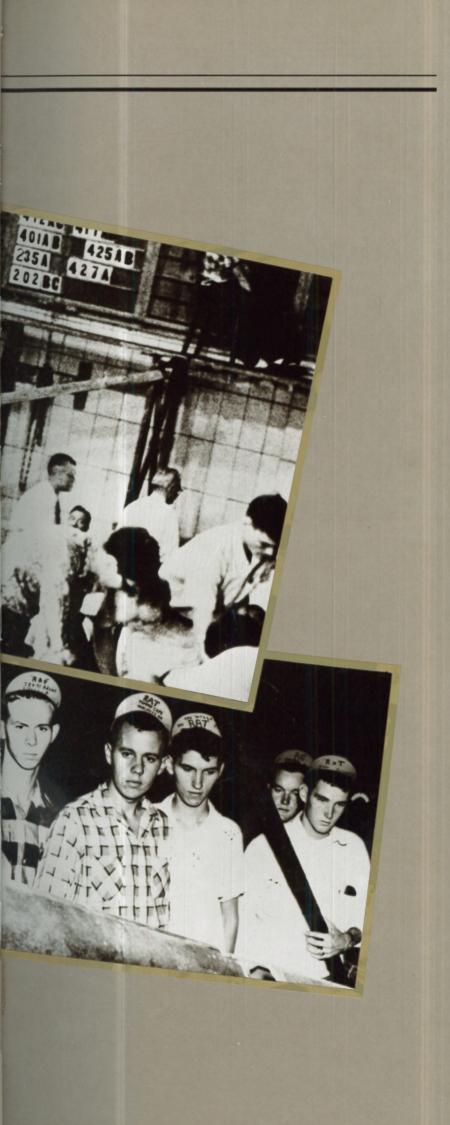
# Academics \_\_\_\_\_

6545



## 100 YEARS

"Without a doubt, the engineering profession by harnessing the energy of our natural resources has created a world of plenty. To play a dominant role in postwar reorganization, the engineer must devote a good deal of his talent and time and energy towards the fields of economics, political science, and social science. All engineering work is closely interwoven with human behavior, human desires, and human welfare. It is the engineer's obligation to mankind to depart occasionally from his handbook and sliderule, and assist in the formation of a better society..."

> From "A letter to Neophyte Engineers" J. F. Fernebok, M.E. 1943, Taken from 1943 BLUE PRINT

#### Tech Brings Technology to South

In 1882 an idea was born that forever changed the city of Atlanta. Two confederate veterans, Major J. F. Hanson and Nathaniel E. Harris (later to become Governor), met to discuss the need for a school to train technical specialists and leaders necessary for continued industrial growth in Georgia. Nathaniel Harris joined the Georgia legislature, which, in 1883, sent a committee to investigate technical schools in the north. In 1885 after a lengthy battle led by Nathaniel Harris, the Governor of Georgia reluctantly signed into law the bill creating the Georgia School of Technology on October 13. With a \$65,000 appropriation, Tech was born.

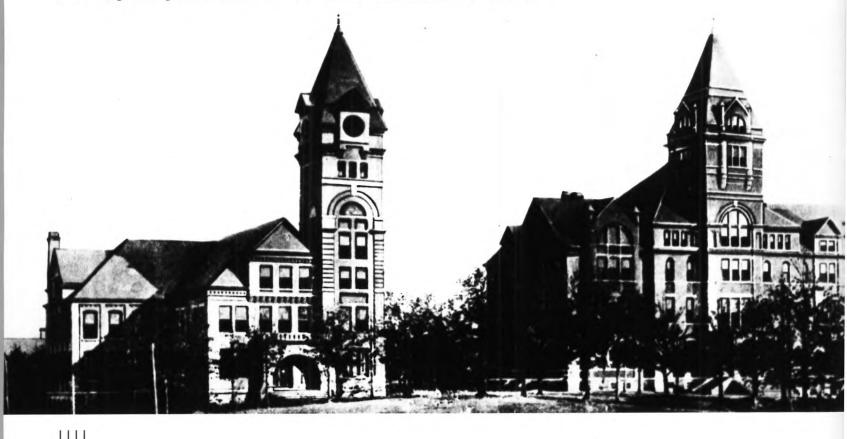
It was not until 1887, when the administration building was contracted for and built, that Tech obtained its first structure. In 1888 Dr. Isaac Hopkins stepped down from his position as president of Emory University to become Tech's first president. In the fall of that same year, Tech's doors opened to its first class which had 129 men enrolled. The list of faculty members that first year consisted of some names still common to Tech's campus.

Mechanical Engineering was the only curriculum offered until 1896, when Civil Engineering and Electrical Engineering were added to the list. With an appropriation from legislature and an \$8600 gift from Aaron French, special Textiles courses were added in view of the booming industry in the South. Also, in 1896, Captain Lyman Hall was chosen to become President when Hopkins resigned.

In 1905 Dr. Kenneth G. Matheson accepted the office of presidency of Tech when Hall resigned; he held that position through 1922. During this time several changes were made at the school. For the first time degree granting status was given to some of the departments. Prior to this, only certificates were issued. Evening classes began, involving the new cooperative education division, and the Engineering Experiment Station (whose name was changed to the Georgia Tech Research Institute in 1984), was authorized. Near the end of the Matheson term in office, the Board of Trustees authorized Tech to grant Master of Science degrees, beginning the graduate program. Furthermore, between 1905 and 1922, the student population grew from 501 to 2579 students.

TOP, LEFT TO RIGHT: Original faculty and staff with the faculty listed at bottom. The founding father of Tech, Nathaniel E. Harris. BOTTOM, LEFT TO RIGHT: Tech towers in 1888. Machine and wood shops in 1890.







#### Dr. Isaac S. Hopkins,

Captain Lyman Hall, Dr. W. H. Emerson, Mr. J. S. Coon,

Mr. Milton P. Higgins,

Rev. Charles Lane, Mr. R. B. Shepherd, President, and Professor of Physics Professor of Mathematics Professor of Chemistry Professor of Mechanical Engineering Professor of Mineralogy and Geology

Professor of English Professor of Drawing



#### **Guggenheim Grant Establishes Aeronautics Schoo**

The early twenties was the beginning of one of Tech's most productive eras. Dr. M. L. Brittain was Tech's president from 1922-1944. Brittain is still remembered best by the Gothic Collegiate style buildings which still remain on campus. The old physics building, which now houses social sciences and history, the old ceramics building, the Brown dormitory, and the Emerson addition to the old chemistry building are examples of this Gothic style. In 1933 Georgia Tech's commerce department was transferred to U.G.A., making room for the establishment of the industrial management department in 1936. Dr. Brittain also helped attain the last Guggenheim Foundation grant of \$300,000 which established the department (now school) of Aeronautics on campus. One of the lesser known but greater contributions of Dr. Brittain was his leadership in the movement which resulted in the University System of Georgia under the control of the Board of Regents. Dr. Brittain resigned at the age of 78 in 1944.

It was in 1944 when Georgia Tech acquired its first engineer as president. Dr. Blake R. Van Leer held office for the twelve years in Tech history referred to as "the Van Leer years" because of his many accomplishments. The campus area doubled in size during this period and also gave birth to Southern Tech, a two year technical vocational school. The Industrial Engineering department was also founded during these years. In 1946 the first Ph.D. degree program was authorized at the school, and the Electrical Engineering department soon produced Tech's first doctorate. Several other departments were authorized to grant Ph.D.s in succeeding years. In 1952 the men of Tech were no longer alone, for the first coeds were admitted. This was of course something we can not forget about "the Van Leer years," but the most visible change occurred during the changeover to the new administrative structure. As an effect of this change, the Georgia School of Technology became the Georgia Institute of Technology. The school was shocked and saddened when Van Leer met his death in 1956.

The school went without a leader until 1957 when Dr. Edwin D. Harrison became Tech's sixth president. The Skiles classroom building, the Radio and Engineering Laboratory, the EE building, the Frank H. Neely Nuclea Research Center, the Physics building the Space Science and Technology con plex, and the new infirmary were amon the buildings erected during the Ha rison term. More land area was added t campus during the Harrison term that any other president's term. New degree programs were started in Biology, Info mation Science, Nuclear Engineering and Psychology, and Southern Tec became a four-year institute. In 196 the first black students were admitte to Tech. In an administrative chang Harrison created the offices of vid president of Academic Affairs and three new academic Deans to report to th new V.P. This abolished the Dean of Faculties position and created th Deans of the Engineering College, th General College, and the College of Ir dustrial Management. In 1968 Dr. Ha rison resigned from the presidency.

TOP, LEFT TO RIGHT: After W.W. I a freshmen were required to enroll in R.O.T.C. Th Last Guggenheim grant paid for the school Aeronautics building. BOTTOM, LEFT TV RIGHT: In early days at Tech students did mos of their studying by candlelight. The Swan building originally housed Electrical Engineerin and a dormitory.









#### **Tech Leads in Innovative Research**

As we get closer to the present in the history of Georgia Tech's academics, we see a school still young in comparison to other institutes but stronger than most. Dr. Vernon Crawford served as acting president until Dr. Arthur Hansen was selected in 1969. Dr. Crawford was Dean of the General College and had just recently retired from the position of Chancellor of the University System of Georgia. Dr. Hansen was Dean of the Engineering College before he accepted his position as president. After only one year as president Dr. Hansen left Georgia Tech to accept the presidency of Purdue University.

In 1972 Dr. Joseph M. Pettit, previously Dean of the Engineering College at Stanford University, came to Atlanta to become the president of Georgia Tech. In 1975 the Architecture Department became the College of Architecture. Shifting its emphasis towards a graduate study program the College uses a four + two year curriculum. In 1980 the new architecture building was erected, and Southern Tech became an independent unit of the University System of Georgia. New additions to the campus include the College of Management and ISYE building, the new Woodruff dormitory housing 560 students, and the opening

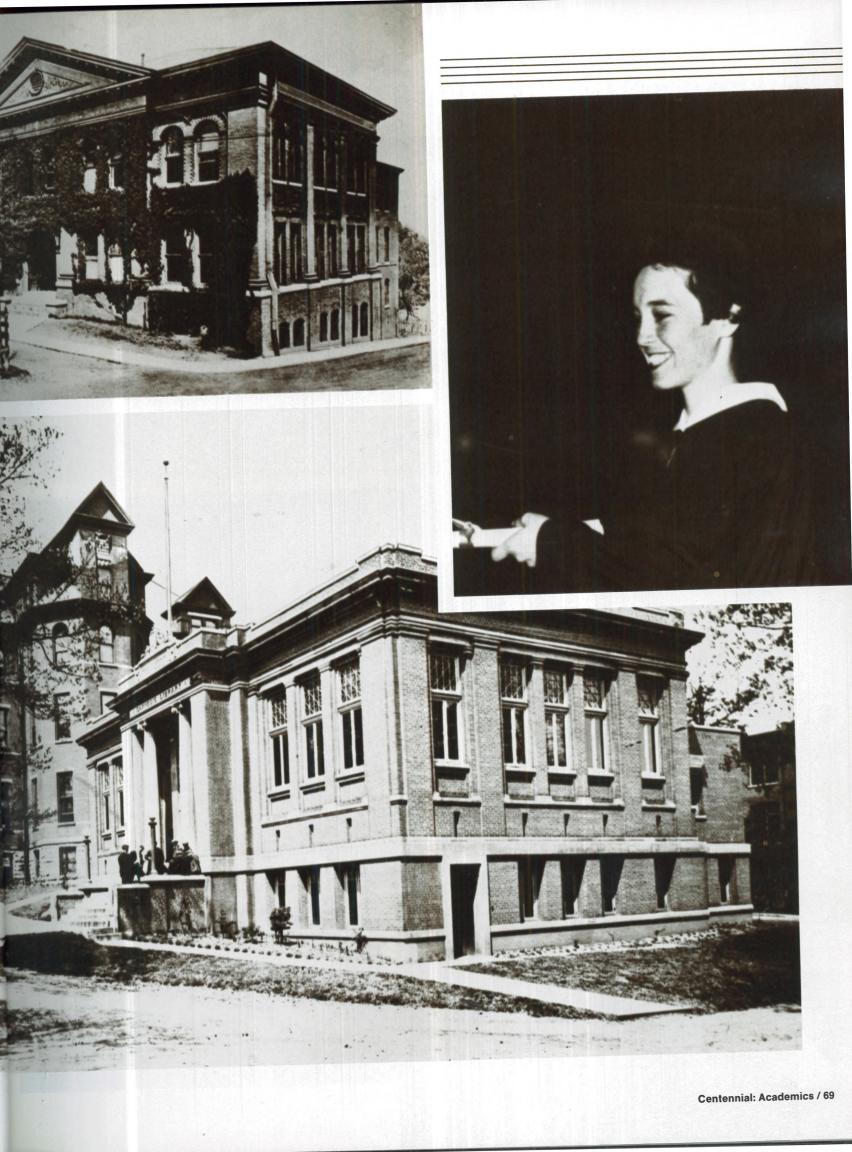
of the first building in the Advanced Technology Development Center this year. With over 6000 students in 1983, the College of Engineering had the largest undergraduate enrollment in the country. Total enrollment in the fall of 1984 was 10,956 of which 2228 were graduate students. With yearly research dollars totaling over \$95 million, research has become an integral part of education at Georgia Tech.

Soon to embark upon its second century of service, Tech continues to produce the world's top technical men and women. "Designing Tomorrow Today" being the theme of our centennial celebration, emphasizes Georgia Tech's position in world progress. A four month exhibition "China: 7,000 Years of Discovery" was hosted by Tech and the High Museum painting a portrait of Chinese scientific discovery. The leading institution in technological innovation and progress throughout the world for at least another century will undoubtedly be the Georgia Institute of Technology.

TOP, LEFT TO RIGHT: The Lyman Hall labs in the early 1900s. Elizabeth Herndon was one of the first women graduates of Tech. BOTTOM, LEFT TO RIGHT: The ME building and the Carnegie Library in 1920.















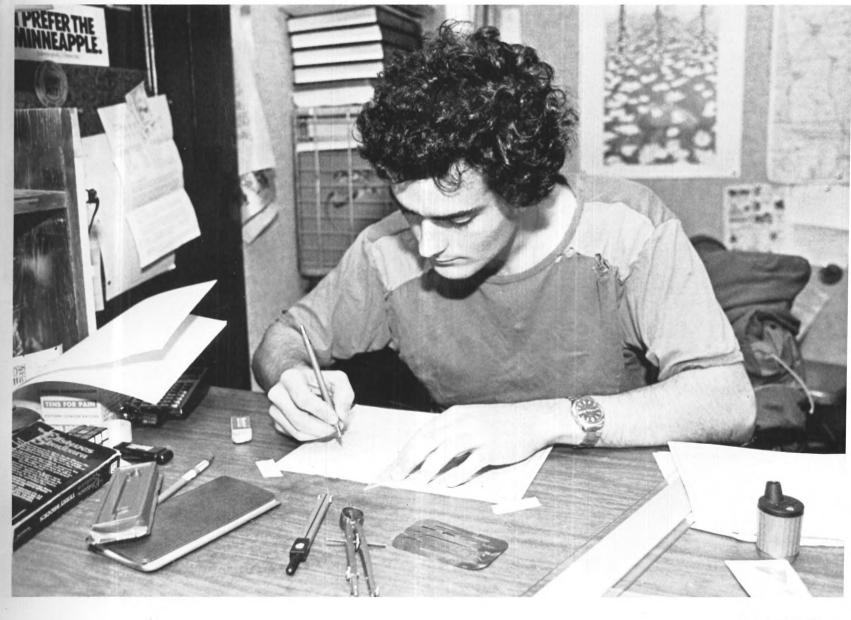
#### **Tech Is Known Around the World**

Throughout the world Georgia Tech is a highly recognized name. People may connect Tech with our fight song "The Ramblin' 'Reck'' or with our sports teams, which have won many championships and bowl titles over the years, but at the forefront of this recognition is the academic reputation of the Institute. Tech has long been known as being one of the most academically challenging schools of higher learning in the country.

Some colleges have strayed so far from their original purpose of education that in today's world the prestige of a college education is somewhat less than it was in the past. Many colleges have the reputation of producing great sports teams or of being party schools with mediocre reputations at the best. However the academic reputation of Georgia Tech has remained highly respected throughout our 100 years of existence.

We have earned this reputation through the high quality of our instructors and students. Only a minority of the people applying for admission are let in. Of those who enroll only 60 to 70 per cent eventually graduate. As new students are truthfully told at orientation - Georgia Tech is a hard school to get in to and even harder to get out of. The students who do earn degrees find it is worth the trials and tribulations they experience while at Tech. Alumni of Georgia Tech have had and continue to have a great deal of impact in the worlds of architecture, engineering, management, and science.

TOP, LEFT TO RIGHT: Co-ed studies for exam. Two students discuss class problem in the Music Listening room. BOTTOM: A late night in the library. Lab assignment discussed by lab partners. Engineering graphics homework.



#### DR. JOSEPH MAYO PETTIT, PRESIDENT Dr. Pettit Sends a Centennial Message for All Students

To all Georgia Tech students: Congratulations on completing another year of your ongoing education. Not your first year of education; not the last. Each year in one's life is important. It brings new experiences, new opportunities for growth and even adventure. This issue of the *Blueprint* provides a beautiful chronicle of another significant year of people and events at Georgia Tech.

To the graduating seniors: Congratulations on completing a major chapter in your life — one that you will always look back on with pride and pleasure. The college years are so very special. They seem lengthy when looked at from the start, and so short when looked back upon. A special chapter always to be remembered and cherished. As alumni you will share with thousands of other Tech alumni the special feelings that are held.

