



Architect



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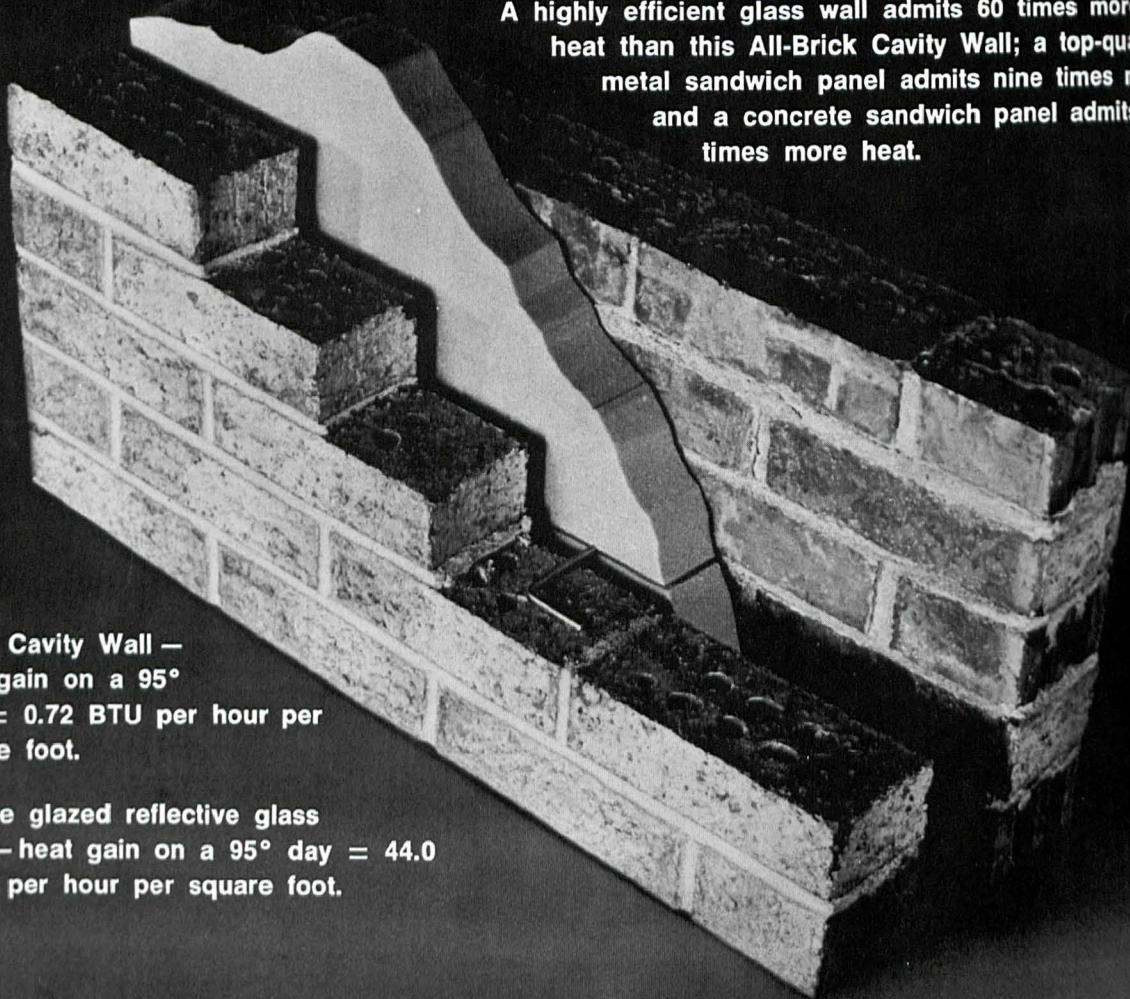
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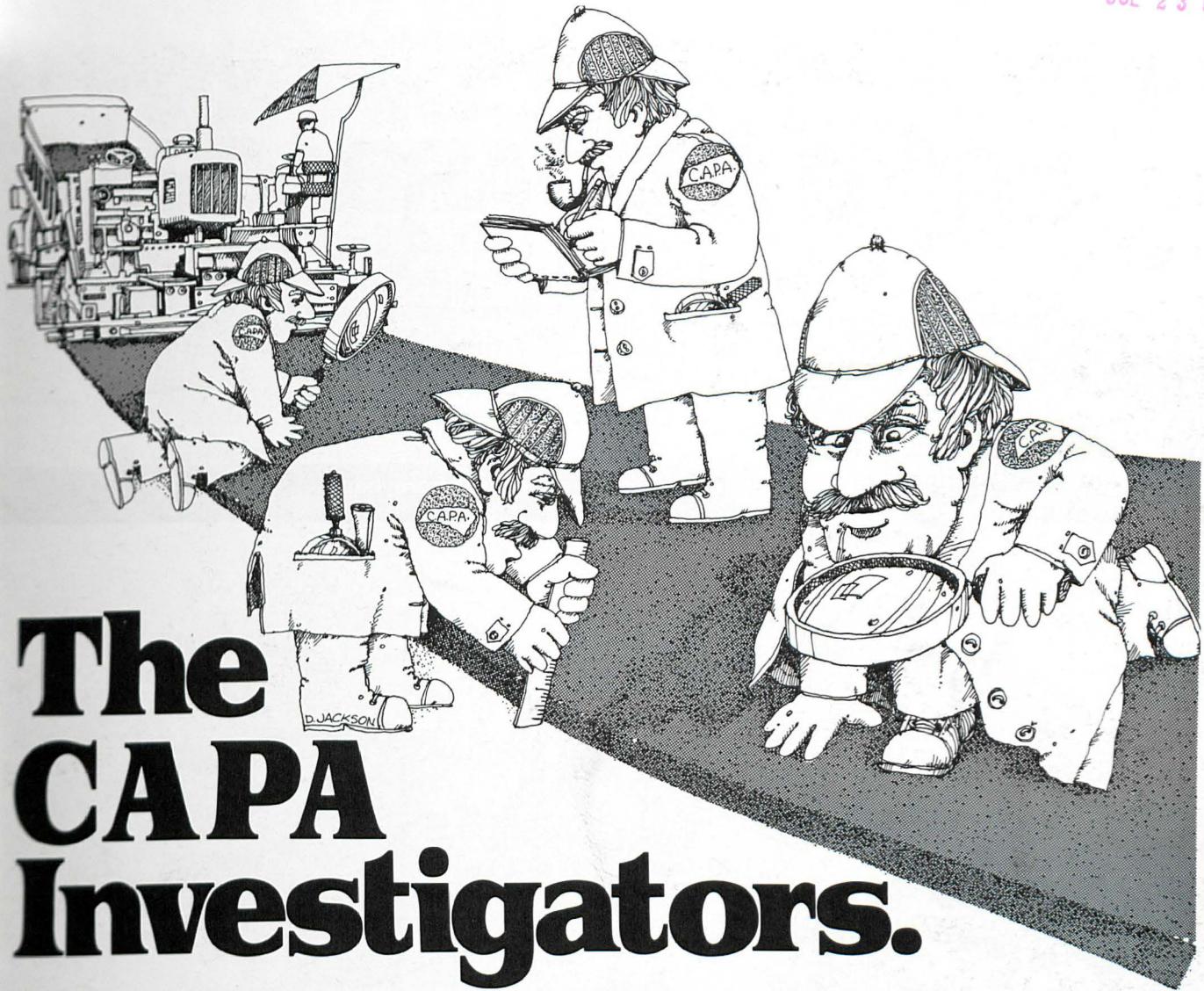
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North Carolina Architect

