5 MILLION*



^{*}Note: Excess of Total Revenue over Total Expenditures is attributed to the Reserve for Renewal and Replacement in Auxiliary Enterprises as required by Board of Regents policy.

FINANCIAL DATA BY PERCENTAGES (continued)

CONSOLIDATED EXPENDITURES BY BUDGETARY FUNCTION FISCAL YEAR 1983 - 84: \$192.0 MILLION*



^{*}Note: Excess of Total Revenue over Total Expenditures is attributed to the Reserve for Renewal and Replacement in Auxiliary Enterprises as required by Board of Regents policy.

FINANCIAL DATA - ACTUAL REVENUES

	FY 1979-80	FY 1980-81	FY 1981-82	FY 1982-83	FY 1983-84
STUDENT TUITION & FEES				THE STATE OF THE	CONTRACTOR CONTRACTOR
Resident Instruction	\$12,273,519	\$15,349,677	\$16,233,829	\$18,733,868	\$19,859,392
Eng Ext Division	732,353	935,197	1,161,380	1,287,702	1,599,586
Total	\$13,005,872	\$16,284,874	\$17,395,209	\$20,021,570	\$21,458,978
ENDOWMENT INCOME					
Resident Instruction	\$141,628	\$184,005	\$957,985	\$225,656	\$521,000
Ga Tech Research Inst	2,354	3,122	6,126		
Unexp Plant Funds	897,000	1,880,016	2,130,117	1,399,933	868,246
Total	\$1,040,982	\$2,067,143	\$3,094,228	\$1,625,589	\$1,389,246
GIFTS & GRANTS					
Resident Instruction	\$199,632	\$214,452	\$272,928	\$449,123	\$197,116
Eng Ext Division	65,179	75,640	90,458	74,817	68,858
Unexp Plant Funds	900,656	27,202	1,028,000	327,876	353,469
Total	\$1,165,467	\$317,294	\$1,391,386	\$851,816	\$619,443
INDIRECT COST RECOVERIES					
Resident Instruction	\$3,993,230	\$4,144,608	\$4,451,801	\$4,310,044	\$4,801,102
Eng Ext Division	2,455		2,286	11	468
Ga Tech Research Inst	7,005,351	8,049,709	8,939,356	10,956,710	12,233,197
Adv Tech Dev Center	# %	(691)	17,859	35,041	13,050
Total	\$11,001,036	\$12,193,626	\$13,411,302	\$15,301,806	\$17,047,817
OTHER SOURCES			TOTAL STORY		
Resident Instruction	\$644,765	\$684,276	\$418,583	\$663,727	\$615,498
Eng Ext Division				(1,384)	1,247
Ga Tech Research Inst	1,386,257	1,349,899	1,925,332	2,351,157	2,644,290
Adv Tech Dev Center					17,096
Unexp Plant Funds	852,997	1,346,566	1,730,254	1,206,101	1,286,352
Total	\$2,884,019	\$3,380,741	\$4,074,169	\$4,219,601	\$4,564,483
STATE APPROPRIATION					
Resident Instruction	\$29,266,000	\$31,440,600	\$37,077,100	\$38,237,100	\$45,898,963
Eng Ext Division	457,075	501,380	552,045	507,829	628,382
Ga Tech Research Inst	3,803,220	4,239,048	4,649,904	4,713,895	5,989,241
Agricultural Research	60,000	60,000	396,801	420,887	487,705
Adv Tech Dev Center	\$14761 BM003	185,000	358,555	409,557	581,611
Unexp Plant Funds	766,000	9,010,389	6,225,713		650,000
onexp riant rands					

FINANCIAL DATA - ACTUAL REVENUES (continued)