And to Georgia Tech herself: Congratulations on completing your first century. We all count ourselves fortunate to be here for your birthday. You've come through well, growing in beauty, wisdom and stature — with a lot of help from the fine people who have been here with you, and who helped in the building during those 100 years. Many happy returns!

moetter







#### ADMINISTRATION President's Staff Reorganized Facilitating Student Access



TOP, LEFT TO RIGHT: Dean of Students Staff: Bottom, Left to Right: (front) Miller Templeton, Director International Services and Programs; Jo Ivey, New Student and Parent Programs; Carole Moore, Asst. Vice-President, Student Affairs; Edwin P. Kohler, Assoc. Vice-President, Student Affairs; James E. Dull, Vice-President, Student Affairs; (back) James Strickland, Director Counseling and Career Planning; Nicholas Gordon, Director of Student Health; Gary Schwarzmueller, Director of Housing: Barry Birckhead, Asst. Dean of Students, Fraternity Affairs; Roger Wehrle, Director Student Center. President Pettit talks with staff. BOTTOM, LEFT TO RIGHT:

President's Staff: Bottom, Left to Right: Janice Gosdin-Sangster, Assistant to the President; Joseph M. Pettit, President; Henry Bourne, VP Academic Affairs; Clyde Robbins, VP Office of Planning; Homer Rice, Athletic Assoc. Director. Back, Left to Right: James Stevenson, Executive Assistant to the President; Jesse Poore, Assoc. VP Academic Affairs: Warren Heemann, VP Institute Relations and Development; J. W. Dees, Director of Contract Administration; Richard Fuller, VP Business and Finance; John Culver, Asst. VP Institute Relations and Development; Edwin P. Kohler, Assoc. VP, Student Affairs; John Gibson, Asst. to Pres. for Affirmative Action and Employee Relations. Cabinet Members discuss future plans.



#### **COLLEGE OF ARCHITECTURE**

#### **School Changes in Response to Professional Needs**

In the fall of 1908 Preston A. Hopkins was employed to teach classes and to initiate a curriculum in architecture. The new Department of Architecture conferred its first degrees in architecture in 1911.

Preston Hopkins remained only one year, but other heads of the school have had more enduring relationships with the College. The brief list of distinguished leaders includes Frances P. Smith (1910-1922), John L. Skinner (1922-1925), Professor Emeritus Harold Bush-Brown (1925-1956), Professor Emeritus Paul M. Heeffernan (1956-1976), and William L. Fash (1976-present).

During the following years academic degrees offered in the school changed in response to needs and demands of the building profession. The original degree first offered in 1911 was replaced in 1934 by two separate degrees which included a four year Bachelor of Science degree with a five year Bachelor of Architecture degree in either architectural engineering or design. In 1958 the four year degree of Bachelor of Science in Building Construc-

tion gave full degree designation to one of the former four year options. The present program in Industrial Design dates to 1952, but Industrial Design was introduced to Georgia Tech in 1940 under a three year \$10,000 grant from the Carnegie Foundation. The new program was housed in a space now serving as the hydraulics laboratory in the old Civil Engineering building. The timing was not favorable for a new program, however, because the Industrial Design students were all drafted during World War II, and when the three year grant period ended the program was discontinued. With a grant from the General Education Board a four year program in Industrial Design was reactivated in 1952 under the leadership of Hin Bredendieck, a graduate of the Brauhaus.

The present Architecture building, completed in 1952, gathered students together who formerly worked in 10 different locations including the A. French building, and houses on Cherry Street, Third Street, Plum Street and Uncle Heinie Way. An expansion to the architecture building complex was completed in 1980.

In response to administrative needs, the School of Architecture was separated from the College of Engineering and became the College of Architecture in 1975, with a dean and separate administrative staff.

The present enrollment includes 591 men and 200 women with a faculty of 61. At present the degrees offered by the College of Architecture include four year Bachelor of Science degrees in Architecture, Building Construction, and Industrial Design. Two year graduate degrees in Architecture and City Planning, and a Ph.D. degree, initiated in 1982, in Architecture and City Planning. The College also offers an extended Master of Architecture degree for students with an academic background other than architecture.

TOP: William Fash, Dean of the College of Architecture. BOTTOM, LEFT TO RIGHT: An Architecture student working on a class project. Several students gather around to see what a fellow classmate has been working on in their freshman lab class.







#### BUILDING CONSTRUCTION New Program Under Development

Building construction education at Georgia Tech was initiated primarily as an outgrowth of the nation's housing shortages brought about during the World War Il years. The first curriculum, structured on the semester system, was founded on the development of skills and abilities as a preparation for the entry into the building industry with direction towards "small house construction." The 1945-46 school catalog highlighted the educational initiative by stating: "This field is in need of and is now beginning to receive the attention of those that, by means of organization and with the aid of technological knowledge and ability, a new development may be about to take place which will provide the great masses of people with better homes."

As the country recovered from the war years, and technical advancements spurred increased and complex building developments, the "Light Construction" program was transformed from a single industry orientation to a broad base educational program encompassing all major areas of the construction industry. These included general contracting, architectural, and engineering construction services, specialty contracting, and specialized construction education these led to the establishment in 1958 of the current Bachelor of Science in Building Construction four year degree program in the College of Architecture.

Since 1958, Building Construction has continually grown and expanded into the current program which reflects the dynamics of the construction industry. The industry today encompasses a partnership of multidisciplined professionals responsible for bringing into reality the structures of our built environment.

An expanded program is now under development which will offer educational opportunities in entrepreneurial theories and practices and in the development of construction projects ranging from single facilities to multiple complexes of buildings.

The new study focuses on urban economic theories, planning legislation and regulations, and urban development methods applicable in land development and real estate investment. Emphasis is on the development and marketing of building projects in the context of contemporary planning at urban development issues. The graduate will be prepared to enter and advance in the entrepreneurial development area of the construction industry.

TOP, LEFT TO RIGHT: Dr. Dreger, Dir. of Building Construction. Industrial Design lab takes a great deal of concentration. *MIDDLE:* Marcia Bowden checks blueprint. *BOTTOM:* Students confer in class. Greg Cates gives presentation. Dr. Payne, *Dir. of Industrial Design.* 







#### INDUSTRIAL DESIGN Students Encouraged To Develop Diverse Backgrounds





Tech's Industrial Design program had its beginning in 1940 when it was listed as one of three options in what was then the Department of Architecture, which makes it one of the oldest programs of its kind in the country. The offered degree was an undesignated Bachelor of Science and worked in cooperation with the Textile, Ceramics, Mechanical, and Chemical Engineering Departments.

During World War II, the program was dormant. Industrial Design was reactivated in 1952 by Professor Hin Bredendieck, a graduate of Germany's famous Bauhaus and founder of the Chicago Bauhaus, later to become the Institute of Design at Illinois Institute of Technology. Professor Bredendieck totally reorganized the program, instituting Bauhaus principles which relied heavily on the use of a teaching shop in which the students developed and refined problem solving abilities in both design and materials. In 1958, the degree program became designated as Bachelor of Science in Industrial Design. Jack Seay, who had taught under Professor Bredendieck, took over directorship of the program upon Brendendieck's retirement in 1972 and continued the course charted by his predecessor.

In 1976, Lee Payne was brought in from professional practice to head up the program and was charged by Dean William Fash, who also came to Tech in 1976, with restructuring the curriculum. The new curriculum was approved in 1982 and first appeared in the 1984/85 General Catalog.

The current faculty is composed of professional designers with extensive experience in the field who encourage students to develop the diverse background necessary for identifying and solving today's complex design problems.

#### COLLEGE OF ENGINEERING

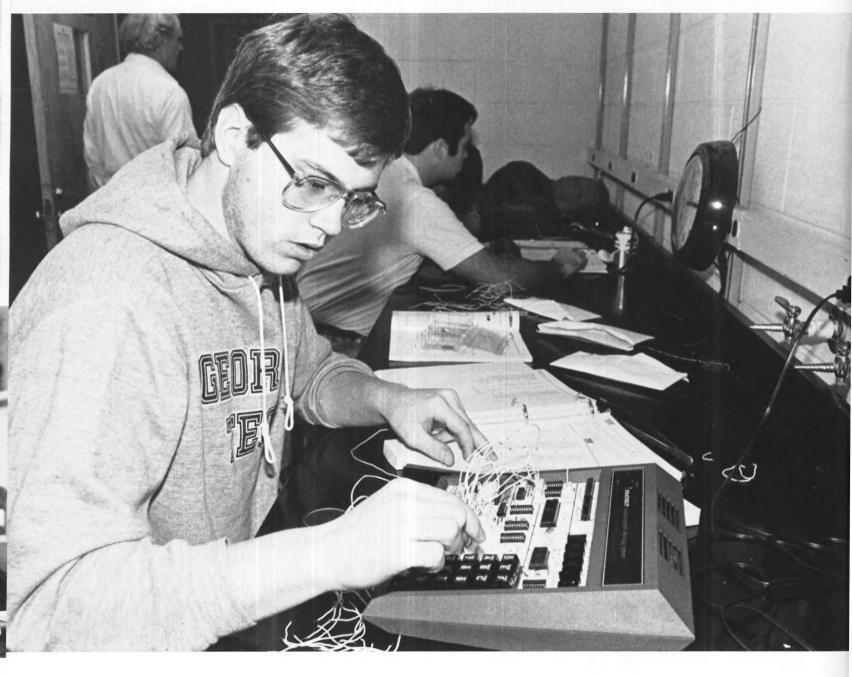
## **Materials Handling Research Center Established**

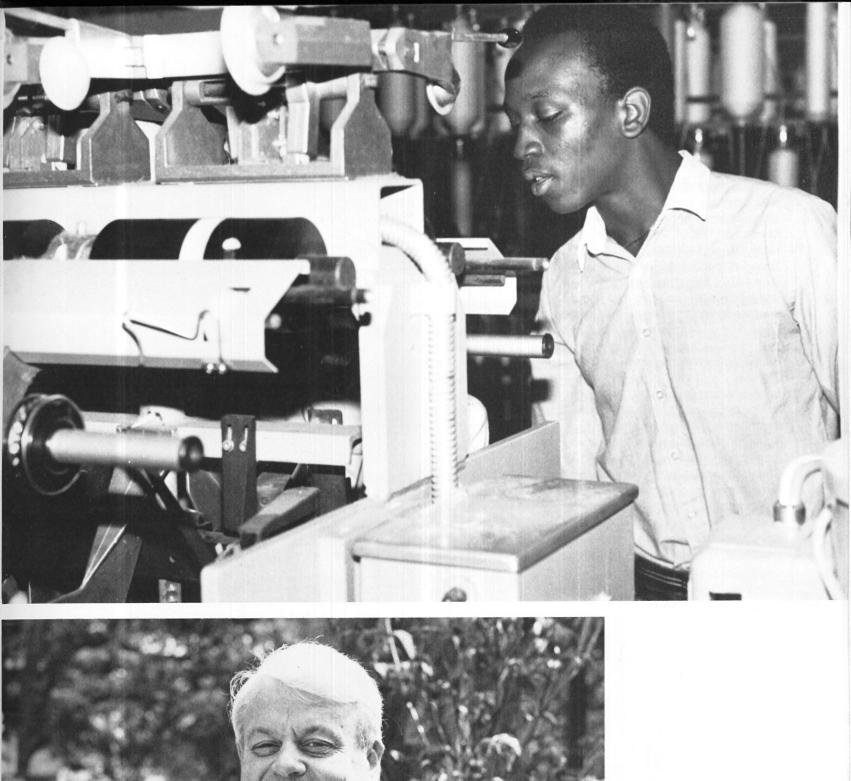
When Georgia Tech was founded in 1885 and began its first classes in 1888, only one program of study was available initially: Mechanical Engineering. Today the College of Engineering provides a diversity of educational opportunities through its nine schools. The first class of students numbered 129, all but one from Georgia. Today there are 7800 undergraduate students from fortyeight states and numerous foreign countries pursuing degrees in engineering. The college has been able to attract large numbers of excellent students. One of every seven National Merit Scholars to enter college in engineering in 1982 begin at Georgia Tech.

The college is one of the largest engineering colleges in the Unitd States. It is third in the number of Bachelor's level engineering degrees awarded and seventh in the number of Master's level engineering degrees awarded in the country. The School of Industrial and Systems Engineering and the School of Mechanical Engineering grant more Bachelor's degrees than any other college in the country.

The college has maintained its high level of sponsored research funding during a period of major reordering of national research priorities and funding sources. Support from individuals and industrial organizations continued to grow. One of the major research activities during the past year was the establishment of the Materials Handling Research Center. Twenty-three industrial organizations are providing annual support totalling \$690,000. The ongoing program involves faculty in several College of Engineering schools, the College of Management, the College of Science and Liberal Studies, and the Georgia Tech Research Institute.

TOP: This graduate student is testing the equipment which is used for several of the research projects the engineering college currently has. BOTTOM, LEFT TO RIGHT: Dean of the College of Engineering, William M. Sangster. Senior physics major Mike Fick works on his project in the Microcomputer design laboratory.







AEROSPACE ENGINEERING

#### **Research Awards Grow Significantly In Recent Years**

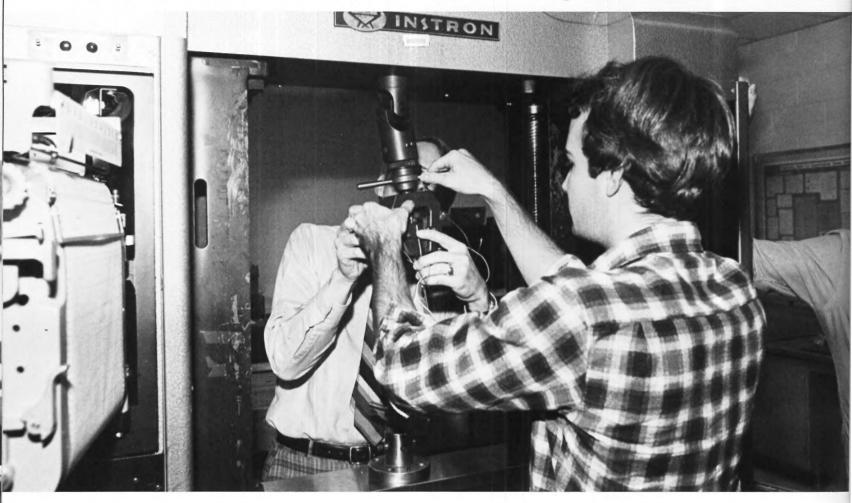
The School of Aerospace Engineering was originally established as the Daniel Guggenheim School of Aeronautics on March 3, 1930 when Georgia Tech received a \$300,000 grant from the Daniel Guggenheim Fund for the promotion of Aeronautics, Inc. The undergraduate program has been accredited for many years by the Engineer's Council for Professional Development and its successor, the Accreditation Board for Engineering and Technology. In the fall of 1984, there were 777 undergraduates and 103 graduate students in attendance. There are fiftyseven faculty and staff members.

During the early years, the number of faculty varied between five and eight. During the mid 1960's the student enrollment began to grow. As a result of this demonstrated growth, the potential for further growth, and the need to strengthen the graduate and research programs, the school received a special

allocation of quality improvement funds. By 1969, the enrollment had grown to over 900 students and there were twenty teaching faculty members. However, in the early 1970's, the demand for A.E. graduates began to fall precipitously, and in the mid 1970's, the enrollment had fallen to approximately 250 students. Concurrently, the faculty began to more actively search for research support. In spite of the national decline in the availability of research support, the faculty was able to compete and win research awards to the extent that there was almost an equally precipitous growth in research which has been maintained with additional growth since.

In recent years, strong international programs in combustion and propulsion and in computational fluid mechanics have been developed. Significant activity is currently being developed in the computer aided engineering/computer aided design area.







## CERAMIC ENGINEERING School One Of Only Eleven

The School of Ceramic Engineering was established in 1923 with A. T. Henry as the first director. In 1939, Professor W. Harry Vaughan became director. While he was director he collaborated with Professor Montgomery Knight (A.E.) and Professor H. A. Bunger (Ch.E.) to establish the Engineering Experiment Station, later becoming the first Head of the E.E.S. The School became dormant during World War II while the faculty served in the military. After the war the school grew and in 1964 moved into a new facility, the present Bunger-Henry Building. The old Ceramic Engineering Building presently serves as the Navy R.O.T.C. armory. Georgia ranks ninth in mineral production in the U.S. (excluding fuels) and the importance of the fine kaolin clay deposits for making ceramics and for paper coating underscores the need for education in the processes and products related to these minerals. Georgia Tech's School of Ceramic Engineering is one of only eleven accredited Ceramic Engineering programs in the United States.

TOP, LEFT TO RIGHT: Dr. Ducoffe, Director of Aerospace Engineering. Students work in Ceramic Engineering lab. BOTTOM, LEFT TO RIGHT: Dr. Bailey and student measuring elasticity of steel. Dr.-Pentecost, director of Ceramic Engineering.