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THE
AMERICAN INSTITUTE OF
ARCHITECTS**

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ABOUT THIS ISSUE . . .

This issue of the North Carolina Architect is devoted to architectural education, with special attention focused on the opportunities for architectural education and training available in the State of North Carolina. As such, it is aimed at students, those in high school and those in colleges and universities, who have contemplated the study of architecture and a possible professional career in this dynamic, expanding field but who have been unable to find adequate and reliable information about architectural education. Furthermore, this issue has been designed to aid academic counselors who have the task of guiding prospective students into appropriate fields. Whatever its limitations, this publication is the first effort to provide for N. C. students and counselors a balanced, broadly based description of educational opportunities in architecture and the special nature of that learning experience.

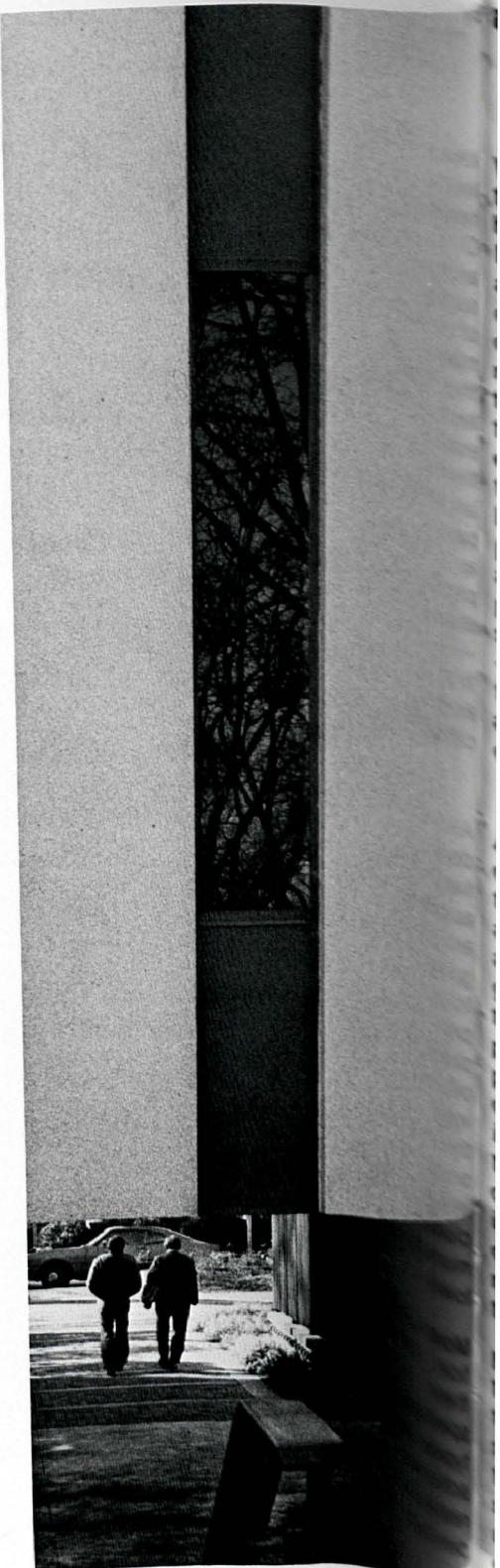
This effort has taken several forms—a survey of institutions in North Carolina which offer a wide range of educational programs in architecture—from two-year technical studies to graduate programs; profiles of two students—a woman at UNC-Charlotte and a black at N. C. A&T—who write about what they have encountered in this academic experience and what they anticipate in their future professional life; articles about student organizations and frank student opinions about architectural offices and schools; and finally a suggested list of architectural reference books—a veritable five-foot shelf of information, analysis, and opinion about this ancient and ever-new field.