	FY 1979-80	FY 1980-81	FY 1981-82	FY 1982-83	FY 1983-84
SPONSORED OPERATIONS					
Resident Instruction	\$11,321,431	\$13,698,110	\$14,655,904	\$17,723,001	\$21,771,05
Eng Ext Division	4,240	8,977	5,316		4,67
Ga Tech Research Inst	20,119,552	23,257,359	25,778,700	34,836,734	36,544,99
Adv Tech Dev Center			33,006	95,458	34,84
Total	\$31,445,223	\$36,964,446	\$40,472,926	\$52,655,193	\$58,355,565
SCHOLAR & FELLOW - RI	\$1,650,092	\$2,076,660	\$1,999,348	\$3,664,552	\$3,995,959
MUXILIARY ENTERPRISES	\$10,615,272	\$12,318,902	\$13,488,402	\$13,763,106	\$14,898,559
A TECH ATHLETIC ASSN	\$3,106,000	\$3,537,000	\$4,091,100	\$5,095,414	\$6,508,000
TUDENT ACTIVITIES	\$984,096	\$984,351	\$1,052,917	\$1,205,327	\$1,216,970
A TECH FOUND, INC	\$4,178,860	\$3,311,602	\$6,498,458	\$4,991,457	\$4,850,417
A TECH RESEARCH CORP	\$2,398,000	\$2,455,000	\$2,923,811	\$3,927,133	\$4,392,000
OTAL REVENUE	************				
Resident Instruction	\$59,490,297	\$67,792,388	\$76,067,478	\$84,007,071	\$97,660,081
Ga Tech Research Inst	32,316,734	36,899,137	41,299,418	52,858,496	57,411,726
Eng Ext Division	1,261,302	1,521,194	1,811,485	1,868,975	2,303,217
Agricultural Research	60,000	60,000	396,801	420,887	487,705
Adv Tech Dev Center		184,309	409,420	540,056	646,597
Auxiliary Enterprises	10,615,272	12,318,902	13,488,402	13,763,106	14,898,559
Ga Tech Athletic Assn	3,106,000	3,537,000	4,091,100	5,095,414	6,508,000
Student Activities	984,096	984,351	1,052,917	1,205,327	1,216,970
Ga Tech Found, Inc	4,178,860	3,311,602	6,498,458	4,991,457	4,850,417
Ga Tech Research Corp	2,398,000	2,455,000	2,923,811	3,927,133	4,392,000
Unexp Plant Funds	3,416,653	12,264,173	11,114,084	2,933,910	3,158,067
TOTAL	\$117,827,214	\$141,328,056	\$159,153,374	\$171,611,832	\$193,533,339

FINANCIAL DATA - ACTUAL EXPENDITURES

	FY 1979-80	FY 1980-81	FY 1981-82	FY 1982-83	FY 1983-84
INSTRUCTION					
Resident Instruction	A10 707 070	\$20,468,099	\$23,316,794	\$24,112,871	\$25,997,281
State Sponsored	\$18,323,839 1,253,307	1,311,734	1,584,388	2,645,470	3,931,592
Total Resident Instr Eng Ext Division	\$19,577,146	\$21,779,833	\$24,901,182	\$26,758,341	\$29,928,873
State	1,176,089	1,405,039	1,659,936	1,721,104	2,065,965
Total	\$20,753,235	\$23,184,872	\$26,561,118	\$28,479,445	\$31,994,838
RESEARCH					
Resident Instruction	A7 00/ 700	A7 010 047	\$8,300,152	\$7,704,205	\$8,009,649
State Sponsored	\$7,296,782 9,913,232	\$7,818,063 11,796,493	12,503,764	14,591,813	17,023,969
Total Resident Instr Ga Tech Research Inst	\$17,210,014	\$19,614,556	\$20,803,916	\$22,296,018	\$25,033,618
State	8,800,961	9,857,034	11,516,480	14,465,468	15,627,304
Sponsored	20,119,552	23,257,359	25,778,700	34,836,734	32,110,004
Total GT Research Inst Agricultural Research	\$28,920,513	\$33,114,393	\$37,295,180	\$49,302,202	\$47,737,308
State Eng Ext Division	56,563	59,735	372,467	391,780	412,762
State			2,832		
Sponsored	4,240	8,977	5,316		4,676
Total Eng Ext Division Adv Tech Dev Center	\$4,240	\$8,977	\$8,148	\$0	\$4,676
Sponsored			33,006		
Total	\$46,191,330	\$52,797,661	\$58,512,717	\$71,990,000	\$73,188,364
PUBLIC SERVICE					
Adv Tech Dev Center		A175 775	\$359,367	\$408,049	\$505,493
State Sponsored	gar ladi ani: 100 000 000 000 000 000 000 000 000 00	\$175,775	\$337,36/	95,458	34,840
Total		\$175,775	\$359,367	\$503,507	\$540,333
ACADEMIC SUPPORT Resident Instruction					
State Sponsored	\$5,075,274 2,055	\$5,963,792	\$7,312,348	\$8,713,150	\$9,064,483 111,412
Total	\$5,077,329	\$5,963,792	\$7,312,348	\$8,713,150	\$9,175,895
<u> </u>					