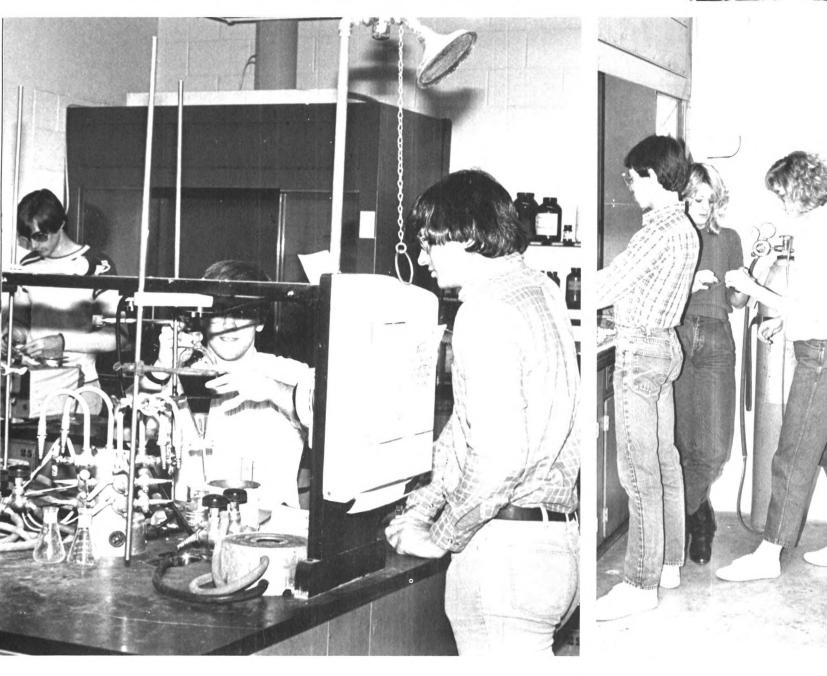


#### **CHEMICAL ENGINEERING Interaction With Industry Expands**

The School of Chemical Engineering grew from the basic chemistry curriculum. An Engineering Chemistry Program was published in the 1900-1901 catalog. In addition to chemistry and chemical engineering topics, areas such as metallurgy, dyeing, mechanics, electricity, minerals, and industrial processes were included. The 1929 catalog listed a B.S. in Engineering Chemistry, and the 1930 catalog indicated a B.S. in Chemical Engineering could be obtained from the Chemistry Department.

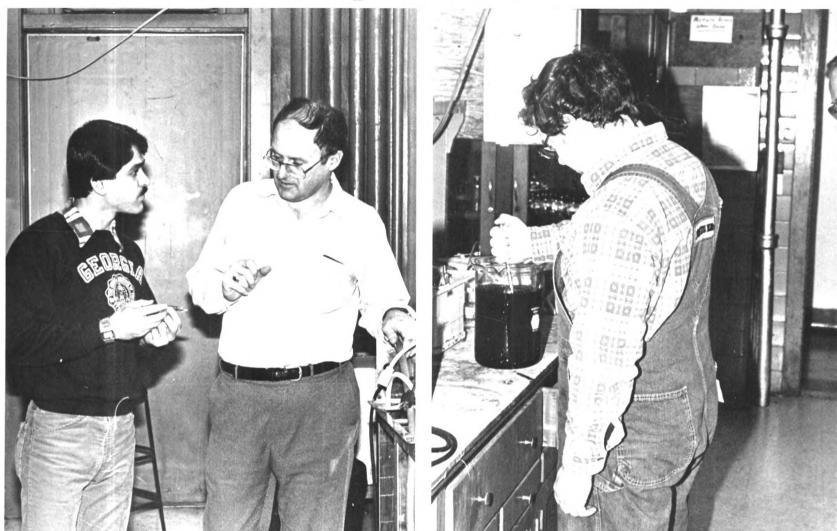
The first head of the Chemical Engineering Division was Dr. Harold Bunger, who started at Tech in 1929. The name of the unit was changed to the Department of Chemistry and Chemical Engineering in the 1930's. The department was headed by Dr. Boggs with Dr. Bunger continuing as the head of the Chemical Engineering Division. Both Boggs and Bunger died in 1941 and the two divisions were split, forming separate departments. A reorganization took place in 1948, and the name was changed from "Department" to "School." In recent years lab facilities were updated, and a modern computer system was installed for teaching and research. Research activities have expanded considerably as have interactions with industry. The school looks forward to continued progress in Tech's second century.

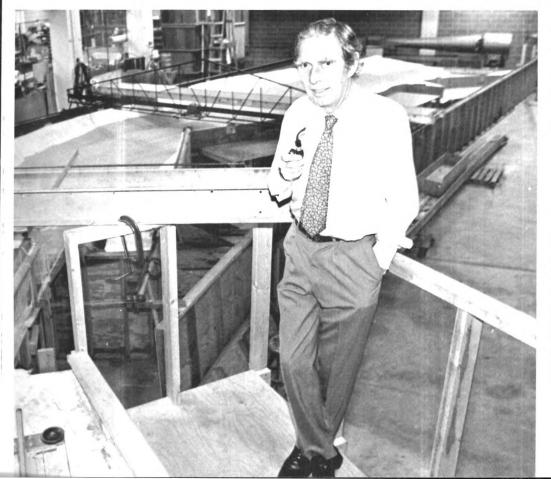




#### CIVIL ENGINEERING

## **Professional Horizons Expanded With Additional Studies**





Courses in Civil Engineering began to appear on the Georgia Tech campus in the early 1890's. Demand for the courses grew and in 1896 the Department of Civil Engineering was formally established. Growth was steady over the next fifty years, and the department obtained school status when Tech was reorganized in 1948.

A graduate with a Bachelor of Civil Engineering degree from Tech is able to enter professional practice as an engineer or continue his or her studies in programs for advanced degrees in such areas as: construction, fluid mechanics, soil mechanics, hydraulics, transportation, and water resources planning and development.

TOP, LEFT TO RIGHT: Dr. Poehlein, Director of School of Chemical Engineering. Student gets advice from instructor in Civil Engineering lab. Another student uses larger beaker and pipet in his C.E. lab. BOTTOM: Organic lab. Students work in groups. Dr. Fitzgerald, Director, School of Civil Engineering.

## **Coming Decade to be Exciting and Challenging Period**

Although the first degree programs at Georgia Tech were in Mechanical Engineering, courses in physics and electricity were taught from the very beginning. It soon became apparent that electrical engineering was a major subject in itself. As a consequence, the Department of Physics and Electrical Engineering was formed in 1896 as Tech's second department; the two were split into separate departments in 1902.

The first electrical engineering building, now known as the Savant Building, was completed in 1901. This remained the home of the Department of Electrical Engineering until 1962 when the present building was completed.

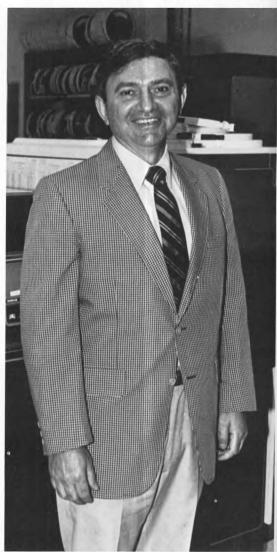
In 1913, the department was operating an experimental wireless telegraph station, 4XG, with an output of 3.5 KW. Electrical Engineering seniors operated the facility. In the 1920's, the station grew to be a 500 watt "radio telephone" station. The call letters of WBBF were changed to WGST for Georgia School of Technology. The station was later sold and is still operating in the Atlanta area.

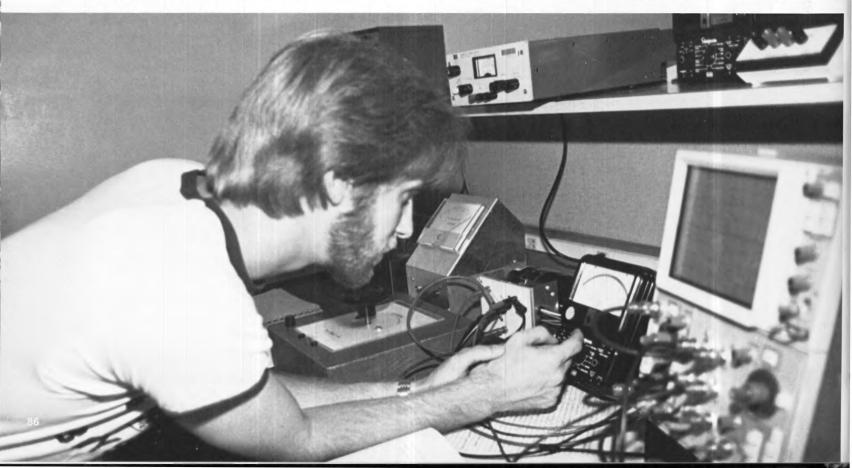
The commencement program in 1897 records the presentation of three bachelor theses, one of which was in Electrical Engineering. By 1933 a master's level graduate program was well underway as evidenced by the three master's degrees awarded in Electrical Engineering. The school later made plans to offer the doctorate in Electrical Engineering, and in 1951 three students took the first qualifying examinations for a Ph.D. The first Ph.D. was awarded in 1953, and the doctoral program in the school became a firm reality.

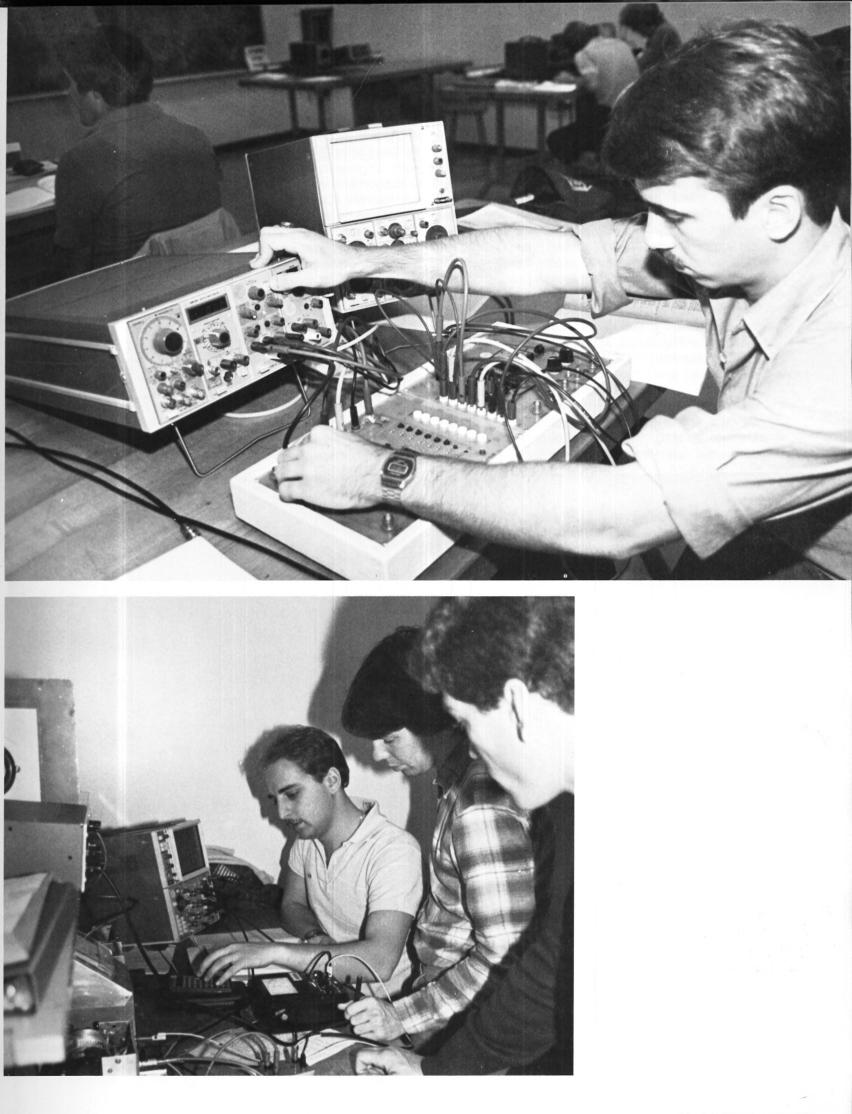
The next decade is going to be an exciting and challenging period for the school. Microprocessors and the underlying microelectronics technology, which will permeate classical electrical engineering arenas and create new ones, will be the dominate force. The successful electrical engineering educational programs in the coming decade will be those which can assume research leadership roles in defining new technologies and their creative application in classical areas, and which can synthesize instructional programs appropriated to the changing nature of the discipline.

The school is well-positioned to continue its historic leadership role in electrical engineering education. A development plan, formulated during this year and in the process of implementation will enable the school to meet the exciting challenge of the coming years.

TOP, LEFT TO RIGHT: Dr. Demetrius Paris, Head of the School of Electrical Engineering. Student at work in his EE lab. BOTTOM, LEFT TO RIGHT: Marc Montgomery in his lab. A student takes time for a calculation.







#### **ENGINEERING SCIENCE AND MECHANICS**

## The First Mechanics Courses Taught at Tech in 1888

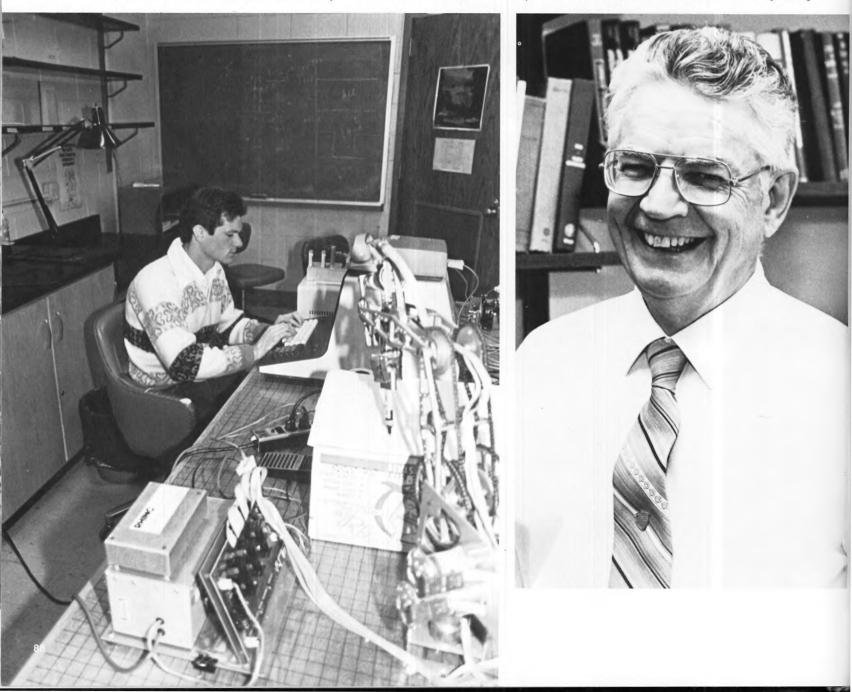
The evolution of instructional and research programs in the areas of Theoretical and Applied Mechanics at Georgia Tech has followed a pattern that is quite similar to that which has been followed in many other institutions of higher learning in this country. The first catalog of Georgia Tech (1888-89) indicates that the Mechanics courses were taught in the Department of Mechanical Engineering. This practice continued until the academic year 1909-10 at which time this responsibility was divided between Mechanical Engineering and the Department of Experimental Engineering. This arrangement lasted for ten years despite the fact that it was unsatisfactory in many respects, primarily because it resulted in conflicts of interest and duplication of courses. In 1920, a new Department of Mechanics was formed, and essentially

all of the Mechanics offerings were deleted from the Mechanical Engineering and Experimental Engineering Departments. A new department, named the Department of Machine Design was established in 1921, and operated until 1933, when the department was redesignated as the Department of Engineering Drawing and Mechanics. In 1948, at the time Tech was renamed the Georgia Institute of Technology, the Department became the Division of Engineering and Mechanics. This involved no significant change in administration or in course offerings.

In 1959, the undergraduate degree of Bachelor of Science in Engineering Mechanics was initiated and the departmental designation was changed at that time to the School of Engineering Mechanics. In 1963, a new Department of Engineering Graphics was established, thus relieving the School of Engineering Mechanics of its responsibilities in this area of instruction. In 1968, the school adopted its present name, and at the same time, changed its undergraduate degree designation to "Bachelor of Engineering Sciences."

During the history of Mechanics Departments at Georgia Tech, under its various names, there have been only three different department directors: Professor C. E. Coolidge (1920-1935), Professor W. B. Johns (1935-1962), and Dr. M. E. Raville (1962-present).

TOP: Dr. Turbak, Director of Textile Engineering School. BOTTOM, LEFT TO RIGHT: Jay Humphrey busy at work in his ESM lab. Dr. M. E. Raville, director of the School of Engineering Science and Mechanics. Two students working on a loom in their lab work in the School of Textile Engineering.





# TEXTILE ENGINEERING School remembers Aaron French

Textile Engineering at Georgia Tech began in 1897 when the Georgia General Assembly appropriated \$10,000 for establishing a Textile Department at Georgia Tech. The appropriation was subject to the conditions that others match the amount in money and machinery. The condition was met with a great deal of help from Aaron French and in commemoration of his generosity the Textile Department was named the A. French Textile School.

Classes began in 1899. The first degrees in textile engineering at Tech were conferred in 1901. Since then the scope of instruction has been broadened and the school has developed into a definite asset to the textile industry in Georgia and the Southeast. Many of the graduates of the Textile Engineering School have developed the textile industry into the largest industry in the state.

As the demand for textile engineers grew, the need for a new building became apparent. In 1949 the present Textile Engineering Building was completed and the school moved from the A. French building. Today's textile students participate in business ventures including the planning, organizing, producing and marketing of a variety of textile products, to both Tech students and the surrounding community, and each is exposed to the many different facets of the textile business environment.