This issue is a project of the NCAIA's Education Committee and has been in the making for almost two years. We are indebted to a large number of individuals—students, teachers and others who have contributed to this issue. We believe it has the potential of providing a valuable service in

disseminating needed information to some who may in time become leaders in our profession. If the idea behind this publication is well received, it could well become a regular or biennial feature in the North Carolina Architect's agenda. We welcome your comments, criticisms, and questions; and we sincerely hope that this effort will succeed in opening a door for at least a few talented and thoughtful young people who welcome the challenges provided by the field of architecture.



Robert Burns
Chairman, Education Committee



BE AN ARCHITECT

and design tomorrow's
man-made environment

Reprinted from Catalyst
Vol. III, No. 4

By Odom Fanning, author of
"Opportunities in Environmental
Careers"

When the American Institute of Architects recently dedicated its new headquarters building in Washington, D. C., it stated: "We of the American architectural profession rededicate ourselves to the fundamental mission of improving the quality of the nation's man-made environment. We pursue this mission in design of work of architecture from individual buildings to entire communities, striving to make them serve both their users and the larger environment of which they are parts . . . And we pursue this mission as citizens, bending our energies and professional knowledge to the reshaping and renewal of our institutions—social, political, and economic—so that a nourishing environment is available to more and more of our fellow citizens."

What An Architect Does

Architecture is the art and science of designing buildings and the space between them. In practice, the architect accepts a commission from a client—an individual, a board of directors, a government agency, a community—to solve a space problem. Usually, this problem involves the design of a complete building such as a residence, office, municipal or industrial building. Of course, it might involve less—the redesigning or remodeling of parts or all of an existing building. Or it might involve more—a group of buildings including their setting, or a whole community such as a suburb or a new town.

Most architects work in private practice, often as owners or partners of their own firms. Some architects specialize in the design of certain types of buildings such as hospitals, schools, churches, hotels, motels, restaurants, shopping centers, residences, or new towns. In a small

office—say, eight to 10 people—the architect must be a generalist. The larger the office, the more one can specialize: in design, production (working drawings), specifications (written documents to go with the drawings), client relations, site planning, office management, graphics, cost estimating, site supervision, photography, computer work, architectural programming, or other areas.

Some Alternatives to Private Practice

That's the range of standard duties. But an architect may not work in a standard office. Several years ago, when 3,000 students graduated from architectural schools in one year, the American Institute of Architects (AIA) estimated that only 1,800 took the state licensing examinations to become registered architects. The AIA presumes that even today only 50-60 per cent follow the conventional route.

What do the rest do? In a new publication, the AIA says: "We wish we knew for sure, but we can guess at some activities. Many go to work in government or planning positions, or go to work for developers and builders of all sizes and types. Some stay and teach or do volunteer work. Others may go to live in a commune in the country and design all the things the commune requires to exist. Others go into environmental fields other than design—such as ecology, preservation, conservation, or environmental education for the public."

RUDATs and CDCs

The AIA feels that its greatest asset is the willingness of its members to donate time to public service projects. For example, as an architect, you might be recruited by your local AIA chapter to serve on a Regional/Urban Design Assistance Team (RUDAT). With other architects, planners, economists, and other specialists, you would devote two or three days to diagnosing a community's problems and making recommendations for their solu-



tion. Increasingly these problems involve environmental matters. The local AIA chapter or the community pays expenses only, and no team member can accept a commission resulting from his team's recommendations.