FINANCIAL DATA - ACTUAL EXPENDITURES (continued)

		y .			
	FY 1979-80	FY 1980-81	FY 1981-82	FY 1982-83	FY 1983-84
STUDENT SERVICES Resident Instruction					
State Sponsored	\$1,426,048 3,130	\$1,680,071 4,934	\$2,008,877 3,174	\$1,886,001 22,144	\$1,966,271 31,374
Total	\$1,429,178		\$2,012,051	\$1,908,145	\$1,997,645
INSTITUTIONAL SUPPORT Resident Instruction					
State	\$6,644,998	\$8,043,490	\$9,986,349	\$10,901,814	\$17,090,889
Sponsored		545,919		431,400	663,945
Total Resident Instr Eng Ext Division	\$6,794,705	\$8,589,409	\$10,507,349		\$17,754,834
State Ga Tech Research Inst	50,472	67,246	78,795	96,116	174,037
State Sponsored	2,646,446	2,760,441	2,900,489	2,216,301	3,815,369 4,427,218
Total GT Research Inst Agricultural Research	\$2,646,446	\$2,760,441	\$2,900,489	\$2,216,301	\$8,242,587
State Adv Tech Dev Center	3,144		24,223	29,217	74,957
State		8,006	17,047	24,754	57,980
Total	\$9,494,767	\$11,425,102	\$13,527,903	\$13,699,602	\$26,304,395
OPERATION OF PLANT Resident Instruction					
State	\$7,780,405	\$8,109,111	\$8,569,067	\$9,437,747	\$9,717,273
Sponsored			43,578		8,759
Total Resident Instr Eng Ext Division	\$7,780,405		\$8,612,645		\$9,726,032
State Ga Tech Research Inst	45,147	39,410	61,151	48,538	54,938
State Sponsored	779,143	1,039,105	1,131,066	1,366,974	1,473,448 7,776
Total GT Research Inst Adv Tech Dev Center	\$779,143	\$1,039,105	\$1,131,066	\$1,366,974	\$1,481,224
State				11,633	46,986
Total	\$8,604,695	AD 20/ /F/	\$9,804,862	\$10,897,066	\$11,309,180
SCHOLAR & FELLOW - RI	\$1,650,092	\$2,076,660	\$1,999,348	\$3,664,552	\$3,995,959
AUXILIARY ENTERPRISES	\$9,151,122		\$11,573,675	\$13,102,308	\$13,322,360

FINANCIAL DATA - ACTUAL EXPENDITURES (continued)

	FY 1979-80	FY 1980-81	FY 1981-82	FY 1982-83	FY 1983-84
GA TECH ATHLETIC ASSN	\$3,106,000	\$3,537,000	\$4,091,100	\$5,095,414	\$6,508,000
STUDENT ACTIVITIES	\$953,669	\$1,018,244	\$1,077,377	\$1,124,592	\$1,245,652
GA TECH FOUND, INC	\$4,178,860	\$3,311,602	\$6,498,458	\$4,991,457	\$4,850,417
GA TECH RESEARCH CORP	\$2,398,000	\$2,455,000	\$2,923,811	\$3,927,133	\$4,392,000
UNEXP PLANT FUNDS	\$3,416,653	\$12,264,173	\$11,114,084	\$2,935,153	\$3,158,067
GRAND TOTAL					
Resident Instruction				*** 755 700	471 015 01
State		\$52,082,626	\$59,493,587	\$62,755,788	\$71,845,840
Sponsored	11,321,431	13,698,110	14,655,904	17,723,001	21,771,05
Scholar & Fellow	1,650,092	2,076,660	1,999,348	3,664,552	3,995,95
Total Resident Instr	\$59,518,869	\$67,857,396	\$76,148,839	\$84,143,341	\$97,612,85
Eng Ext Division	1,275,948	1,520,672	1,808,030	1,865,758	2,299,61
Ga Tech Research Inst	32,346,102	36,913,939	41,326,735	52,885,477	57,461,11
Agricultural Research	59,707	59,735	396,690	420,997	487,71
Adv Tech Dev Center		183,781	409,420	539,894	645,29
Auxiliary Enterprises	9,151,122	10,646,546	11,573,675	13,102,308	13,322,36
Ga Tech Athletic Assn	3,106,000	3,537,000	4,091,100	5,095,414	6,508,00
Student Activities	953,669	1,018,244	1,077,377	1,124,592	1,245,65
Ga Tech Found, Inc	4,178,860	3,311,602	6,498,458	4,991,457	4,850,41
Ga Tech Research Corp	2,398,000	2,455,000	2,923,811	3,927,133	4,392,00
Unexp Plant Fund	3,416,653	12,264,173	11,114,084	2,935,153	3,158,06
TOTAL	\$116,404,930	\$139,768,088	\$157,368,219	\$171,031,524	\$191,983,10

Source: Office of the Vice President, Business and Finance

RESEARCH AT GEORGIA TECH

Georgia Tech is a major center for advanced technology in Georgia and the Southeast. With a full-time staff of more than 1,300 scientists and engineers, it conducts research of national significance, provides 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 research laboratories, with 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 non-profit organization incorporated under the laws of the State of Georgia, serves as the contract agency. It also handles patent and other financial and administrative research matters.