## INDUSTRIAL AND SYSTEMS ENGINEERING Research Facility Nation's Largest

In response to the content of a 1911 commencement address, Georgia Tech began offering the first industrial engineering courses in 1913. By 1923 a curriculum in industrial engineering had evolved from these early courses. At that time only junior and senior students were eligible to participate in the program offered as an option in the Department of Mechanical Engineering. In 1945 the Department of Industrial Engineering separated from the Department of Mechanical Engineering. The Department granted its first Bachelors degree in 1946 and its first Masters degree in 1947.

In 1948 the Department became the School of Industrial Engineering. In the same year Georgia Tech became the home of two new professional and educational groups — Alpha Pi Mu, the industrial engineering honorary society, and the Journal of Industrial Engineering, the national publication of the American Society of Industrial Engineers.

The years following World War II brought significant growth and develop-

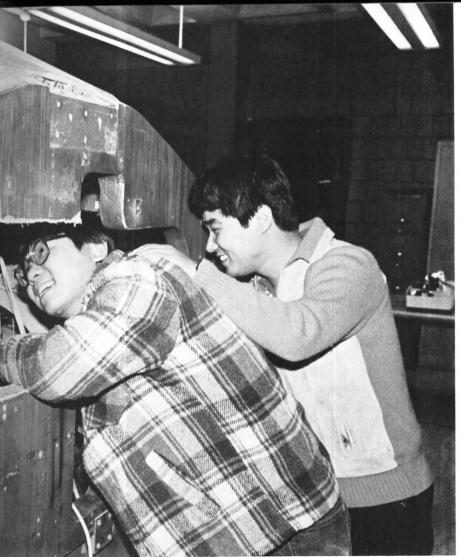
ment in the school. In 1958 the doctoral program was approved. In response to innovation in technology, in the late 1960's the school changed its name to the School of Industrial and Systems Engineering to more accurately reflect the focus of its curriculum. The school continued to grow throughout the 1970's and today not only enrolls the fourth largest number of students at Georgia Tech, but also the largest number of industrial engineering students in the entire United States.

In 1983 the school moved from the old A. French Building, that had housed it since 1952, into a \$10,000,000 complex on West Campus that is shared with the College of Management. This gives it the newest and largest research facility in the United States.

*TOP, LEFT TO RIGHT:* Students work on flight simulator. Dr. Thomas, *Director of Industrial and Systems Engineering.* Work on simulation lab. Personal computer opens new doors for this Industrial Engineering student. A lecture in a special projects class.

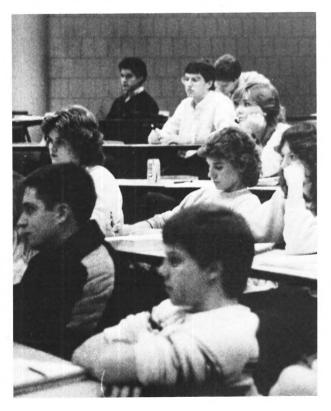












#### MECHANICAL ENGINEERING

## School's Graduates Highly Sought After in Industry

Georgia Tech's beginnings are Mechanical Engineering's beginnings. The very first class at the Georgia School of Technology in 1888 was made of up 129 mechanical engineering students. The memorable Professor John Sayler Coon was M.E.'s first Head, and he saw to it that ME courses were challenging from the start, so challenging that only twenty-eight of the original 129 member class eventually earned degrees. According to one student, R. H. Lowndes (Class of 1903), Dr. Coon declined several lucrative job offers from industry during his years at Tech, preferring instead "To live among you people, you boys, whose hair I ruffle, and whom I drag down and mop the floor with, and often seem to hammer a bit too hard (then maybe it is hard enough). But you must remember that the best steel which engineers make use of comes out from under the hammer."

Mechanical engineering was the only degree program offered at Tech for

several years. The first students took courses such as forging, woodworking, and mechanical drawing in what is now Tech's Administration Building and in two facilities which no longer exist, the Old Shop Building and the foundry shop.

The first curriculum was modeled after that of the Worcester Free Institute in Massachusetts with its successful commercial shop system. Founders hoped that the items produced in the mechanical engineering shop classes would help produce income for the struggling new Georgia School of Technology.

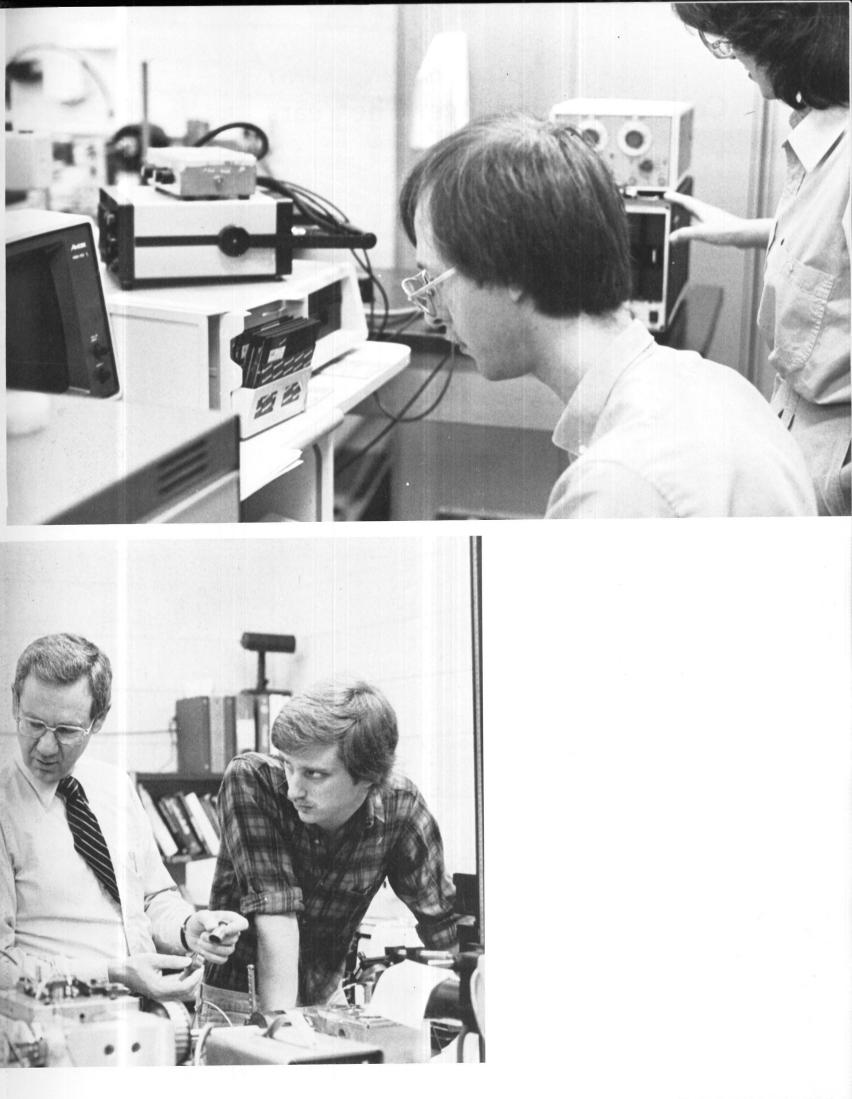
Because the School of Mechanical Engineering has continued to address the most current technologies, the need for educating that sort of "practical scholar" has changed little since the late 1800's. Today, the school's mechanical engineers, nuclear engineers, and health physicists are highly sought after because they move easily between theory and application, they are versatile, and because their professional concerns — the understanding and control of energy, mo tion, and materials — are timeless an universal.

The School of Mechanical Engineerin is celebrating the Centennial with severa achievements and significant changes new or renovated undergraduate laboratories, new opportunities for facult collaboration through the recent merge with Nuclear Engineering and Healt Physics, strengthened collaboration with industry, and the adition of several highly qualified faculty.

Though the challenge of providing a sufficient number of faculty and quality in structional and research facilities remains great, the school is looking forward to a second century of preparing students to lead the country in engineering and scien tific achievements.

TOP: Graduate student Jan Griffioen works with a microcomputer interfaced with lab equipment BOTTOM, LEFT TO RIGHT: Dr. Brighton, Directo of the Mechanical Engineering Department. Dr Winer and graduate students discuss a problem.





#### COLLEGE OF MANAGEMENT College Changes Over The Years

The present College of Management at Georgia Tech had its beginning in 1913 when the School of Commerce was organized. In 1933, the School became the Atlanta Division of the University of Georgia (now Georgia State University), and was replaced by the Department of Industrial Management. In 1948, this department became the School of Industrial Management. College status was achieved in 1969 and the College moved into its permanent new building in 1983.

The College of Management, now ranked in the top forty nationally, enjoys a unique academic environment within one of the leading science and engineering institutions in the world. Technology and its applications are the hallmarks of this institution, with management providing the vital link between the technologically feasible, and the economically practical.

The College enrolls 1,000 undergraduate students, 150 Master's students, and 15 Ph.D. students. Some forty faculty teach accounting, economics, finance, management, management science, marketing, and organizational behavior. Marketing, accounting, and management science have recently been designated as academic areas of special strength and faculty resource concentration.

The complete management curriculum offered by the college produces 15% of all Georgia Tech graduates, the highest percentage of any academic unit at Tech. Many of these graduates now serve as presidents or CEO's of America's leading companies. The success of the college is largely due to the very high-quality level of its students, its dedicated faculty, its applied and practical orientation, and the continuing support of alumni and friends.

TOP, LEFT TO RIGHT: A student working on her 3050 project in the computer lab. Dr. Day, *Dean of the College of Management. BOTTOM, LEFT TO RIGHT:* Dr. Adler tries to get a correct answer in his Personnel Management class. Students in 4140 class try to take notes and answer questions. Dr. Naoao in 3100 class.

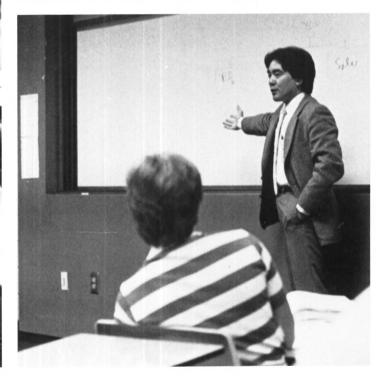












**ECONOMIC** 

#### **Program Enhances Student Ability to Analyze Problem**

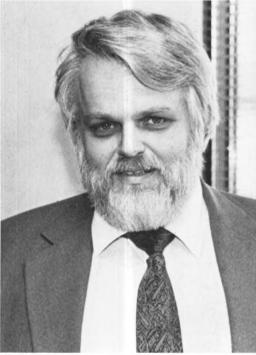
Classes in Economics were originally taught in the Department of Economics and Social Science. When Tech reorganized in 1948 and changed from the Georgia School of Technology to the Georgia Institute of Technology, the department was split and the teaching of economics courses went to the Department of Industrial Management. The Department of Industrial Management grew and is now the College of Management.

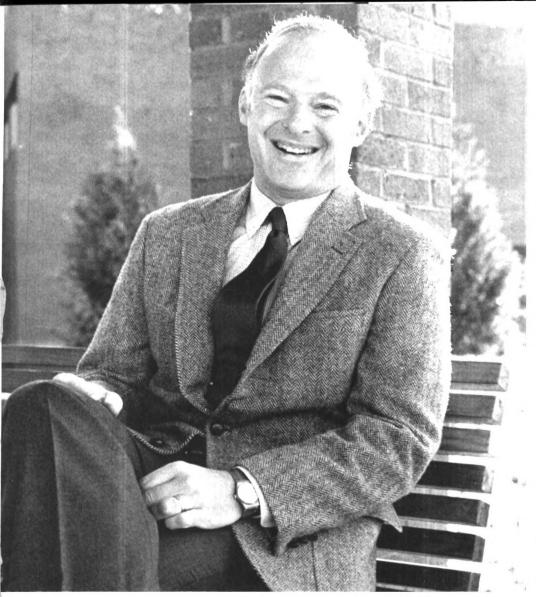
Although many people do not realize Tech offers a degree in Economics, approximately forty students are presently pursuing undergraduate degrees. The program in economics, based on the management core curriculum, gives students the ability to analyze complex economic problems and to understand policies for their solutions. The curriculum requires a background in mathematics, statistics, and economic theory. This prepares the students for advances that have been made in the field of economics in recent years.

TOP, LEFT TO RIGHT: Students pay attention in an economics class. Dr. Sobel, *Head of Management Science. BOTTOM:* Basic economics courses are always full. Dr. Tarpley, *Head of Economics.* Student learns about management science models through use of computer.







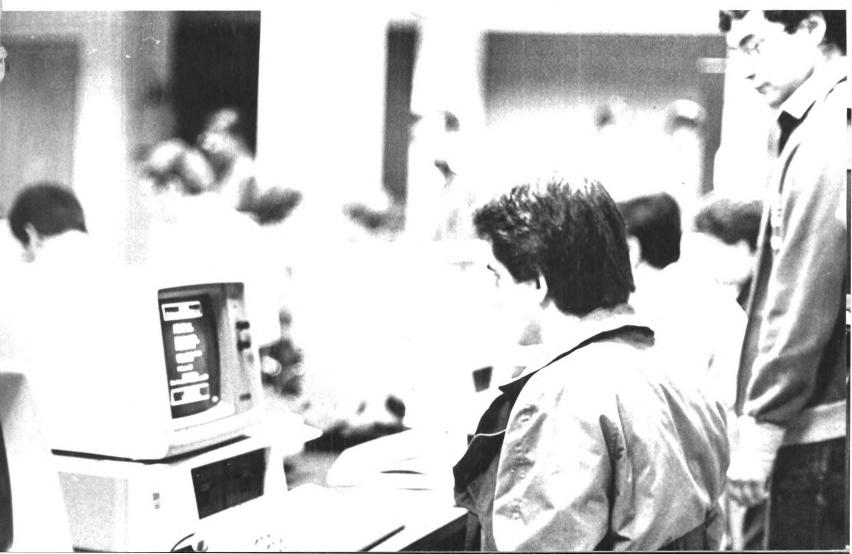


## MANAGEMENT SCIENCE Models Used in Other Disciplines

Management science has had an increasingly great impact on the management of organizations in recent years. Management science models are widespread in use in both private and public sectors. Because of the significant impact of management science, there has been a steadily increasing demand for academic programs devoted to fostering research and professional education in this new field.

The College of Management offers academic programs in management science at the undergraduate and the graduate level. The faculty of the college includes specialists in management science and others who apply management science in such areas as accounting, finance, marketing, organizational behavior, business policy, economics, and production management.

Most practitioners of management science are employed by large organizations in manufacturing and service industries, by government agencies and the military, and by consulting firms that assist the management of other organizations.



#### COSALS

### Classroom/Laboratories Aid in Computer Instruction

The College of Sciences and Liberal Studies was given its present name in 1975, being formerly known as the General College. As both names imply, the College has traditionally been responsible for a broad mission in both education and research.

The degree programs of the College have evolved as the institution has evolved. In particular, degrees in the natural sciences and mathematics were initiated as the educational programs in engineering became increasingly more science based. This development paralleled a national trend. Today, strong engineering programs and strong science programs go hand-in-hand at excellent universities.

A continuing tradition in the College is the emphasis which humanities and social science courses place on the connections between and among science, technology, and society, as well as on the social context in which scientists and engineers work.

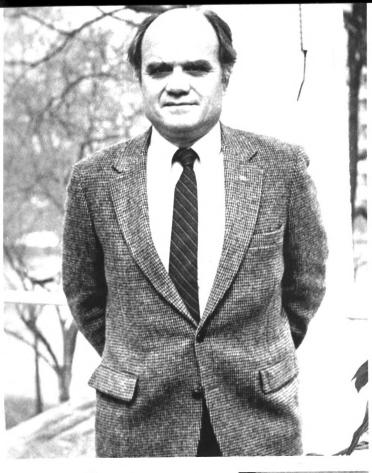
One of the recent developments in the College is characteristic of its forwardlooking educational endeavors. It is the goal of the college to integrate modern information technology into all of its courses. A highly visible aspect of this development is the recent opening of three new classroom/laboratories for computer supported instruction. The computer workstations in these facilities simultaneously serve as modern tools-ofthe-trade and tools to enhance the processes of learning and teaching.

The most recently established degree programs in the College, Information and Computer Science and Applied Biology, reflect the rapidly changing technological developments of our external environment.

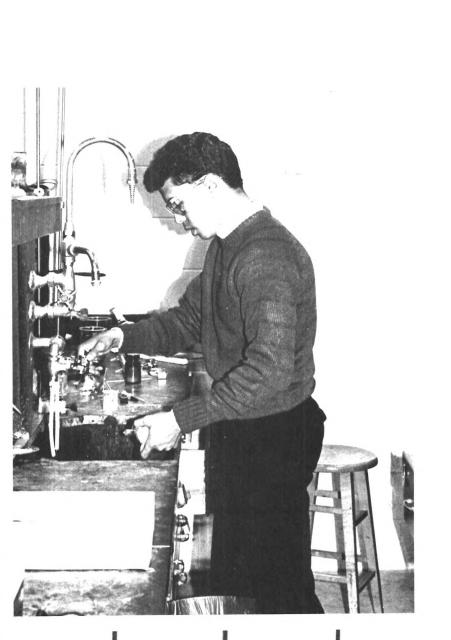
The research mission of the College has had its main development in the second half of Tech's first century. This mission is intimately connected with the educational mission. The research is essential to the process of keeping the College's course up-to-date, and it comprises the heart of the Ph.D. programs. Moreover, the research mission, through its contribution to the discovery of new knowledge and applications thereof to technology, connects the College with the national scientific world and with industry. Research programs of the College have a broad range and significant impact.