In more than 80 cities, Community Design Centers (CDCs) provide the expertise of architects, planners, and other professionals where it is lacking, with a firm commitment to involve the community in planning its own future. Some CDCs were created as instruments of protest—for example, to stop a freeway by offering a design alternative which would not destroy as much housing or natural areas. Others were created to direct the talents of motivated professionals into such constructive channels as creating parks and playgrounds or low-cost housing. The Urban Workshop in Los Angeles has built low-cost housing in the Watts District. The Architects Workshop in Philadelphia has planned 40 vest-pocket parks. The Cleveland Design Center has conducted a survey of the city's housing and prepared plans to rehabilitate 2,500 housing units, making them environmentally more attractive.

Education for Architecture

While you're still in high school, you can begin preparing for an architectural career. Take as much math and social studies as possible, and some physics. If your high school offers courses in ecology or environmental or urban problems, seize the opportunity. The architect is a communicator, so do a good job in English composition. The AIA recommends: "If you have a year or two of high school left . . . tell your teachers about your architectural ambitions and see if they can't tailor things a bit for you. For instance, your art teacher might help you by emphasizing free-hand drawing instead of painting or ceramics."

Many kinds of self-help are recommended. Teach yourself to draw. Get



books and journals on architecture from the library. Get involved in local environmental activities relating to housing and landscaping. Visit architects' offices for advice. If there's a school of architecture nearby, ask about summer orientation sessions for high school seniors.

There are 97 schools of architecture in the U. S. and Canada. Generally you will spend four years as a major in environmental design, leading to a Bachelor of Environmental Design, followed by two years of graduate work leading to a Master of Architecture. The Bachelor's program may share part or all of its curriculum with allied disciplines such as interior architecture, industrial design, landscape architecture, or urban design. Some schools have not adopted that four-plus-two year program, but offer a five-year Bachelor of Architecture course, followed by one or two years of optional graduate work toward a Master's Degree. A few other schools offer graduate education only, for those with degrees in something other than environmental design.

During the school year 1972-1973, the 97 schools of architecture in North America enrolled 29,000 (full-time equivalent) students, of whom 2,400 (8.3 per cent) were women. While women comprise less than four per cent of the practicing professionals, that proportion is rising rapidly. Massachusetts Institute of Technology had the highest percentage (36 per cent) of women enrolled in graduate school. Approximately four per cent of all architectural students are black, (due partly to a \$1.6 million program financed by the AIA and the Ford Foundation).

Some schools of architecture require "clinical experience," much as medicine requires its students to treat actual patients before receiving their M.D. degrees. Normally an architectural clinic is staffed by the faculty of a particular school. It provides students with opportunities to work on real

problems with real clients. Often the students are paid.

Employment Prerequisites and Prospects

To be an architect requires not only specialized education and experience but registration as well. You acquire the education as already described. Either as part of the curriculum or later, you must gain appropriate experience for a certain period—usually one to three years under the supervision of a registered architect. Then you are eligible to take the architectural registration examination in your state. The reason an architect must be registered is that his work directly affects the health, safety, and welfare of the public. State registration is a way of making sure that those who practice the profession are qualified to perform architectural services competently. Once licensed in his home state, an architect can apply for and receive a license in other states without further examination.

Last year 5,000 degrees in architecture were awarded by the 90 U.S. and seven Canadian architectural schools. It is believed that every graduate who wanted an architectural position was able to find one, for architectural firms in most major cities report a perennial shortage of personnel. About 57,000 persons in the U.S. and Canada hold architectural degrees, but the U. S. Department of Labor estimates that only 33,000 of them are registered and practicing. The rest presumably are in alternatives to private practice, as explained above. But architecture as architecture is growing, and a steady increase in demand is anticipated—to 50,000 practicing architects by 1980.

Earnings

Beginning salaries for architects are in the range of \$10,000-\$12,000 with architectural firms in large cities. After five years, one should be earning \$18,000-\$22,000. After 15 years, an archi-

tect in private practice might be earning upwards of \$35,000.

The AIA reports: "It's hard to generalize but the life-time earnings of most successful architects in private practice are generally about equal to those of physicians and lawyers—the other highest paid professions. And it is true that there is nothing to stop architects from participating in the financing (architectural) projects and sharing the rewards, so long as they practice ethically and honorably."

OPPORTUNITIES IN ARCHITECTURAL EDUCATION

The State of North Carolina has witnessed a remarkable growth of interest in formal studies in architecture in recent years, a development which reaffirms the State's long heritage of architectural consciousness. With many examples of extraordinary architecture and urban design scattered throughout the State—Old Salem, Town and Davis' State Capitol, the public buildings and residential quarters of Edenton, Wilmington, Hillsborough and New Bern, Nowicki and Dietrich's State Fair Arena, Catalano's hyperbolic paraboloid house and Wolf Associates' crystalline banks—it is hardly surprising that schools are currently experiencing an unparalleled demand for admission to educational programs in architecture.