Research programs range from alternate energy research to the development of electronic defense systems to protect our nation; from economic development assistance to business and industry to the application of computer technology in a variety of settings; from analyses of systems for monitoring stratospheric pollution to the design and implementation of totally new radars; from the evolution of processing techniques for earth resources satellites to management of the nation's second largest solar energy test facilities. Contracts vary in size from an \$8.5 million contract with the federal government to a \$500 contract with a rural industry. There are programs with local, regional and state governments, with major companies, with other R & D organizations, and with developing nations.

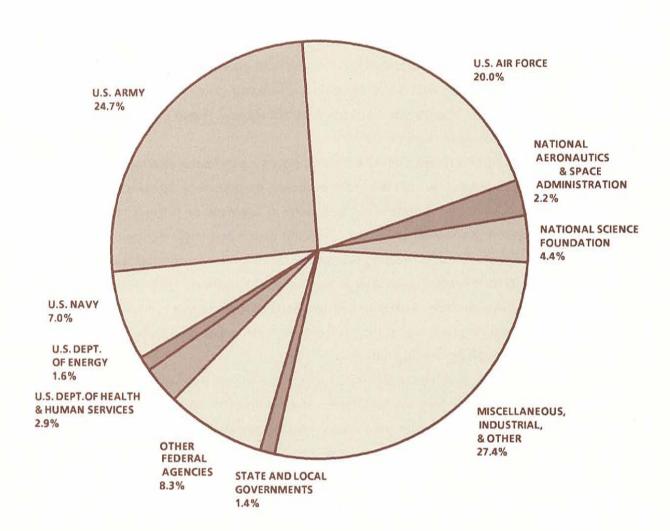
Much of the total research activity is within the broad field of electronics, including electronic defense, electronic systems, electronic techniques and components, antennas, microelectronics, electromagnetics, and optics. Energy research on solar and other alternate energy forms and work on energy conservation and applications are also important areas, as are the following: domestic and international economic development; computer technology and applications; mechanics; and the fields of physical, chemical, material, earth atmospheric, and social science.

Most of the research is performed on the Georgia Tech campus, but there are a variety of off-campus facilities managed by the Georgia Tech Research Institute (GTRI), formerly the Engineering Experiment Station. About 67% of the research and extension activities are managed by GTRI and 33% are managed by academic schools and centers.

Source: Office of the Vice President for Research

RESEARCH AT GEORGIA TECH (continued)

TOTAL SPONSORED RESEARCH As of June 30, 1984



Source: Office of the Vice President for Research

RESEARCH AT GEORGIA TECH (continued)

RESEARCH GRANTS AND CONTRACTS*

AWARDING AGENCY	FY 1984	(% of Total)
National Science Foundation	\$2,894,759	(4.4)
National Aeronautics & Space Administration	1,470,012	(2.2)
U. S. Air Force	13,283,038	(20.0)
U. S. Army	16,420,925	(24.7)
U. S. Navy	4,667,665	(7.0)
U. S. Department of Energy	1,094,157	(1.6)
U. S. Department of Health and Human Services	1,924,952	(2.9)
Other Federal Agencies	5,486,297	(8.3)
Total Federal Government	\$47,241,805	
State and Local Governments	926,775	(1.4)
Miscellaneous, Industrial & Other	18,214,097	(27.4)
GRAND TOTAL	\$66,382,677	

^{*}This summary does not include other extramural support such as fellowships, traineeships, training grants and instructional equipment grants.

RESEARCH SUMMARY July 1983-June 1984

UNIT	PROPOSALS AWA		ARDS	
	Number	Amount	Number	Amount
Engineering	469	\$42,226,943	271	\$11,830,712
Architecture	43	3,362,204	26	1,230,586
College of Sciences & Liberal Studies	244	48,511,514	92	6,969,669
Management	7	488,366	5	355,770
Research Centers	31	1,244,419	27	915,684
Georgia Tech Research Institute	920	142,700,997	535	45,130,285
TOTAL	1,714	\$238,534,443	956	\$66,432,706

FY 83-84 Awards:	\$66,432,706
FY 82-83 Awards:	\$82,384,454
FY 81-82 Awards:	\$61,727,967
FY 80-81 Awards:	\$54,016,873
FY 79-80 Awards:	\$46,423,509

Source: Office of the Vice President for Research

CONTRACT ADMINISTRATION

The Vice President for Research has the executive responsibility for all research programs conducted at the Georgia Institute of Technology. He works with the deans, school and center directors, and the Director of the Georgia Tech Research Institute in establishing research policies and procedures. Management support for the research programs at Georgia Tech is provided by the Office of the Vice President for Research and the Georgia Tech Research Corporation (GTRC), in partnership with the Office of Contract Administration (OCA) and its five divisions.