TOP, LEFT TO RIGHT: Les Karlovitz, Dean of COSALS. Student hard at work in an Organic Chemistry lab. BOTTOM, LEFT TO RIGHT: Student works in Physics lab. Chemistry student conducts experiment. I.C.S. lab proves challenging.











#### **BIOLOGY**

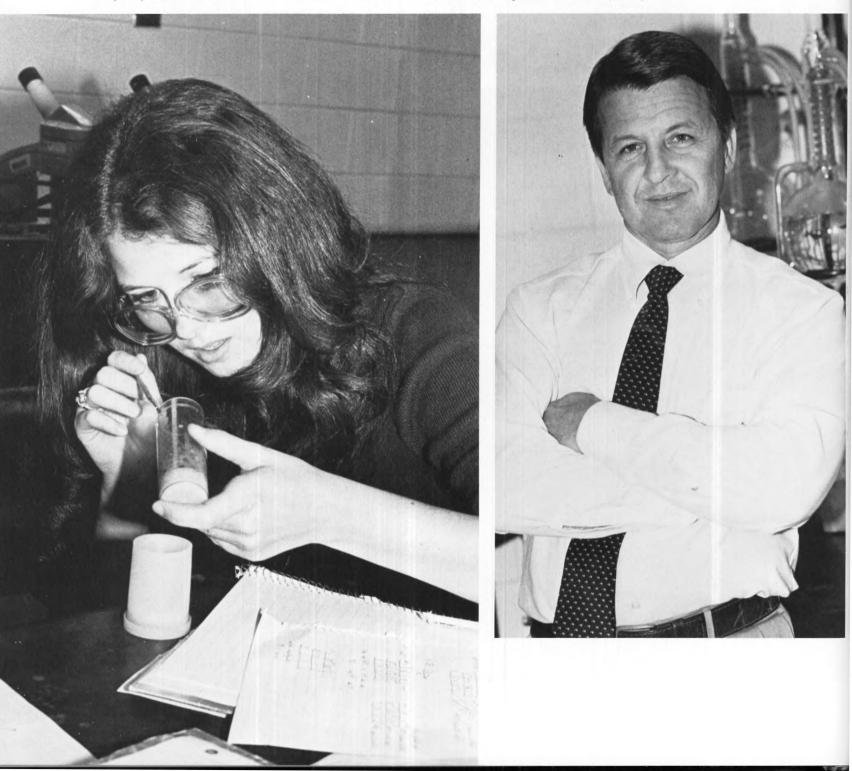
### **Today's Program Places Emphasis on Biotechnology**

The School of Applied Biology was established at Tech in 1959, replacing the Department of Public Health. The School offered B.S. and M.S. degrees, emphasized industrial microbiology and the application of basic biological principles and techniques to contemporary problems in the fields of public health and bioengineering.

In 1972 the Applied Biology program was expanded to emphasize environmental sciences and animal physiology, following increased activity in premedical training. The enrollment of undergraduate majors peaked in 1975 at 250 students. In 1975 the enrollment steadily declined until 1982 when it bottomed out at 70 undergraduates majors.

In 1981 the academic program was again revised to focus on the original concepts of Applied Biology. Today's program has its emphasis on biotechnology which incorporates recent advances in fermentation technology, genetic engineering, biomass utilization and biochemistry in a multidisciplinary approach to the biological synthesis of desired products. The School has now completed the construction of specialized laboratories for the teaching of fermentation and cell immobilization technologies and genetic engineering. Premedical training remains as an inherent part of the program. Students have the opportunity to pursue a minor in the biotechnology major with options in physiology, ecology, or biochemical and environmental engineering. The undergraduate enrollment in fall of 1984 was 164 majors.

A Ph.D. program was established in 1982. The current thirty full-time graduate students are conducting research in the basic sciences that integrate biological, chemical, and process engineering principles.





### *снемізтку* Nobel Speaker

Chemistry has always played an important part in the education of the Tech student. Established in 1906, the School of Chemistry occupies a portion of the Lyman Hall Laboratory Building and the entire Boggs Building. The department offers a flexible undergraduate program that allows students to tailor their courses of study to their particular interests. Many chemistry undergraduate students take advantage of this flexibility to complete the requirements for entry into medical or dental school. Others choose to jointly enroll with Georgia State University to earn their teaching degrees.

Undergraduates may devote elective hours to research projects conducted with faculty members. The results of these collaborations have been impressive. More than twenty papers with undergraduate co-authors were presented at meetings or published in the last three years.

The department sponsors weekly graduate and undergraduate seminars that feature speakers from industry as well as faculty members from Georgia Tech and other universities. Each year the W. M. Spicer Lecture is given by a prominent chemist and is aimed specifically at undergraduate students. This occasion is also used to recognize the outstanding rising senior in Chemistry. A recent speaker was 1979 Nobel Prize winner H. C. Brown.

TOP, LEFT TO RIGHT: Lab partners in Organic Lab. BOTTOM: Biology student works on experiment. Dr. Tournabene, Director of Biology. Dr. Pierotti, Director of Chemistry. Student in lab.





#### **ENGLISH**

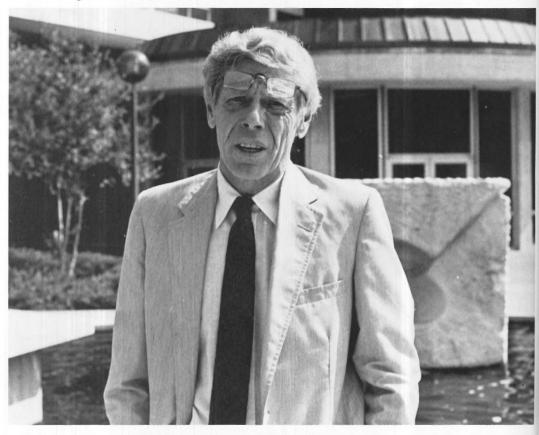
### **Students Attracted by Courses in Southern Literature**

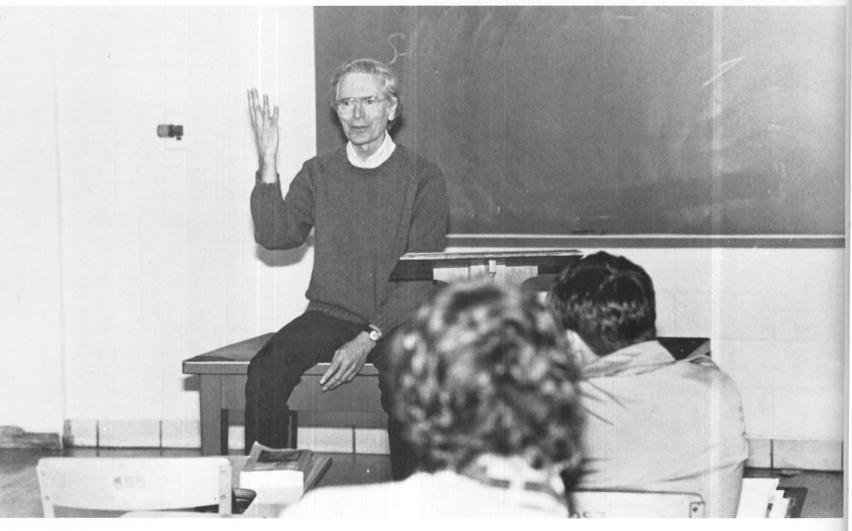
The English Department at Georgia Tech was begun in 1888 when the Reverend Charles Lane of Macon was hired as its first professor. Students were required to complete four full years of English. Later this was changed to two years, while today students must fulfill eighteen hours of humanities credit.

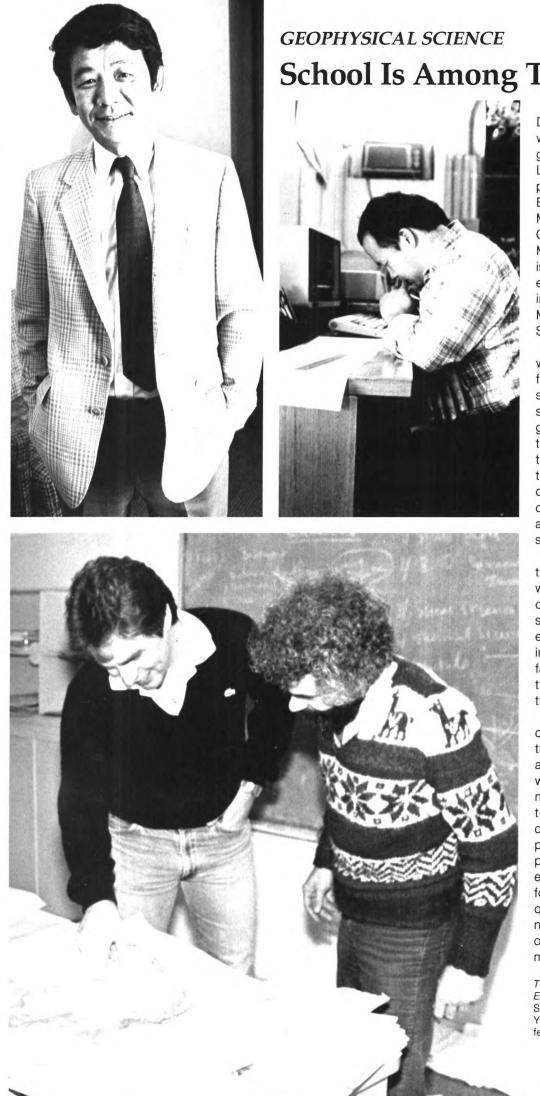
Tech's third president, Kenneth G. Matheson, is credited with establishing the Institute's first library. Near the turn of the century as a professor in the English Department, he donated his classroom to be used as the facility.

No degree of English has ever been offered at Georgia Tech, but a certificate in one of four programs of related courses is offered today.

The program areas were selected with Faculty and student's interests and abilities in mind. To take advantage of Tech's Southern locale, the American Literature program contains a Southern Literature track. Among the more popular in this series has been Dr. O'Brien's "The Civil War in Literature."







# School Is Among Tech's Youngest

Georgia Tech had a one man Geology Department on the 1930's and 1940's which offered courses in support of programs in several degree granting schools. Later the geology program was incorporated into the School of Ceramic Engineering. In the early 1960's, Dr. Lane Mitchell, Director of the School of Ceramic Engineering, and Dr. Jesse Mason, Dean of the College of Engineering, chose Dr. Charles Weaver to establish a program of graduate courses in geoscience. In 1967 a new program, Master of Science in Geophysical Sciences, was approved.

The School of Geophysical Sciences was established in 1970. At the time of its founding, the school offered programs of study leading to the Master's degree for students specializing in geochemistry, geophysics, and some areas of geology that are closely related to these. A doctoral program was approved shortly after the school was established. Research in oceanography at the Skidaway Institute of Oceanography in Savannah, Georgia is an option that many students in the school have chosen.

A major addition to the program and the faculty of the school began in 1977 with the approval of graduate programs of study in atmospheric sciences. With strong support from the administration to establish a top-ranked research program in atmospheric sciences, the size of the faculty was doubled in a few years and the magnitude of the research activity in the school was greatly increased.

The graduate programs of the school currently offer a broad range of opportunities for students interested in physical and chemical studies of the earth, its waters, and its atmosphere. The atmospheric sciences program emphasizes three basic elements: atmospheric chemistry, atmospheric dynamics, and physical meterology. Specific research problems range from studies of modern environmental problems (acid rain, other forms of water and air pollution, earthquake activity, geological disposal of nuclear wastes) to fundamental studies of the structure and dynamics of the atmosphere, hydrosphere, and lithosphere.

TOP, LEFT TO RIGHT: Dr. Van Norstrand, Dir. of English. Dr. Kiang, Dir. of Geophysical Science. Student contemplates a problem. BOTTOM: Dr. Young giving a lively lecture in English 3059. Professor and student in Geophysical Science.

#### INFORMATION AND COMPUTER SCIENCE ICS Strengthens The Computer Communications Labs

At the youthful age of twenty-one, the School of Information and Computer Science is one of Tech's most dynamic and fastest growing schools, with an enrollment of 606 undergraduate majors, 179 master's students, and fifty-seven doctoral students. The staff has expanded greatly in recent years; the School now employs twenty-eight faculty members and eleven professional staff members.

The school's history began in the fall of 1963 when it opened as the School of Information Science, offering the world's first designated degree program in information science. One year later, Vladimir Slamecka became the school's first director, a position he held for fourteen years.

Initially, the school offered only the degree of M.S. in Information Science; the first M.S. was awarded in December, 1964. The school inaugurated its doctoral program in 1967, awarding the first Ph.D. in 1970, when it broadened its programs and changed its name, becoming the School of Information and Computer Science.

The school first offered an undergraduate major in 1972; the first graduating class in 1974 had only five members. Undergraduate enrollment has grown rapidly since then, particularly in the early 1980's. By the fall of 1982 there were 700 undergraduate majors forcing the school to take measures to limit enrollment. Since then undergraduate enrollment has declined to its present level of 606.

The school underwent several major changes during 1984. Last summer, the School's offices moved to the second floor of the Rich Building. The new location has helped alleviate the school's chronic shortage problem and has also made the school more visible on campus.

The ICS program in computer networking and communications systems received major donations from several companies. One of these gifts from Northern Telecom, was a set of three SL-10 packet switches, giving the school the largest concentration of these switches in the United States.

Other equipment delivered during the past year included three VAX 11/750 computer systems, for operating systems research, and a second Symbolics 3600 system, for artificial intelligence work. The school also bought \$110,000 worth of Textronix equipment for computer graphics instruction.







# MATH Gift of Computers Put to Good Use

The first faculty member at Georgia Tech was Dr. Lyman Hall, a professor of mathematics. He became the second president of Georgia Tech and served from 1896 to 1905.

The first half century was dominated by Dr. D. M. Smith who served as professor from 1913 to 1954 and chairman from 1930 to 1950. As chairman he recruited Ph.D. instructors from strong northern universities and built a solid foundation by offering good salaries and security from political troubles. Smith gave up the chairmanship in 1950 and was succeeded by Professor Herman Fulmer.

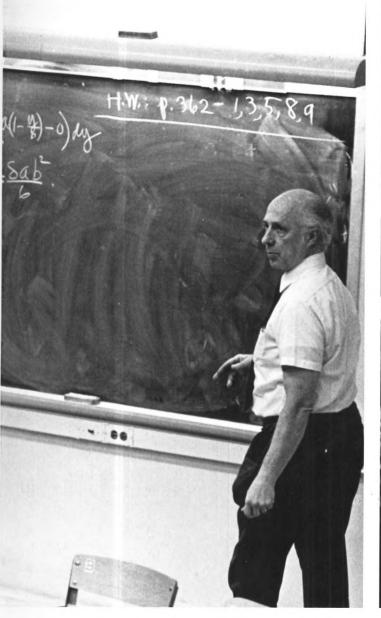
Dr. Fulmer served as head of the department from 1950 to 1957. During this period the department became a degree granting school with modern programs at the bachelor's and master's

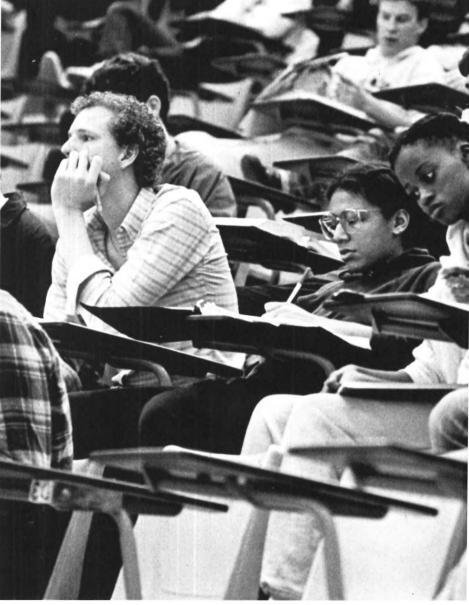
level. Fulmer was also instrumental in laying the groundwork for the present high quality Ph.D. program.

The school became increasingly interested in research over the years by encouraging faculty members to seek out research grants. The school has sponsored national meetings of the American Mathematical Society and the Society for Industrial and Applied Mathematics.

During the past year the school has continued to upgrade its microcomputer facility. This was made possible through a gift from the Burroughs Corporation of 28 Burroughs B-20 computers.

TOP, LEFT TO RIGHT: Dr. Miller, ICS Director. Dr. Ames, Director of the School of Mathematics. BOT-TOM: Students learn the latest in computer technology. Dr. Johnson in 1308 class. Students check homework problems.





#### MODERN LANGUAGES Dialogue Exchange Helps Students

The Department of Modern Languages, established in 1904, first offered courses in French, German, and Spanish, until the mid-sixties, when courses in Russian, Chinese, and the science of linguistics were added. In the late seventies, the Department added Brazilian-Portuguese, Italian, and English as a foreign language. In addition, the department since 1958 has offered noncredit program in English as a foreign language as a special service to foreign students.

In recent years enrollment has averaged about 1500 students each quarter. Faculty members compensate for this large enrollment by encouraging students to use recorded tapes in the language laboratory and to avail themselves of the opportunity to exchange conversational lessons in French, German, Spanish, and other languages with foreign students in the department. The consensus of the departmental faculty is that their basic responsibility is to provide quality instruction, complemented by relevant and quality research evaluated by peers. Most of the research publications and innovations are related to the classroom. Continual use and evaluation is made of pedagogical research in the acquisition and teaching of foreign languages, which include the utilization of audio-lingual and cognitive-code methodologies, and individualized instructional media systems.