This demand has resulted in the establishment of a new professional college of architecture at U.N.C.-Charlotte as well as the development of two-year architectural technology programs at many of the State's community colleges and technical institutes. These new programs, initiated during the sixties, together with older professional departments at N.C.S.U. and N.C. A&T constitute a broad variety of educational choices for the student seeking a career in architecture. Curricula varying in length from two to six years are offered; diversified emphases are available—from technical training, specializing in drafting and construction, to programs which focus on the design of buildings and entire new communities.

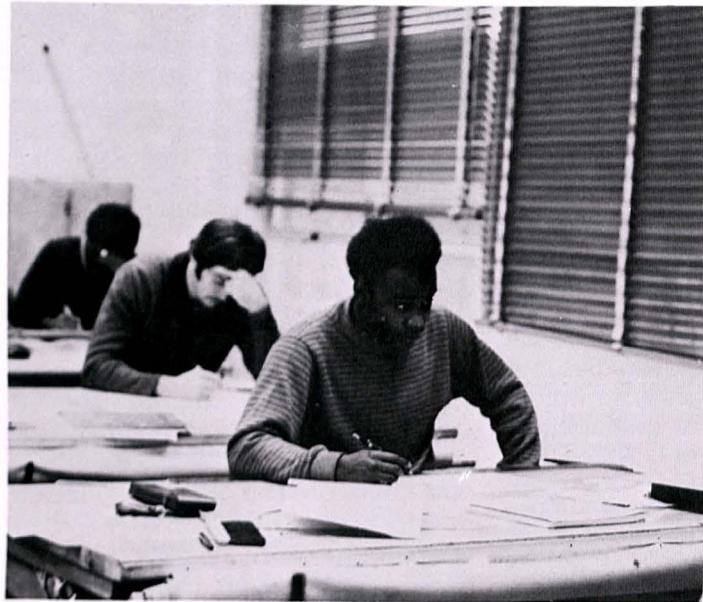
These fundamental distinctions are barely indicative of the many other less obvious differences which make North Carolina's architectural education offerings richly diversified. It is, consequently, important that a student interested in studying architecture understand the intentions and expectations of the available programs so that he can match these with his own abilities and aspirations.

The following pages constitute an overview of architectural programs in the State. Each institution offering formal studies as a basis for professional activity in architecture has been surveyed to determine certain basic information about the nature of the program offered—degree or degrees granted; curriculum structure; numbers of students, graduates and faculty members; tuition costs; admissions requirements and procedures. For the three universities offering professional degrees in architecture or architectural engineering (N.C. A&T, N.C.S.U. and U.N.C.-C), a brief statement summarizes the concerns and emphasis of each school's program.

Recognizing that the highly condensed information provided in this survey is inadequate for a thorough understanding of the options available, each school has provided a source from which additional information can be requested. Most institutions provide a general catalog and some offer a bulletin describing the architecture program in detail. These tend to be helpful in establishing specific curriculum and course information, although they tend to become obsolete quickly (as will the information in this publication). Students are urged to make a personal visit to any school they are considering, to talk with faculty and students, and, if possible, observe classes in progress. (This would rule out weekend visits as being of limited value.) In addition, students are urged to initiate application procedures early, as admission to most architecture programs is highly competitive. Certain schools have as many as ten applicants for every available position in the entering class.

Some students may wish to explore educational opportunities in institutions outside the State. There is one excellent source of information for the approximately 100 university based architectural programs: a

paperback volume titled **Architectural Schools in North America** available for \$3.00 from the Association of Collegiate Schools of Architecture, 1735 New York Avenue, N.W., Washington, D. C. 20006. This document is updated annually and devotes two full pages to each school.



NORTH CAROLINA A&T STATE UNIVERSITY

Department of Architectural Engineering

Greensboro, N. C.

It is the aim of the program in architectural engineering to encourage and develop students, who exhibit creative ability and who exhibit the ability to grasp and use scientific principles, for professional careers in the art and science of building. Strong emphasis is placed on training in the building sciences and on training in engineering as it applies to the design and construction of buildings.

The architectural engineering program provides considerable training in general education which is devoted to study of social and physical sciences, art, English, mathematics and the humanities. Introductory

courses in architectural engineering and a large percentage of the required general education courses are scheduled in the freshman and sophomore years. This training, during the first and second years, provides background for the study of basic engineering science and the study of more professional courses which are scheduled later in the program. Instruction within the department of architectural engineering is organized under four divisions.

1. Graphics, Architectural Design and Architectural History
2. Environmental Control, Electrical and Mechanical Equipment

of Buildings.