The <u>Office of the Director of OCA</u> is responsible for annual overhead negotiations with the federal government. Policy and procedures are set in the Director's office. This office also provides a telex and telecopier service for official campus business.

The <u>Program Initiation Division (PID)</u> assists the faculty in identifying potential funding sources by means of a weekly report entitled "Research Opportunities." PID also serves as the central coordinating point for the entire campus for ordering and distributing Requests for Proposals (RFP's).

PID is responsible for handling all proposals and grant applications from the Georgia Tech Research Institute and the Georgia Institute of Technology for all sponsored activity. Contracting officers in PID review proposals and cost estimates for compliance with the business policies of both the Institute and awarding agencies. PID negotiates all resulting grants and contracts. Contracting sponsors include almost every department of the U.S. government, many state and local governments, corporations, universities and colleges, and foreign government agencies. Each PID contracting officer works with specific sponsoring agencies.

The <u>Program Administration Division (PAD)</u> has the responsibility of monitoring active grants and contracts and is the liaison between project sponsors and the Georgia Tech research management staff. This office is organized in the same way as PID, so that each contracting officer is assigned specific sponsoring agencies. PAD carefully reviews the terms and obligations of grants and contracts once they have been awarded and prepares and distributes necessary documents. All modifications to an existing program, such as budgetary changes, an extension of time, and/or a change in scope of work or terms and conditions, are processed by PAD.

PAD also reports to the Vice President for Research all contractually required items ("deliverables") that are due or delinquent. Upon completion of a grant or contract, PAD facilitates close-out of the program, i.e., certification of satisfactory performance, preparation of

CONTRACT ADMINISTRATION (continued)

research property records, accounting for patents and classified documents, final billing, and submission of all "deliverables" and closing certificates to the sponsor.

The <u>Legal and Subcontracting Division (L&SD)</u> provides assistance in subcontract activities related to contracts and grants. Patent and license review, copyright and patent application processing, and negotiation of royalty fees are services provided by this division. The International Traffic in Arms Regulations (ITAR) and Export Administration Regulations (EAR) are checked for compliance. L&SD is available to handle any legal problem related to research activities.

The <u>Support Services Division</u> located in the Graduate Library Basement serves as the distribution point for all proposals and progress reports, the filing center for all progress reports during the life of a project, and the office of record for the dispatch of both research proposals and progress/final reports on grants and contracts. This division works closely with the printing and photographic department to assure timely reproduction, with the Program Initiation Division to coordinate proposal submission, with the Program Administration Division for report identification and contractual compliance, with the Archives section of the Georgia Tech Library for disposition of files on completed projects, and with the various postal carriers to assure expeditious and economical delivery of research documents.

The <u>Printing and Photographic Center (PPC)</u> has modern printing equipment and a layout section to support the press department with design and line drawing capabilities. A copy camera, capable of enlargements and reductions, is available to produce negatives from which plates can be made for reproduction. The finishing department has all the standard equipment and materials for normal binding. The photographic department is equipped with a wide variety of cameras, movie and still, high-speed and slow-motion, for either in-house or research laboratory use. All developing and printing capabilities, except color processing, are available. PPC is well-equipped and staffed to meet the instruction, research, and administrative requirements of a major academic institution.

Source: Office of the Director, Contract Administration

Research



GEORGIA TECH 1885-1985

DESIGNING TOMORROW TODAY

RESEARCH CENTERS (continued)

The <u>Georgia Tech Microelectronics Research Center</u> provides a mechanism for the formal coordination of campus programs of a microelectronics nature conducted within existing campus organizational units. The center also provides a focus for the development of specialized facilities used in support of interdisciplinary research activities. Typical research programs include thin film deposition and characterization, anisotropic etching, high field-hot electron effects on device modeling, laser annealing, and very large scale integration (VLSI) chip design.

The <u>Health Systems Research Center</u> provides an interdisciplinary and interinstitutional program of health systems research, community outreach, and continuing education. The center develops, applies, and disseminates new knowledge and techniques in all aspects of improved operational and managerial systems for the delivery of health care to the public. The center emphasizes systematic planning, engineering design, and scientific management of health care facilities, work methods, and human resources.

The <u>Nuclear Research Center</u> provides access for multiple-discipline users of a five megawatt research reactor. On-going work includes trace element analysis, production of radioisotopes for medical and industrial use, medical application research, and personnel training programs for industry. An additional program supports reactor use by colleges and universities throughout the southeastern United States.

The <u>Center for Radiological Protection</u> coordinates research and training in health physics. Its Environmental Radiation Laboratory provides analytical support for faculty research programs complementary to and supportive of the School of Nuclear Engineering's undergraduate and graduate degree programs in health physics.