The department's future goals are to develop international programs in cooperation with other units on Tech's campus, coordinate with the University of Georgia in its foreign language teacher education program, improve the audiovisual library, and develop the use of electronic media as a possible solution to the current problem of burgeoning enrollment.





MUSIC

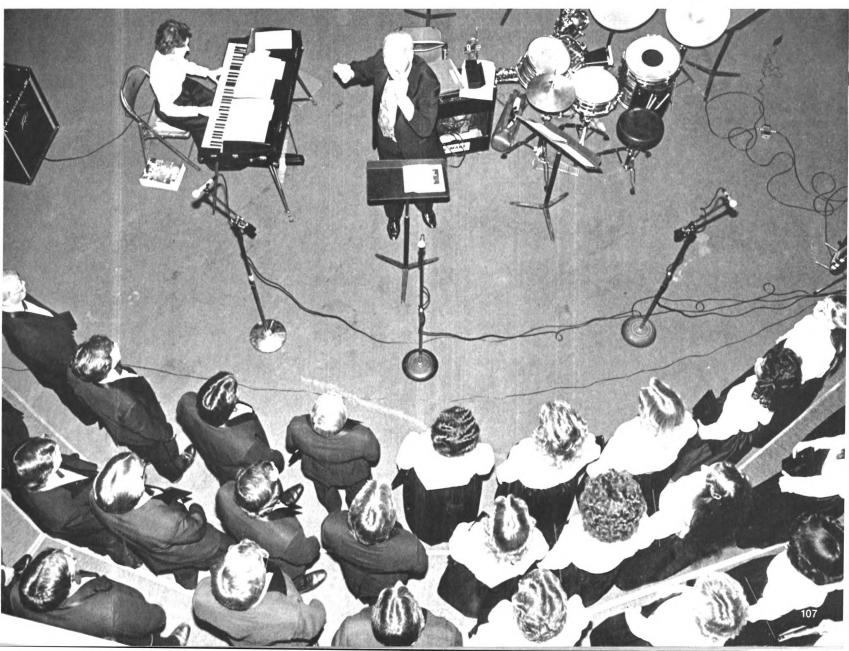
# **Humanities Credit Given to Participating Students**





Three performing groups at Tech fall under the Department of Music: the Chorale, the Jazz Ensemble, and the Band. The Music Department provides a creative outlet for many students. All three groups make various appearances around the campus, the metropolitan Atlanta area, and in many neighboring states. Students in all three groups learn a great deal about music history and theory through rehearsals, lectures and discussions, and performances. Humanities credit is allowed for those involved in the music program because of the background they receive. The Department of Music looks forward to continued growth in Tech's coming second century.

TOP, LEFT TO RIGHT: Dr. Zahn, Director of Modern Languages Department. Vince Campbell as "The Boy Wonder" at Halloween half time show. Mr. Carlson, Director of Music Department. BOTTOM: Modern languages class. Chorale concert.



PHYSICAL EDUCATION

# **Concept of Drownproofing Developed by Tech Professor**

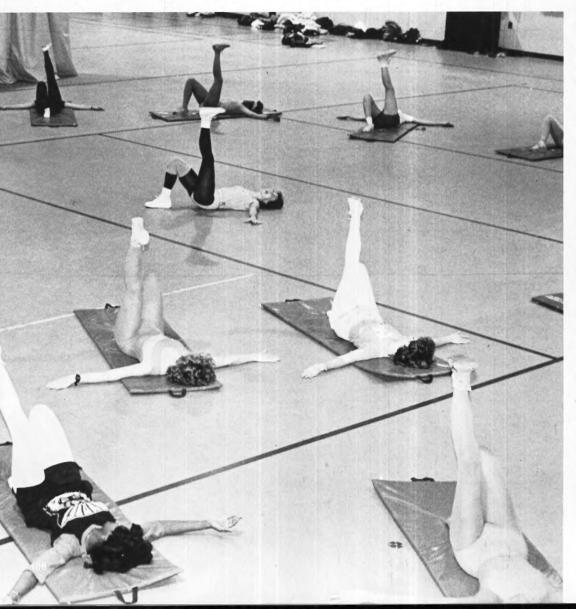
The Department of Physical Education was created by Coach William Alexander, of the Athletic Association, in 1941. It remained under the Athletic Association until 1972 when it began receiving its primary funding from the Institute. Due to the influence of World War II and the related concerns about the physical condition of the inductees, the initial curricula had a heavy emphasis on physical fitness and a strong military orientation.

Six courses were required in the early years: swimming, gymnastics, track and field during the freshman year; outdoor games, indoor games, and combatives during the sophomore year. Requirements were later modified to three hours in 1974 and in 1981 the requirement was changed to four courses.

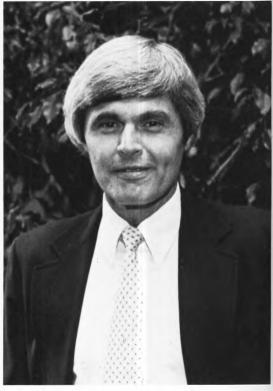
The concept of drownproofing was invented in 1937 by Tech Professor and Coach Fred Lanoue. It has been a continuous requirement at Tech since 1942. The concept was adopted by such agencies as the United States Armed Forces and the American Red Cross. The curriculum content broadened in the early 1950's to include more lifetime sports, and gradually evolved to present emphasis on health management and lifetime fitness, as a supplement to sports skills.

The Department originally operated out of the Old Gym and Naval Armory and later the Coliseum, sharing these facilities with varsity athletics. The opening of the Callaway Student Athletic Complex in 1977 marked a milestone for Tech. The facility is one of the finest comprehensive athletic and recreational facilities in the country and currently houses the Physical Education Department, as well as intramurals, club sports, and recreational programs.

TOP, LEFT TO RIGHT: Kirk McQueen instructs a student in a CPR and Standard First Aid class. Dr. Thomas, Director of the School of Physics. BOT-TOM: Students workout hard in an aerobics class, which is one of the new courses offered by the Physical Education Department. Dr. Reedy, Director of Physical Education. A student works in Physics lab.









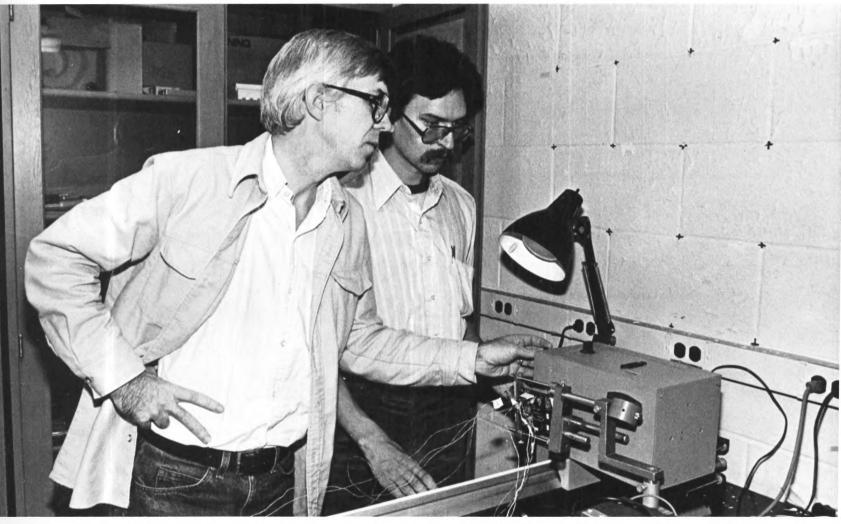
### **PHYSICS** School Streamlines Service Courses

When Georgia Tech opened in 1888, the Physics Department consisted of a single faculty member, Professor Issac Hopkins, who also served as Tech's first president. In 1896 the Department of Physics and Electrical Engineering was formed, and in 1902 the department was split into the Department of Electrical Engineering and the Department of Physics. A separate building for the Department of Physics, now known as the D. M. Smith Building, was opened in 1923. This remained the home of physics until the present Physics Building was built in 1967.

In 1939 the department was authorized to offer a Bachelor of Science degree and granted its first three degrees in 1943. Over the one hundred years of physics at Georgia Tech the courses have changed very little in the catalog descriptions. In 1888, courses covered properties of matter, laws of motion and machines, hydrostatics, pneumatics, acoustics, magnetism, electricity, heat and light. Hydrostatics and dynamics have been dropped since then, while courses involving the atom have been added. These courses which originally took four years to complete, are now taught in three quarters.

Today the school has a dual role at Georgia Tech. Just as it did one hundred years ago, it provides a thorough grounding in physical properties for all students at Georgia Tech. Today it is also one of five largest undergraduate physics schools in the country and produces a significant number of Ph.D. students.

During the last year emphasis has been placed on streamlining the school's service courses and improving laboratory facilities. The main introductory courses taken by all students are now using computer generated quizes from a data bank of problems. This ensures that students in all sections are assessed on the same objective basis. The accompanying labs are being upgraded with new equipment, and the first new laboratory manual in twenty years has been written. Throughout the year, many faculty members made investigative research trips to China, India, and Europe.



### PSYCHOLOGY Schools Facilities Now Together

The School of Psychology was established in 1945 as a service department offering courses for students in architecture, engineering, industrial management, mathematics, and the natural sciences. The department grew by adding courses which served needs of different major fields within the Institute. The school became a degree granting unit of the Institute in 1959 when the undergraduate degree in Applied Psychology was established.

At that time a bachelor's degree in Psychology was unique in the country. Unlike most liberal arts degrees in psychology, the Georgia Tech degree was aimed at applied psychology with a foundation in science and mathematics. The Georgia Tech degree equipped students with skills and knowledge that were competitive in the marketplace. The faculty, during the past 25 years, has grown from three to fourteen.

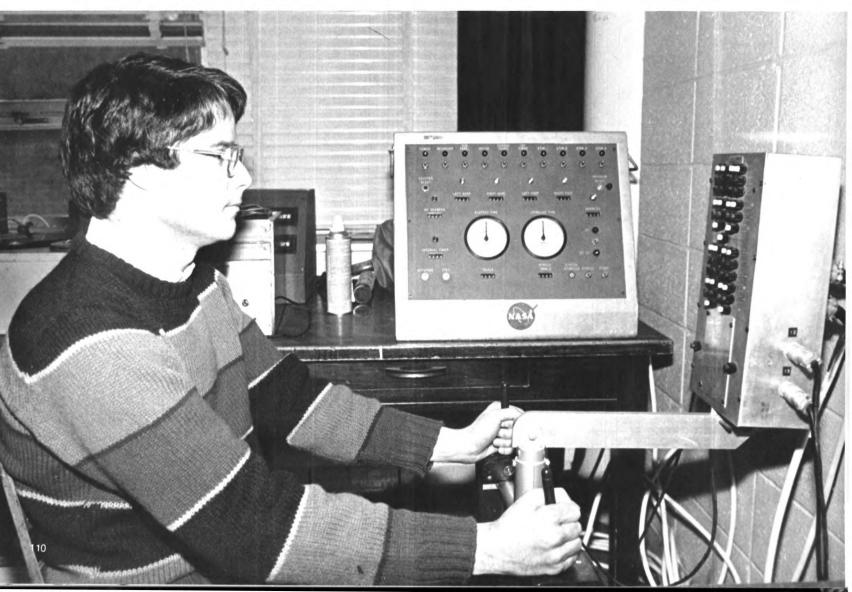
In the late 1960's graduate programs were implemented. Both Master's and Doctoral degrees were offered in three areas of concentration: Industrial/ Organizational Psychology, Engineering Psychology, and General Experimental Psychology. The graduate program has been very successful at sending its graduates to academic, industrial, and governmental research positions.

In 1984 the school moved its laboratories into the Skiles Building, for the first time bringing the school together in one building. The new facilities allowed the school to further develop its research programs in Engineering Psychology, Visual Perception, Psychoacoustics, Animal Behavior, Organizational Psychology, Psychometrics, Social Psychology, Cognative Aging, and Quantative Methods. The school also offers undergraduate certificate programs for majors in other schools in Engineering Psychology, Industrial Psychology, Biopsychology, Experimental Psychology, and Social-Personality Psychology.

TOP, LEFT TO RIGHT: Dr. Smith, Dir. of Psychology. History lecture draws student attention. MIDDLE: Perception experiment in progress. BOTTOM: Equipment from NASA made use of. Dr. Bayor in lecture. Dr. Papp, Dir. of Social Sciences.



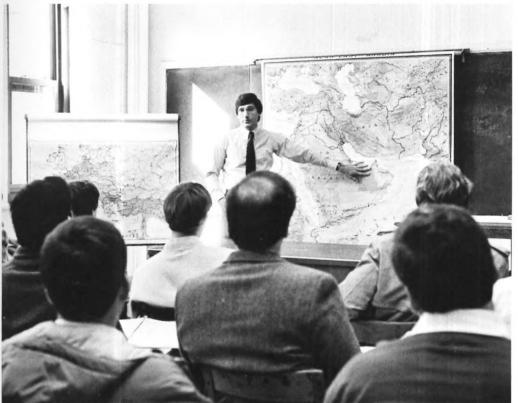




#### SOCIAL SCIENCE

# **Department Plans to Publish Detailed History of Tech**





The School of Social Science began in 1948 as a non-degree granting department, and in the years since it has come to play a major role on Georgia Tech's campus. In 1954 the State of Georgia mandated that all college students pass courses in United States and Georgia history and government; in 1970 requirements for graduation were expanded to include at least 18 hours of Social Science.

Over the years faculty members have conducted research in areas as diverse as technology assessment, Southern history, labor relations, Atlanta demographic trends, technology transfer, office automation, and nuclear weapons policies. In 1980 the Master of Science Degree in Technology and Science Policy was authorized; these graduates are trained to analyze the social impacts of scientific-technical advances and innovations. The undergraduate program has grown to include programs in computerassisted instruction and science, technology and international affairs.

Particularly noteworthy is the project undertaken by six of the school's historians. For the past two years they have conducted research on the history of Georgia Tech, and will publish this first detailed scholarly history of Georgia Tech during Tech's centennial year.



#### **COOPERATIVE DIVISION**

# **Co-Op Plan Fourth Largest in U.S.**

The cooperative program at Georgia Tech is the fourth largest cooperative program in the country. It was started in 1912, only six years after the Nation's first cooperative program was developed at the University of Cincinnati.

The program has grown steadily in size through the years, and at the present time approximately 25% of the undergraduate students at Georgia Tech are enrolled in this five year program. The students are employed by about 400 companies throughout the United States. They alternate school and work quarters from the freshman through the junior

year, and normally remain in school on a continuous basis for the senior year. The successful completion of the program is recognized by a Cooperative Plan designation on the diploma. There is continuing strong interest in the program, both on the part of students and companies, and it is expected that this method of education will interest even more students in the years to come.

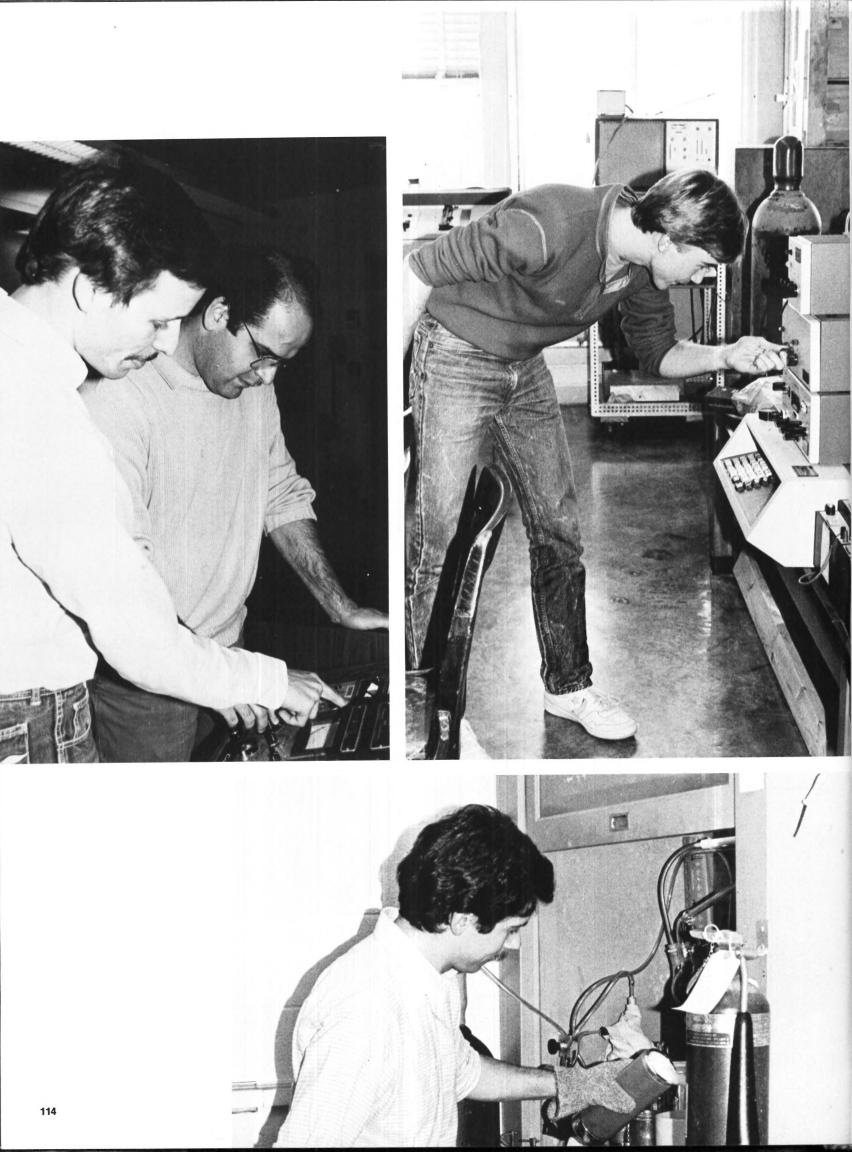
TOP, LEFT TO RIGHT: Michael Cannon and Edward McCall work on a project together. E.E. students working with CAD/CAM systems. BOTTOM: Hightech graphics terminal aids in design problems. Often problems require group effort. Mr. Hitch, Co-op director.