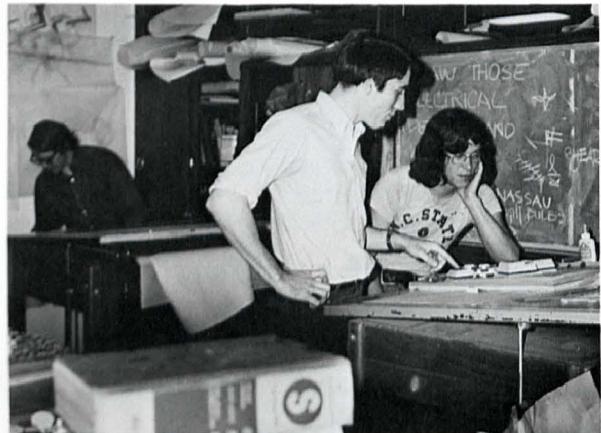
3. Professional Practice, Management, Materials and Methods of Construction

4. Structures

Each of these divisions has specific course requirements that are aimed toward the development of the architectural engineering student so that he will be able to take his place in society as a professional in the field of engineering.

The five year program in architectural engineering leads to the bachelor of science degree and is fully accredited by the Engineers' Council for Professional Development.

Program	Comprehensive Architectural Engineering—Five years needed to complete requirements for Bachelor of Science degree; accredited by E.C.P.D. (Engineering Council for Professional Development)
Curriculum Requirements	Architectural Design (8-13% of total courses), Planning/Urban Studies (0-6%), Drafting/Graphics (6%), Structures/Technology (23-29%), other Professional courses (10%), Science/Math (30%), Humanities/Social Studies (17-22%).
Students	Enrollment in institution—4731; in Architectural Engineering Program—93; in first and second years—53; in third and fourth years—34; in fifth year—6; graduating this year—4.
Faculty	Number of full-time—6; Part-time—1; with Professional degrees in architecture or engineering—6; with Professional registration—4.
Employment	Department sponsors coordinating program with profession and industry; job placement services available to graduates; employment of graduates: Private architectural firms (10%); Engineering firms (20%); Government agencies (55%); Industry (10%); Educational institutions (5%).
Financial	Tuition and fees: in-state \$1,312.50/yr.; out-of-state \$2,845.50/yr. Scholarships and loans are available for qualified students.
Admissions	The following are required for freshman admission: High School Diploma (or equivalent); SAT Scores; Academic Record; a personal interview is recommended.
Additional Information	Catalog and other information may be obtained by writing Professional William A. Streat, Chairman; Department of Architectural-Engineering, North Carolina A&T State University, Greensboro, North Carolina 27411.



NORTH CAROLINA STATE UNIVERSITY

School of Design / Architecture Program

Raleigh, N. C.

The Architecture Program is the largest and best known of the School of Design's professional programs. It was thrust into the vanguard of architectural education in the late forties and since that time has gained an international reputation as a center of architectural innovation and excellence.

Its fundamental goal is to prepare individuals for significant professional activity by providing a basis for each student to gain an understanding of man and his cultural context, a deep commitment to the ordering of the physical environment, and the essential capabilities for realizing his creative potentials.

Inherent in the Architecture Program is recognition of the evolving role of the architect. While individual creativity and decision-making abilities are no less important than previously, it is clear that the architect increasingly functions as member and frequently as coordinator of a team of professionals—engineers, planners, political and behavioral scientists, economists, and others—who together are able to formulate the comprehensive pro-

grams adequate to meet today's most urgent environmental problems.

It becomes obvious that no monolithic academic program can serve the requirements of architecture students with highly divergent interests and capabilities, nor indeed the varied needs of the present-day architecture profession. The curriculum in architecture, while providing a broad basic structure common to all students, encourages individual diversity through a major elective program of in-depth study in one of several design-related fields leading to expanded background in social and cultural factors, programming and analytic methods, technological issues, urban affairs, visual studies, management and operations, economics or natural systems. Through interdisciplinary studies in the School and University and through the use of outside consultants, the interdependence of the architect with related professionals is strongly emphasized. The design studio is transformed into a working laboratory in which analysis and synthesis become real and meaningful activities to the

students.

Considering the changing requirements in the field of architecture and the increasing complexity of tasks facing today's architect, the Architecture Program has established a six-year, two degree curriculum organized into three two-year cycles of study.

The freshman and sophomore years combining general studies and introductory design exercises constitute the "Basic Design Program" common to all architecture, landscape architecture, and product design students in the School of Design. The junior and senior years mark the formal introduction to architectural studies and form the "Preprofessional Program". This first four-year program requires 129 semester hours and leads to the nonprofessional degree of Bachelor of Environmental Design. The third cycle is designated the "Professional Program" in which the student undertakes two years of graduate study leading to the professional degree of Master of Architecture.

Program: Comprehensive Professional Architecture; Four year undergraduate program leading to the Bachelor of Environmental Design in Architecture, two additional years for Master of Architecture degree; accredited by NAAB (National Architectural Accrediting Board)

Curriculum Requirements: Architectural/Environmental Design (30% of total courses); Planning/Urban Studies (5%); Drafting/Graphics (5%); Structures/Technology (15%); Other Professional courses (15%); Sciences/Math (10%); Humanities/Social Studies (20%).

Students: Enrollment in Institution—13,800; in Architecture program—340; in first and second year—140; in third and fourth year—140; in graduate program—60; graduating this year—63 BEND, 12—M. Arch.