The <u>Rehabilitation Technology Center</u> facilitates research on devices and systems which help handicapped or disabled persons by removing functional barriers in the workplace, home, and community environments. Collaborative research relationships have been established with the Atlanta Veterans Administration Medical Center; the Division of Vocational Rehabilitation (Georgia Department of Human Resources); the Roosevelt Warm Springs Institute; and Emory University.

The <u>Technology Policy and Assessment Center</u> brings together faculty and student research teams to conduct research on major technology policy issues which face our society. Typical areas of investigation involve analyses of social impact, organizational behavior, institutional responsiveness and cost-risk-benefit features associated with alternative policies, and strategies for the management of scientific and technological development.

RESEARCH CENTERS (continued)

The <u>Materials Handling Research Center</u> is a joint university/industry activity that produces research results which will ultimately improve the handling, storage and control of material. The Center's research programs include design, development and operational studies that have applications in manufacturing, warehousing, and logistics. Research staff members of the center work closely with member companies to keep the program oriented toward significant and relevant research opportunites.

The <u>Center for Research in Writing</u> addresses literacy, language use and development, and the process of composition. Research and services are performed by a network of scholars whose results have been applied widely to teaching and learning, both within and beyond the academic setting.

The <u>Center for Excellence in Rotary Wing Aircraft Technology</u> provides a national focal point to stimulate more continuous research in helicopter technology and more comprehensive graduate training for engineers in the field. Georgia Tech was selected by the U.S. Army as one of their three centers for excellence in rotary wing aircraft technology.

The <u>Center for Architectural Conservation</u> focuses on research in the technology of existing buildings to promote, enhance and assist in the conservation and re-use of building environments.

The <u>Research Center for Biotechnology</u> provides a focus for the development of research in molecular biology, applied biology, biochemistry, biophysics, and biochemical engineering. A major emphasis is on the utilization of new research for the development of new industrial processes and products for health care items, specialty chemicals, fuels, and biomaterials.

Source: Office of the Director, Interdisciplinary Programs



GEORGIA TECH RESEARCH INSTITUTE



The Georgia Tech Research Institute (GTRI), formerly the Engineering Experiment Station, is chartered by the Georgia legislature as a non-profit organization. Its missions include: service to the community, state and nation; conducting scientific, engineering, and industrial research; encouraging the development of Georgia's natural resources; aiding industrial and economic development; and participating in national programs of science, technology, and preparedness. In performing these missions, GTRI simultaneously is making the maximum possible contribution to Georgia Tech's overall research, educational, and service goals.

The Director of GTRI reports administratively to the Georgia Tech Vice President for Research, who is the focal point for all research at the Institute. There is considerable interaction in research and instruction between the staff of GTRI and the academic schools and departments. There is also increasing involvement in the presentation of seminars and other forms of specialized training for off-campus groups.

GTRI is headquartered on the Georgia Tech campus where most of its staff is located. GTRI activities also are located at an off-campus leased facility in nearby Cobb County, as well as at twelve field offices located throughout the state in Albany, Augusta, Brunswick, Carrollton, Columbus, Douglas, Dublin, Gainesville, Macon, Madison, Rome, and Savannah. In addition, other groups are performing research at the sponsors' locations: at Eglin Air Force Base, Florida;

at the Army Missile command in Huntsville, Alabama; at the Warner Robins Air Logistics Center, in Georgia; and at Ft. Monmouth, N.J. Overseas resident locations include Cairo, Egypt; Khartoum, Sudan; and Guatemala City, Guatemala. GTRI is organized into two major groups of laboratories by research areas, with five electronics and three resource laboratories as described briefly below:

ELECTRONICS

The five electronics laboratories have major activities in systems analysis, radar, radiometry, computers, biomedical, and communications research. A brief description of the electronics labs and their principal research areas shows the wide variety of projects underway and the skills invested in the staff and students that are needed to carry out the programs.

The <u>ELECTROMAGNETICS LABORATORY (EML)</u> is composed of three major research units: Electro-Optics; Physical Sciences; and Millimeter Wave Techniques, plus the Huntsville office. A broad spectrum of research programs covers both governmental and industrial activities. Some of these are: digital image processing, millimeter-wave technology, molecular beam epitaxy (MBE), radiometric systems, remote sensing applications, semi-conductor materials, IMPATT diode chips, chemical kinetics and photochemistry, artificial intelligence, and optoelectronics. One of the more important projects is the study of chemical kinetic processes which affect the depletion of ozone in the upper atmosphere.