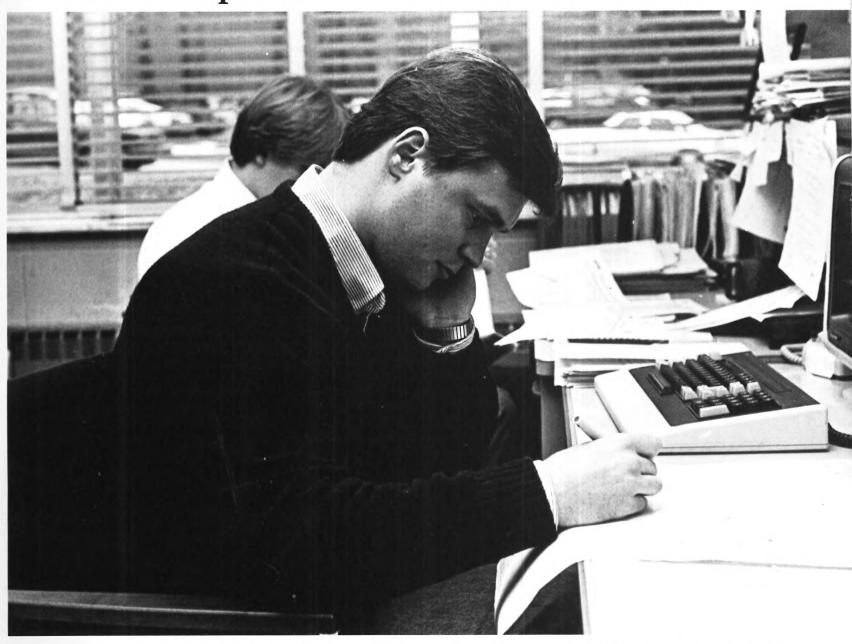








#### GRADUATE STUDENTS Graduate Co-Op Plan Is the Most Recent Addition





The Board of Trustees authorized the Master of Science degree at Georgia Tech (then the Georgia School of Technology) in 1922. The first M.S. degree was awarded in 1925. The first record of designated M.S. degrees was in 1927 when five master's degrees in Civil Engineering were awarded.

The first graduate dean was Dr. Gilbert Boggs, who became the Dean of Graduate Courses in 1935. The Division of Graduate Studies was established in 1941 with Dr. John Daniel as the Dean.

In February, 1946, the Board of Regents authorized the Ph.D. degree in engineering at Tech, awarding the first Ph.D. degree in 1950 to a chemical engineering graduate. Since 1927, the Institute has awarded approximately 12,000 master's degrees and 1400 Ph.D. degrees. Currently there are thirty-one M.S. degree programs and twenty-three Ph.D. programs.

One of the most significant developments in recent years for the Graduate Division was the establishment of The Graduate Cooperative Program in December 1983 with Dr. Helen E. Grenga as the Director. The first students in this program began their cooperative assignments in winter quarter of 1984.

TOP, LEFT TO RIGHT: John Hansen and Angelos Katsaggelos in signal process lab. Chem. E. student in graduate lab. A graduate student works on a project with microcomputer. BOTTOM: Graduate Chem. E. experiment. Dr. Carlson, Dir. of Graduate Studies.

# **Increased Cadet Benefits Result in ROTC Resurgence**

Continuing in the tradition of producing fine officers, the Georgia Tech Reserve Officers' Training Corps, ROTC, had a prosperous year. Fall quarter began with a new Navy commander and several new Air Force and Army instructors. The transition went smoothly, as if the newcomers had been around for years. Upon graduation in the spring, approximately eighty new officers embarked on a military career. A four year commitment is required of junior officers while pilots and navigators have six and five year commitments respectively.

Air Force ROTC teaches the organization of the Air Force and its history and management, along with civil law and world events. Freshmen and sophomores attend class once a week while juniors and seniors go three times. All cadets attended a lab Tuesdays at 11:00 where the upperclassmen practiced their leadership and management skills while the sophomores and freshmen learned the importance of teamwork. The sophomores attended field training during the summer months where they covered subjects ranging from survival training to opportunities in the Air Force.

Naval ROTC cadets learned about the history of the Navy, weapons systems, navigation, and management. Freshmen and sophomores met twice a week while upperclassmen attended class three times. Like the Air Force, the Navy held labs on Thursday mornings. During summer, cadets went on cruise where they learned about the operation of naval vessels.

Army ROTC taught the organization of the Army, map reading, tactical decision making, and military ethics. Almost all of the Military Science courses were two hours each with a lab that met Thursdays at 11:00. Sophomores and juniors attended camp in the summer.

Georgia Tech has an excellent tradition of ROTC. Many high ranking military leaders graduated through Tech's program. ROTC was a major force on the campus during the forties and fifties. With the advent of the Vietnam war and the anti-military sentiment during the late sixties and early seventies, ROTC participation was low. However, with the increased number of benefits offered by the military including four year scholarships, the eighties have witnessed a resurgence of the program.

*TOP*: Rick Mann records demerits during an inspection. *BOTTOM, LEFT TO RIGHT*: Jamie Burnette is seen inspecting Chris Chandler as well as others. Colonel Scharf of Army R.O.T.C., Colonel Bash of A.F.R.O.T.C., and Captain Sloan of Navy R.O.T.C. Navy and Air Force R.O.T.C. men drill at Grant Field











### Phi Eta Sigma

#### FRESHMAN SCHOLASTIC HONORARY

Superior Scholastic achievement among college freshmen is recognized through the society of Phi Eta Sigma. Founded in 1923 and chartered at Tech in 1930, the society rewards freshman academic excellence. All students who attain a 3.5 GPA or better during their first freshman quarter or by the end of their freshman year are eligible to join.

Glenn F. Abad Christine K. Adams John K. Adams Bradley L. Anderson Paul G. Arata Karen E. Armanini James A. Arvigo Douglas K. Ash Roberto H. Bamberger Douglas A. Bodner Bradley D. Bolster Glenn S. Bowman John M. Brady Peter G. Briggs George E. Britt Thomas R. Bugg John S. Burnett Kenneth H. Calhoun Ross E. Cannin Angela M. Cardoso Mike J. Carney Jeffrey K. Chandler Alfred L. Christianson Min Kwon Chung Sandee J. Coats **Richard A. Coblens** Sydney A. Cook Michael J. Cooper Ricardo S. Coro Daniel E. Crocker Kenneth B. Crowe Peter D. Cuffe Brian K. Cunningham Lisa Custer James M. Dabbs James A. Dawson Cheryl J. Deese Olga C. Desdin Doyle M. Dillard Angela R. Dominy Gary L. Doss Anthony T. Dove Steven L. Duncan

Kevin H. Dunn Stephen A. Eilertson Stephen D. Evans Colin J. Field Pedro W. Fong Roberto M. Frontera John T. Gallo Steven R. Gieseking Karen L. Giles David A. Gillam Sandra L. Glenn Alan R. Goddard William I. Gorick Lance W. Gotfredson Emily A. Greene Susan E. Gregory Stephen G. Hall Heather D. Hardy Julie A. Harrell Raymond W. Harrison Deborah J. Hayes Jonathan G. Heath Ralph M. Herkert **Evelio Hernandez** Rodney F. Hill John D. Hirvela Tony M. Hogan Neal W. Hollenbeck Cheuk Y. Hong Anita S. House Dale K. Huff James A. Hugenberg Patrick W. Hunter Paul E. Jansen Angela J. Jernigan Neal F. Johnson Philip S. Johnson William N. Jones Peter W. Juergensen Todd M. Kaptiula Robert J. Kaufman Keith J. Lambright Jack R. Landers

Brendan F. Lane Joseph C. Layden Phuong J. Le Kenneth S. Lightner Don L. Livingston Alexander C. Lozada Michael J. Lucas Colleen M. Lynch Patricia G. Lynch James G. Maloney Thomas R. Mann Martin J. Mannion Armand R. Marina Christopher L. Martin Sean McClenaghan Leah K. McCleskey Crandell E. McCloud Michael S. McLendon Kelly J. McMillan Allan R. Metts Anne M. Miller Matthew B. Mills Patrick T. Mogan Martha Y. Montanez Michael A. Morgan Scott D. Morgan Kenneth A. Morneault Charles M. Morris John W. Morrison Sherry L. Murray Syed A. Naseeruddin Andy C. Nazarenko Cindy J. Navel Mark J. Miepmann Terry R. O'Bannon James T. Owens Mary L. Palmer Gregory S. Parker David A. Parks Mary L. Patterson Robert M. Patton Melissa J. Peoples Kathleen E. Peterson

Michael R. Peterson Zoltan A. Poleretzky Timothy P. Porter Gai A. Pribnow Sanjay Radman Carroll A. Reddic Carlos A. Restrepo John R. Rhodes Aaron C. Rice Elizabeth A. Robinson Gregory E. Rollings **Richard A. Rossi** Felix P. Ruo James A. Sanders John E. Schureck Jay A. Schwarzhoff Michael R. Seetaler Eric B. Sevv Simrana Singh John E. Sivak Anthony L. Smith Mary L. Smith Neil W. Songer Mark A. Spears Erik A. Steeb Johnathan R. Stevens John A. Szulya Gregory G. Tardsidis Britt Be. Thompson Mark A. Tippens Douglas B. Turner James L. Veal D'Juro Villaran-Rokovich Keith D. Waldo Greg M. Watson Clifford D. Way Sean A. Wellman Jennifer J. Wike James M. Wileman Philip T. Wilson Joel K. Wood Glenn T. Wright **Daniel Yue** 

### **Briarean Society**

#### CO-OP SCHOLASTIC HONORARY

be elected to the Briarian Society, a stu-

dent must have earned at least a 3.0 cumulative GPA and have completed five

quarters of academic study in the Co-

operative Department.

Founded at Georgia Tech on July 16, 1922, the oldest co-operative honorary society in existence recognizes the scholastic achievements of students enrolled in the co-operative program. To

**Thomas Abscutz** Joni Adams Scott Allison Jorge Almirall Brent Althauser Dave Anderson Paul Anderson Joe Arcuri Pamela Amato Mary Jan Arnette Art Arrington Godfrey Augustine William Draton Avera Raymond Baer **Glenn Ballard** Randolph S. Baker **Jill Batchelor** Greg Beasley Tommy Bell Michael Benson Jon Berg Robert J. Berinato Philip Betgauet **Doug Betts** Paul Bishop Mark Bischoff Keith Blankenship Keith Boland Kurt Bost Bryant S. Bostater Pat Bournes Roger W. Bouwmans Scott Breshears Charles R. Brown George Brown James S. Brown Gary J. Brust William Bryan Robert Bullington, Jr. James Byrum Gene Cannella Will Caraway Kristi Carley Gina Carr Jo Ellen Carter Kristina R. Catlin **Tim Chasteen** Todd Chesnut Joseph Cohen Mary M. Coker Mark Coile Gordon B. Connelly Jean Cook Jeffrey Cook **Donald Corbett** Hank Corriher **Bill Couch** Harold W. Council III Norman Cowden Doug Cox Phillip Crowder **Elizabeth Crilly** Joe Curtis **Dale Dangler** Albert Danial Mark Danielson Todd Danielson Jeff Dansereau

**Claude Ervin Davis** Dari Davis Steven Davis Jerry O. Dawson **Jill Deardorff** Olga C. Desdin Laura Devlin William Dodd William B. Doty Kevin Driscoll Andrew Dufour W. Duggleby Steve R. Duke Judith Eckert Maxson V. Eddy Michelle Evans **Ronald Farb** Marcel Farina Jeff Farmer **Brian Farris Courtney Fazekas** Abigail G. Feinman Neal Flanagan **David Fletcher Rob Franz Rob Friedrich** Stephen E. Fuks Kathy Funk James Gambon Steve Gambon **Daniel Galbraith** Richard J. Gaeta Frances Gallagher Dwight A. Garrison David G. Garza Charles Geiger Mintoo Ghuman Glenn Gilbert **Bill Goleman** Juan Gonzales Jon T. Goodman Mark Goodwin David R. Graham **Glenn Greathouse** David A. Griffin David H. Groh Donn Gruensfelder Thomas K. Grzywack Mike Gubart Janice C. Guebert Steve Guebert Karla Hagans Steve Hahn Mike Haight Mark Hajas Jeffrey Hall **Timothy Hall** Louis Haller Anita Hamelynch David E. Hamm John Hammond Jerry Hancok **Bill Hargen** Christ Harvey **Riley Hawkins** Chris Heard Michael Heighes Pat Henry

Marion J. Herkert John Hermes Christopher M. Herring Christa Herron John Hibbard Mary Jane Hinton Ann Hitch Bill Hitch Quynh Thi-Ngoc Hoand Vince Holsenbeck Ken Holsten Nancy Holt **Glenn Hopkins** Robert L. Howard III Keith F. Hogenberg Todd J. Hugenberg **Robert Hughes** Timothy L. Hunt **Robin Hutchenson** Steven Isabelle **Bill Jennings** Brad Johnson Jeff Johnson Jerry R. Johnson Matthew A. Johnson **Robert Johnson** Scott Johnson Angela Jones Harmon Jones Juli M. Jordan William E. Kahn Robert T. Kaufman Matthew J. Kearns Mark Kehne **David Kehres** David Keller Todd Kelso Christopher Kemple Kenneth Kolpitcke Tom Konetth Kent Kozak Carol A. Kunkel Nan Kunzler Paul Lamatte Mitchell E. Lambert Gary E. Landriav **Robert Laurens** Edward Lee **Richard Leon** Mark Lesser Laura C. Lindsay Dave Loftus Thomas Lyons Mike Madden Ida Malavenda Martin Mancuso Dinah Mann Mike A. Marino Dave Marino Brian Markwalter Gary Martin Joe Massari Gary May Mike Mehrman Kevin Mepham Jana D. Miles Maureen Milici **Richard Miller** 

John Mize James E. Moore, Jr. Keith Mozena **Bill Murphy** Edward McCall, Jr. Ed McDonald Kelly E. McDonald Jeff McKinney Mark C. McMaster Brian McNamara Scott McTier Bret Needle Scott D. Nelson Gene New Mark Niehaus Eric A. Neilsen Steve Norman Richard Norris, Jr. Phillip North Robert Northrup Anthony Noto Alvce Novak Catherine O'Donnell Mark Oliver Thomas D. O'Sullivan Andrea Otter Hugh D. Parks Laura Kenline Parks Teresa Parsons Phillip Perdan Graciela Perez-Cruet Bryan E. Pierce **Robert Poovey** W. Scott Potter William C. Powell **Cowan Price** Robert A. Raboud, Jr. Kimberly Ragsdale Mark D. Rambeau Jim Reach Robert N. Reeve Mike Renie Ronald A. Rice Timothy W. Rice C. Harold Robbins Charles Robida William Robinson Virginia Rogers Karen Rubin Kenneth S. Rubin Ann Rush Carl Rush Paul Ruzica Julio Sanjurjo Daniel J. Schaefer **Ruth Schaefer Bill Schmidt** Todd Schmidt Kevin Schultz Chris Schwartz Mark Selman Curtis Shaw Dale Shultz Harold B. Simmons David Slankard Wendy Slurzberg Glen Spivak Scott Spivak

Charles Smith Cyrus Smith Elizabeth Smith Jim Smith Ken Smith Nils Smith Eric Snyder Steve Spann Ken Spratlin Phillip Stallcup Willam Stark Michelle Stecklein Laura E. Steele Joe Steiner Kevin Stotz Terry S. Strickland Terry Styles **Brian Sulc** Jeff H. Sullivan Karl R. Swensen John A. Tamplin Tanya Targonsky Leo Taske III Patrick J. Taylor Kent B. Terry **Carol Thomas** Daniel Tiernan Keith Todd Annette Toy Hai Ho Tran Ruben Travieso Robert Trobaugh Carolyn Tulkoff Bob Vaughn Todd Vaughn Lisa A. Voight Lisa Volmar Jeff Waldrop John Walker Larry V. Walker Jim Wallace Cathy Walters Stan Ward Joe Watwood Anthony D. Weathers Glenn Wells John R. Wells Kelly Westbrook **Timothy Whiffen Robert Whiting** Jeff Whittley James M. Wileman Sandra D. Williams William F. Williams Mark Wolaver Karl Wolfe Nancy L. Wolf Anita Womble Andrew D. Wood Michael Woods H. Dean Wright Robert Wysocki Mark W. Yambert Julie A. Youles Charles R. Young John Young Mark E. Zimmerman

### ANAK

#### HIGHEST SENIOR HONORARY

Established in 1908, ANAK recognizes students for their leadership ability, personal achievement and strong character. Membership in the society is the highest

Vernon Boland Jeff Cooper Joe Daniel Neil Fisher Amory Gabel Julia Hunter Sharon Jadrnak Lisa Landrum

honor a student can receive while at Georgia Tech. ANAK is unique in that meetings and activities are known only to its members.