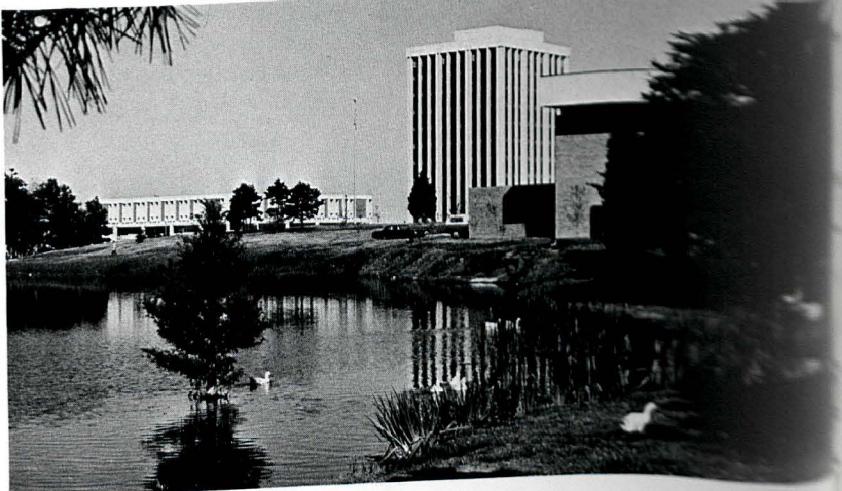
Faculty: Number of full-time—15; Part-time—4, with professional degrees in architecture or engineering—19, with professional registration—18.

Employment: Eight weeks summer professional experience required for M. Arch. degree; job placement service provided to graduating students by University; employment of graduates: private architectural firms (70-80%); government agencies (5%); industry (5%); educational institutions (5-10%); other (5-10%).

Financial: Tuition and fees: in-state \$430.00/yr; out-of-state \$2,000.00/yr. Scholarships and loans are available for qualified students.

Admissions: The following are required for freshmen admission: High School diploma (or equivalent); SAT Scores; academic record; portfolio of creative work; reference reports; and personal interview. For graduate admission: Bachelors degree, reference reports; undergraduate transcript; departmental questionnaire, and portfolio. Transfer students from other universities or technical institutes will be reviewed on an individual basis and should initiate process with personal interview with program director or Dean.

Additional Information: University catalog, School of Design bulletin, and other information may be obtained by writing, Director, Architecture Program, School of Design, North Carolina State University, Raleigh, North Carolina 27607.



UNIVERSITY OF NORTH CAROLINA—CHARLOTTE

College of Architecture

Charlotte, N. C.

The objectives of the College of Architecture recognize the fundamental concern of the architect: the design and control of the physical environment. This concern is with respect to a broad range of scales, the organization of single buildings as well as the organization of large groups of buildings at the scale of the city and the systematic integration of these structures with the fabric of technological, societal and geophysical forces.

The basis and method of study in the College is conducted in an intellectual climate which promotes inquiry, deals with the fundamentals of objective problem solving and teaches the essential balance be-