The <u>ELECTRONICS AND COMPUTER SYSTEMS LABORATORY (ECSL)</u> is composed of six major research units: Biomedical Research; Communications Systems; Computer Technology and Applications; Electromagnetic Compatibility; Electromagnetic Effectiveness; and Command and Control. A sample of the research activities performed in ECSL includes research of antenna systems, electromagnetic scattering, design and analysis of robust communication systems, analysis and control of electromagnetic interference effects, information management and decision-support systems, process controllers, and real-time data acquisition and display systems.

The <u>RADAR AND INSTRUMENTATION LABORATORY</u> (RAIL) is composed of five major units: Modeling and Simulation; Analysis; Development; Instrumentation and Measurements; and a Special Projects Office. Areas of national recognition include millimeter-wave technology,

characterization of targets and clutter, polarization processing, instrumentation radars and reflectivity measurements, stationary target detection, target classification, radar transmitters and modulators. New research thrusts include electronic counter countermeasures, advanced radar transmitter/modulation technology, tracking radar systems, fiber optics technology/applications, counter-mine technology, and guidance/seeker technology.

The <u>SYSTEMS AND TECHNIQUES LABORATORY (S&TL)</u> is composed of two program offices and four major units: Defense Electronics; Microwave Systems; Systems Development; and Design Services. The majority of the research in S&TL is related to threat radar tracking systems. This work focuses on the analysis, design, fabrication, and testing of new radar systems and major components. Other major technical areas are microwave antennas, particularly track-while-scan types; millimeter-wave and phased array antennas; and multiple-target instrumentation systems. A few of the major accomplishments include the development of major radar systems, both fixed and mobile, extensive upgrading of three mobile gunfire control radars, and the development of a large antenna system for an industrial sponsor.

The <u>SYSTEMS ENGINEERING LABORATORY (SEL)</u> is composed of four major units: Concepts Analysis; Countermeasures Development; Defense Systems; and Electronic Support Measures. In addition, SEL has an Advanced Programs Office and a Techniques Analysis Program Office on campus, plus field offices located at Eglin Air Force Base in Florida, and Warner Robins Air Logistics Center in Georgia. They are engaged in large-scale systems analysis and in-depth modeling of system concepts. Areas of expertise are electronic countermeasures (ECM), electronic warfare (EW), electronic support measures (ESM), and electronic counter countermeasures (ECCM). Much research is underway in EW simulator development, EW software development, and advanced digital signal processing. Another area of research is the experimental evaluation and flight testing of new techniques for use with operational radar systems. Studies are also performed in the collection, processing, and analysis of electronic data.

RESOURCES

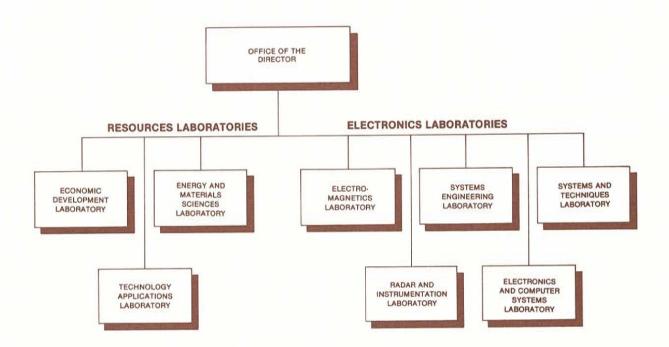
The Resources Laboratories conduct a wide variety of applied research and extension programs which include, among their principal thrusts, economic development, productivity improvement, alternative energy development and energy conservation.

The <u>ECONOMIC DEVELOPMENT LABORATORY (EDL)</u> conducts programs in three major areas: Environmental Health and Safety; Business Development; and Industrial Extension. EDL operates the Industrial Extension Service with twelve offices throughout the state of Georgia. Other programs are directed toward minority business development, the problems of inventors and small businesses, and firms hurt by import competition. Environmental programs are Hazardous Waste Management, Safety Engineering, and Industrial Hygiene. An area of national interest has been the forecasting of energy demand, using the commercial sector model to look at issues such as market penetration of coal technologies and electric heat pumps.

The <u>ENERGY AND MATERIAL SCIENCES LABORATORY (EMSL)</u> is composed of three major units: Solar Energy; Material Sciences; and Bioengineering. Much of the research is directed toward advanced engineering and the physical sciences as applied to energy production, development of new materials, and the resolution of environmental problems. Some projects include high-temperature solar energy research, technology related to the conversion and utilization of biomass, the development and evaluation of high-temperature materials, and protective coating technology. The most significant of these programs are entrained pyrolysis and gasification of biomass, the development of high temperature ceramics materials, and operation of the Advanced Components Test Facility (Solar Test Site).