> Gary May Nelson McRay Jon Strombom Lisa Volmar Ken Whisenhunt

### **Omicron Delta Kappa**

#### NATIONAL LEADERSHIP HONORARY

For fifty-two years, Georgia Tech's chapter of Omicron Delta Kappa has honored juniors and seniors who have proven themselves outstanding in academics, athletics, social service, journalism and creative and performing arts. Candidates must have a 2.8 cumulative grade point average for consideration.

Philip Adler Jonathon Baliff Roberrt Beauchamp Julie Bercegeay Carlyle Bernard Carl Biven Walter Bloom Glenn Bochner Keith Boland Henry Bourne Samuel Bracken John Brighton Ward Broom **Ray Brutomesso** James Bynum Steve Calva Carolyn Connon Kristi Carley Thomas Carney Vince Castiglione John Chabay Al Connelly Greg Cook Jean Marie Cook Wister Cook Bill Curry Joe Daniel

Samuel Davis Andrew Delany John Dewberry Bobby Dodd William Dodd Jim Duli Jack Eckees Jimmy Etheredge Keith Eubanks **Keith Eubanks** Michelle Evans Peter Finlay Amory Gabel Chris Gaffney William Gamble Thomas Gaylord John Goda Steve Good Barry Goodno James Gordon **Glenn Greathouse Robert Green** Helen Grenga Steve Guebert Ken Gwinner Tim Hall Sally Hammock

Kevin Harbol Parra Harris Greg Harvin Pamela Hatch John Hernes James Herod Jeff Howe Kenneth Howell Jay Humphrey Sally Jackson Sharon Jadrnak Harold Johnson Daryl Jones Les Kariovitz Ellen Kerr John Knight Edwin Kohler Bill Landiss Fran Langton Susan Leather Whitney Lenihan Alyssa Levy Martin Light William Lnenicka Mike Martin Gary May Paul Mayer

Jo McIver Robert McMath Nelson McRay Paul Menegazzi Thomas Mergens Maureen Milici **Blake Monet** Jim Morris Helen Naugle Anthony Neaverth Joan Nelson **Bettina Newmaier** Alyce Novak Ann Lynn Parker John Parker John Peatman Joseph Pentecost Michael Perez Paul Pernonard Joseph Pettit Alvi Pierce Angela Pike Cynthia Price Anne Rambaud Milton Raville Patricia Reardon Homer Rice Peter Rodrigue

**Nelson Rogers** Mark Samulian William Sangster Bill Sayle Robert Schmidt David Seacca Nancy Shaler Peter Sherry George Shields Dale Smith Warren Smith Michelle Stecklein James Stevenson **Rilchard Stone Richard Teach** Miller Templeton Michael Thomas Maxine Turner Lisa Volmar James Walker John White Anilta Womble Todd Wood William Woolf Robert Wysocki Dorothy Yancey James Young Marc Zionts

### **Outstanding Teachers of the Year**

Nominations for this award are solicited by the Institute's Faculty Honors Committee from faculty, staff, students, and alumni. The awards are in recognition of excellence in teaching, extraordinary effort in the classroom, the degree and quality of inspiration transmitted to the students, direct impact involvement with students, and the intellectual integrity and scholarship of the professor.

HOWARD KERSCH

THOMAS GAYLORD

JAMES HEROD

### Phi Kappa Phi

#### SCHOLASTIC HONORARY

The Georgia Tech chapter of Phi Kappa Phi was established in 1914. Recognition of superior scholarship in all academic subjects is the purpose of this society. Candidates rank in the top ten percent of their class as well as display a good character and academic record.

Debra L. Adams Joni A. Adams Jon M. Allingham Charles D. Anderson Angelos A. Apostolides Randolph S. Baker David S. Barnes John T. Bell Rolf W. Biernath Paul H. Bishop Robert E. Blackburn, Jr. Vernon K. Boland Albert G. Brand Todd J. Briley Robert G. Bullington, Jr. James M. Byrum Robert J. Caesar, Jr. James B. Caldwell Gerald N. Cameron Daniel T. Carroll John E. Chabay Nancy J. Chamberlain Steven R. Chuey Lee R. Clendenning, Jr. Gregory C. Cole

Jeanie R. Coleman Jean M. Cook Dale A. Dangler Albert N. Danial Mark J. Danielson Robert A. Delk William K. Dodd Michael A. Drago Clifford K. Eubanks Brian R. Farris Mario Ferman-Parker Chris L. Fouts James C. Gaffney Steven J. Gambon Amanda Gearing Steven L. Goldberg Mark D. Goodwin Stephen W. Guebert Charles A. Hall Cynthia L. Hall Vernon K. Handley Francis J. Harbist David M. Harris Robyn L. Harrison Michael W. Heiges

John E. Hermes Ann L. Hitch Gregory T. Hodgdon Lisa D. Hong Raymond L. Humphries Steven H. Isabelle Ronald L. Jacobsen Walter E. Johnson Laura M. Kenline Michael R. Kimmons John J. Kimsey Carol A. Kunkel **Richard Leon** Bradford A. Majeres Raymond L. Mann Gary S. May Maureen I. Milici Warren E. Morgan Joseph J. Palasak Johne M. Parker Thomas K. Patrick Perry A. Pettett Steven J. Pinsky James E. Polk Matthew D. Rao

Amer A. Samie Nancy J. Shaler Richard R. Siergiej Michael A. Sieweke Philip B. Simpson Steven G. Skinner Kathryn E. Sklenak Charles N. Smith William J. Smith Eric S. Snyder Hyeri So Glen F. Spivak Scot J. Spivak Kenneth M. Spratlin Krishnamurthy V. Srinivasan Joseph M. Steiner Anders J. Sullivan John G. Taylor Charles M. Tomlinson William J. Wallace Phillip P. Warren Ephie A. Womble John J. Young, Jr.

# Who's Who Among Students in American Colleges and Universities

Since 1936, Who's Who Among Students in American Colleges has been providing recognition for outstanding campus leaders. Candidates must be

Rolf Biernath Steven Michael Calva John Edward Chabay Jean Marie Cook Lori Lee Deiters Howard Mark Delashmit Particia A. Eads James Otis Etheredge Michele Renee Evans Robert Joseph Flowers Gregory Alan Harbin Jeffrey Allen Howe Timothy Leonard Hunt Cheryl Renee Johnson Greg Mark Jung Whitney Jane Lenihan Alyssa Anne Levy Gary Stephen May Maureen Ines Milici Susan Jane Miller

juniors, seniors, or graduate students and are judged on academics, community service and leadership in extracurricular activities.

> Bettina Neumaier Anne Corrine Rambaud Mark G. Samuelian Yiannakis Chari Savoullis Daniel Michael Schimelman Nancy Jean Shaler Charles Nils Smith Michael Brando Thomas Laura Ruth Todd

### Tau Beta Pi

#### HIGHEST ENGINEERING HONORARY

Engineering students who show superior scholarship and leadership as well as integrity and breadth of interest, both inside and outside of engineering, are recognized by

Simaan Maurice Abdu Rizk Debra Lynne Adams Scott Brian Allison Paul Raymond Anderson Floyd Gresham Ansley Angelos Andrea Apostolides Jorge Alberto Aristizabal Godfrey Augustine Karen Elaine Ballew David Sanderson Barnes **Preston Ray Bates** Anita Robin Bausman Johnathan Mark Berg David John Bessinger Daniel John Biffl Donald Nelson Black Jr. Robert Earl Blackburn Jr. Vernon Keith Boland Terry James Bordelon Jr. Kurt Wade Bost Roger Willem Bouwmans Mark Whitman Bowers Matthew Philip Bradley Albert Gerard Brand Scott Alexander Breshears **Daniel Gaines Brown** Benjamin Lawrence Burbridge Carol Ann Burditt James Michael Byrum Forrest Clinton Cahoon Gerald Neil Cameron James Eugene Cannella Edward Gene Cape Jr. Willie Dade Caraway III Vincent Alfred Castiglione Nancy Jean Chamberlain **Timothy Scott Chasteen** Leslie Finnigan Clay Ralph Cleveland Jr. Bruce Clevenger Robin Lynn Coleman Gregory Steven Compton John Francis Conway Gregory William Cook Scott David Cowell John Edward Cox Jr. John Charles Curtis Jr. John Joseph Curtis III Bradley John Dailey Albert Naguib Danial Donald Carl Davidson Jr. Carlos Clifford Davis Jr. Darin Hugh Davis William Keith Dodd Cheri D'Ann Dubose

William George Duggleby Kenneth Webster Dunwoody III Glenn Charles Edwards **Thomas Ivey Faison** Brian Ray Farris Neal Patrick Fleck Karyn Leigh Fletcher James Shadoan Floyd James Randall Ford Christopher Lynn Fouts James Christopher Gaffney Steven John Gambon Sergio Ruben Garcia Charles Corwin Geiger Pedro Ramon Gelabert Thomas Russell Gentry Jose Manuel Gomez Susan Hope Gonsky Saul Gonzalez Steven Louis Good James Paul Gratzek Samuel Joseph Haines Mark Stephen Hajos Charles Arnold Hall Cynthia Lynne Hall John Benson Hamilton Steven Alan Hamsness Vernon Kenneth Handley Jeff William Harding Sara Ellen Harrell Michael William Heiges Gerald Andrew Helms Andrew Mann Henshaw John Len Hibbard Ann Louise Hitch Brett K. Holland Edgar Holmann Chi-Cheng Hsu Billy Eugene Hudgins Jr. Curtis Evan Ide Michael Edward Ingraham Steven Hamilton Isabelle William Jennings Larry Alan Jens Randall Alan Johnson Greg Mark Jung Tracy Kahn Robert Tarshish Kaufman Douglas John Kaye Arne Hamilton Keister Eric Johnathan Keller Wade Cooke Kelly Jr. Laura Marie Kenline John Johnson Kimsey Haruko Kinoshita

Tau Beta Pi. Undergraduate students who rank in the top eighth of their junior class or the top fifth of their senior class are considered for membership.

Laurel Jean Kleven Thomas Lee Konerth **David James Leroy** Martin Earl Levine Paul Chih-Ho Li Curtis Raymond Lisle Ronald Steven Lizzi Cecil Howard Macoy Jr. Bruce Douglas Macurda Raymond Lee Mann III David Edward Marino Gary Francis Martin Gary Stephen May Brian Douglas McCary Edward Arlan McDonald John Joseph McGirr Jr. John Wayne McMichen Jeffrey Dean Millsaps Michael Steven Mitchell John Henry Mize Paul Andrew Mogan Michael Andrew Morgan Lance Alworth Morris Keith Deming Mozena Mark Allen Neifeld Paul Manna Nochaharli Steven Marion Norman David Elwin Norris Donna Marie Olszowka David Loomis Owens Scott Allen Owens Robert Neil Patrick John Andrew Pecis Debra Ellen Peck Phillip Volney Peel Gregory Leo Perras William Walker Persyn Jose Ramon Pertierra Steven Jay Pinsky Eric David Pohl James Everett Powell Wanda Rae Puckett Fernando Ramos Balasubramaniam Ravichandran Carlos Alberto Restrepo William Michael Robinson Virginia Lee Rogers David Lawrence Rollins Amer Abdul Samie Julio Severo Sanjurjo Marcel Joseph Sarzen Yiannakis Chari Savoullis Ruth Ellen Schaefer John David Schierman

Nancy Jean Shaler Andrew Gregory Shem Donald Neal Shepherd **Kevin Creed Shultz** Michael Antony Sieweke Surendra Pal Singh Jeffrey Lynn Smart Charles Nils Smith Michael Smith Lyn Irvin Smittle Eric Stewart Snyder Hyeri So Lori Sene Sorrow Kenneth Milton Spratlin Krishnamurthy V. Srinivasan Gerald Glen Stanguist Michelle Louise Stecklein Carol Violanda Stelzenmuller William Fordyce Stieglitz Steven Lemay Story Kevin Mark Stotz David Andrew Sykes Choon Peng Tan John Gordon Taylor Jeff Marcus Terry Kent Bennett Terry Bruce Harvey Thompson Nola Ann Thompson Daniel Joseph Tiernan Charles Mead Tomlinson Annette Marie Toy Mark Alan Turner Stephen Andrew Turpin Stephen Michael Tyler Abhoyprasad Madhav Vaidya Silvia Marina Viteri Antonio Vizurraga Lisa Joan Volmar William James Wallace Clifton Blake Ward Anthony Dwayne Weathers Aaron Wayne Wells Malcolm Glenn Wells Stephen Kent Weltlich Clay Kittredge Williams Theresa A. M. Williamson Carlton Madrey Wilson Peter Norman Wolff Michael Bernard Woods Thomas Louin Wright Jr. Siamak Yari John Richard Yntema John Jacob Young Jr. Robert Eric Zimmerman

#### Gamma Beta Phi

The Gamma Beta Phi Society is an honor and service organization for students ranking in the top fifteen percent of their class. Its motto is "Progress Through Education," and its watchwords

Stuart Alan Adler Hiram Chism Allen IV Paul Burger Allen Thomas A. Anschutz R. Craig Attig Silvana Avellaneda Raymond M. Baer Karen Elaine Ballew **David Sanderson Barnes Jill Batchelor** Anita Robin Bausman Robert S. Beauchamp Mark Mansfield Beck Eric Berggren Robert John Berinato **Carlyle Bernard** Donald Nelson Black Jr. Robert Earl Blackburn Jr. William D. Blackstock Jr. Jose Blanco Mosy Blau Thomas Robert Blenk Jr. Barry T. Blount Robert W. Bodron **Jill Christine Boron** Daniel G. Brown Sanford H. Burford Julie L. Burns Steve Michael Calva David E. Camp James Eugene Cannella Jr. Angela Maria Cardosa Vincent Alfred Castiglione Kristina R. Catlin Melanie Colleen Ciccarello Grey Bishop Cleveland James F. Coats Natalie Jane Coker Robin L. Coleman Ricardo S. Coro **Fionnuala Mary Cross** Alexis L. Cusson IV Jeffrey Paul Dansereau Lori Deiters Andrew John Delany Victoria Jory Dennard **Constance Ann Dewitt** 

James T. Drews Steve Richard Duke Carletta Deneen Dunca David Paul Durand Judith Ann Eckert **Bruce Edward Elgin James Hamilton Evans** David Brian Farmer **Roger Neil Farris** Mario Ferman-Parker Peter T. Finlay Neal Francis Flanagan Karyn L. Fletcher **Brian Scott Fogle** Harold Douglas Ford **James Randall Ford** Herbert M. Forrister Jr. **Stephen Edward Fuks** Kathryn Ann Funk Thurston D. Futch III Amory Elizabeth Gabel **Caroline Galt** Amanda Gearing Kevin Bruce Gibson Jose Manuel Gomez Jon Thomas Goodman Joey Michael Goodroe Jeffrey M. Gross Louis Haller John H. Hammond Francis Joseph Harbist David M. Harris Kelly Lyn Hefner **Shelley Hembree** Patrick C. Henry Marion Joyce Herkert John Edward Hermes John Len Hibbard Mary Jane Hinton Gregory Thomas Hodgdon Edgar Holmann Chi-Cheng Hsu Keith Hugenberg William Von Ingle Gerard E. Insolia Jose Antonio Izquierdo **Donna Jenkins** 

are Scholarship, Service and Character. The Society works to promote these ideals through a number of service projects benefitting Georgia Tech and the Atlanta community.

> Ranall A. Johnson R. Scott Johnson Walter Easel Johnson Angela Yolanda Jones Rosan M. Kaylor Matthew Joseph Kearns Michael R. Kimmons Terri Lynn King Kenneth Eric Kolpitcke Karla R. Kreul Suresh Krishnamurti Nanette M. Kunzler Omar Ashraf Ali Kurdi B. Lamar Lepard Jr. **David James Leroy** Laura Catherine Lindsay Anthony C. Lucius Jr. Douglas Brian Lynch Michael Madden Michael J. Mankin Raymond Lee Mann III **David Edward Marino** Brian Edward Markwalter Karen Elaine Martens Gary F. Martin Joseph Mario Massari Edward Patton McCall Jr. Brian Douglas McCarv Susan A. Mercier Richard G. Miller John Henry Mize Sharon Kay Mize James E. Moore Jr. Bryan A. Morris Lydia Ruth Musterer Dung Anh Ngo **Theresa Faye Nichols** Eric Adolf Nielsen **Tracey Ann Nietling** Steven Marion Norman Anthony F. Noto Johne Michelle Parker Teresa Marie Parsons **Gregory Leo Perras** Perry Pettett Archie E. Pickels Angela Marie Pike

Jefferson D. Powell Paul Edward Probst Fernando J. Renneke **Raymond Scott Ribes** Aaron C. Rice Timothy W. Rice William Michael Robinson Scott W. Russell Sharon A. Schmidt Shobhana Shetty Richard Robert A. Siergiej Michael A. Sieweke Steven L. Sisterman **Charles Nils Smith** Eric Garrard Smith Steven Douglas Smith Jr. Jeffrey A. Sobhani Kenneth Spratlin William H. Stark Jr. Michelle L. Stecklein James A. Stone **Richard E. Stone** Mary P. Swanger Hue Hue Tang Leo E. Taske II Nola Ann Thompson Luong Thz Tieu Annette M. Toy Robert A. Trobaugh III David Lee Vanhoy D'Juro Villaran-Rokovich John Elliott Walker Randy Isaac Walker William James Wallace Anthony D. Weathers Paul Frederick Wellborn III Fred Wetzell III **Charles Russell Whittle** Mark Travis Wilson Peter N. Wolff Laura Woodbury Patricia A. Woodward Robert J. Wysocki **Charles Robert Young** Warren John Zyla