The <u>TECHNOLOGY APPLICATIONS LABORATORY (TAL)</u> is composed of four major units: Process Technology, Mechanical Systems, International Programs Divisions, and the Industrial Education Department. Research includes determining and demonstrating technical feasibility in applied engineering projects. Manufacturing technology research features investigation of robotics and automated machinery in industrial plants and the advancement of the state of the art of automated systems. Major efforts are underway to develop ways to improve energy efficiency in industrial processes and to develop cost-effective photovoltaic systems to provide electric power for residential and industrial users. Wood energy research is directed toward improving the state of technology in gasification and direct combustion. International programs deal with industrial technology and improved productivity, rural water resources, alternative energy technologies, and industrial energy conservation.

Source: Office of the Director, Georgia Tech Research Institute



Source: Office of the Director, Georgia Tech Research Institute

STAFF

June 30, 1984

Research Regular (full-time)

Professional By Highest Degree Doctorates* Masters Bachelors Other No Degree	97 266 193 5 6	(17.1%) (46.9%) (34.0%) (1.0%) (1.0%)	567	
Support Total Research Regular (full-time			271	838
Supplementary (part-time) Professional Support Graduate Research Assistan Co-op Students Student Assistants Total Supplementary (part-time)	nts		41 153 60 119 77	450
TOTAL STAFF	H			1,288

^{*}Includes 2 J.D's and 1 M.D.

FY-84/85 FINANCIAL DATA

Activity Level/Funding Sources

Research Contracts and Grants	\$48.8 million
Interdepartmental Services	2.6 million
State Appropriation	6.0 million
TOTAL	\$57.4 million

RESEARCH FACILITIES

Campus Research Space Off-Campus Leased Reseach Space	231,087 sq. ft. 142,707 sq. ft.
TOTAL	373,794 sq. ft.
Total Research Equipment (cost)	\$22.5 million

Source: Office of the Director, Georgia Tech Research Institute

ADVANCED TECHNOLOGY DEVELOPMENT CENTER

The Advanced Technology Development Center (ATDC) was created in July of 1980 jointly by then-Governor George Busbee and the General Assembly. Located on the Georgia Tech campus, the Center serves as a catalyst for attracting and fostering high technology industrial growth in Georgia. Such high technology companies are capital intensive in production, employ a high percentage of technicians, engineers, and scientists, and are science-based, dependent on research and development for their continued success.

ATDC assists high technology businesses at all stages of development. Specific programs include recruiting new high technology firms, assisting high technology entrepreneurs, helping existing companies develop new technology-based products, assisting in the formation of venture capital resources, and conducting educational programs in high technology business development. The Center offers the following services to companies considering expansion or relocation to Georgia: technical information about and access to state resources; low-cost incubator space on campus; access to Tech's facilities, engineers and scientists; and other support and training needed to facilitate their operation.

As part of its assistance to high technology companies, the ATDC can help identify product markets; locate venture capital; provide management, finance and marketing assistance; and evaluate new products and ideas. ATDC-sponsored short courses and conferences, utilizing the wide variety of management and technical expertise at Georgia Tech, can enable members of the business and financial communities to update their technological understanding or improve their management skills.

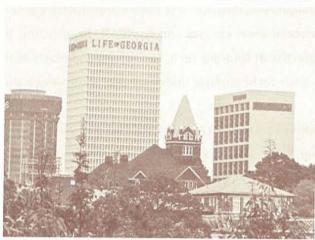
The ATDC is housed in a new two-building complex located on the northern edge of the campus facing Tenth Street. The first building, a three-story structure containing about 45,000 square feet of space, was completed in 1984 and is now occupied at full capacity. The lower floor consists of open bay areas suitable for laboratory or production use, with the upper floors designed to house administrative offices, support services and conference facilities. A second building is scheduled for completion in the winter of 1985. In addition to providing reasonably priced temporary space for developing businesses, the buildings allow convenient access to Tech's library, computer center, sophisticated test equipment, and other facilities. Currently, ATDC has twenty tenant firms involved in a wide range of technology based businesses.

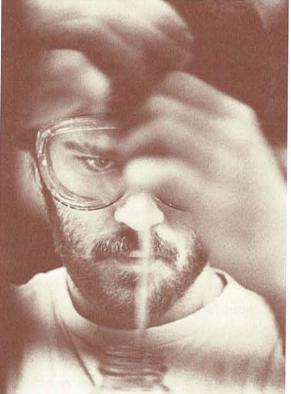
Source: Office of the Director, Advanced Technology Development Center

GEORGIA TECH 1885 - 1985DESIGNING TOMORROW TODAY









For additional information about this publication contact:

Sue Palmer

Office of the Associate Vice President
for Academic Affairs

404-894-3311

Georgia Tech is an Equal Employment/Education Opportunity Institution.