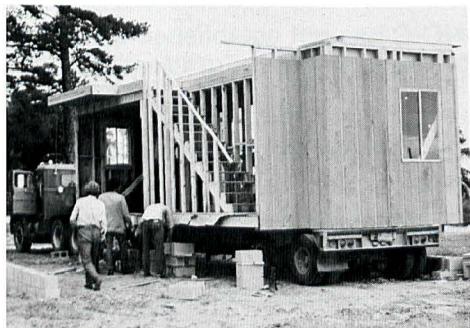
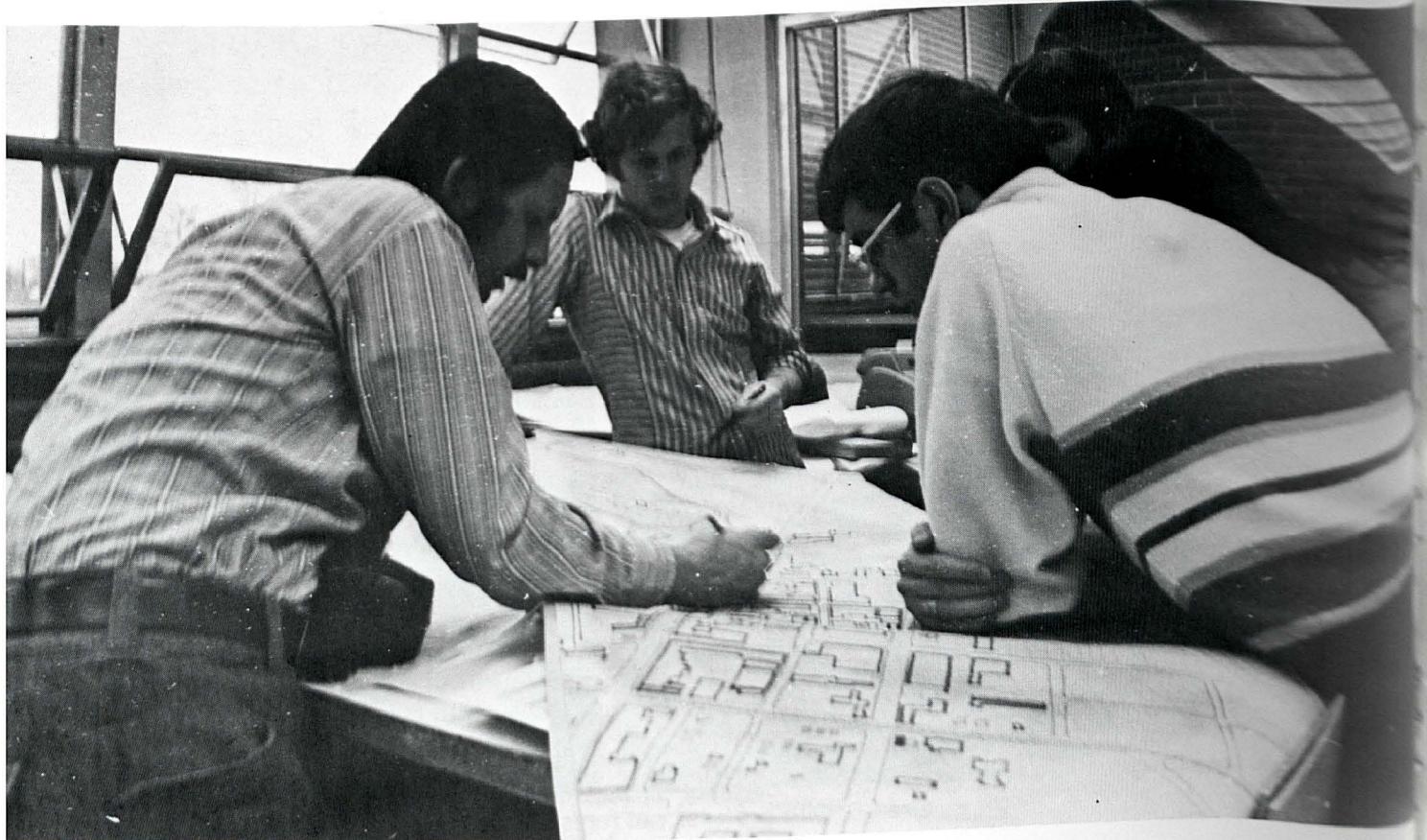
tween analysis and synthesis necessary to solve the problems of the physical environment facing contemporary society. In summary the administrative policy, the curricula and the teaching methods are designed to support most usefully the education of the architect in a rapidly changing world.

Teaching is highly individual with each instructor working directly with small groups of students in the studio. The focus is primarily on process; however, through a program of visiting distinguished lecturers and exhibitions, the student is afforded the opportunity of direct contact with contemporary professional practice. Our task then is to search con-

tinually for and develop new techniques and methods of teaching problem solving; to develop means of communication with other disciplines; to have a qualified distinguished faculty; to develop significant research programs; to develop action-oriented programs for the community; and to take full advantage of the resources of the University and the region.

The nature of the problems in our society coupled with the unique location of Charlotte in a rapidly growing region create for us in the College of Architecture at the University of North Carolina at Charlotte some challenging opportunities for the education of the architect.

Program	Comprehensive professional architecture; four year undergraduate program leading to the Bachelor of Arts in Architecture degree; one additional year required for the Professional Bachelor of Architecture degree.
Curriculum Requirements	Architectural design (30% of total courses); Planning/Urban Studies (10%); Drafting/Graphics (2%); Structures/Technology (6%); Other professional courses (4%); Sciences/Math (12%); Humanities/Social Studies (15%); Electives (21%).
Students	Enrollment in Institution—5871, in architecture program—162; in first and second year—135; in third and fourth year—27. (UNC-C is a newly formed program and will have its first graduating class in 1975).
Faculty	Number of full-time—7, part-time—1, with professional degrees in architecture—6; with professional registration—3.
Employment	Because of its status of a new school, UNC-C has not established an employment service. There is no work experience requirement for graduation.
Financial	Tuition and fees: in-state \$199.00/yr.; out-of-state \$979.00/yr. Scholarships and loans are available for qualified students.
Admissions	The following are required for freshmen admission: High School diploma (or equivalent); SAT Scores; academic record, and personal interview.
Additional Information	University catalog, College of Architecture bulletin, and other information may be obtained by writing Robert G. Anderson, Dean, College of Architecture, University of North Carolina at Charlotte, UNC-C Station, Charlotte, North Carolina 28213.



CATAWBA VALLEY TECHNICAL INSTITUTE
Architectural Technology
Hickory, N. C.

Program Two year Technical Architectural drafting—offers Associate Degree of Applied Science. Prepares student to turn architect's design sketches into complete working drawings for construction purposes.

Curriculum Drafting/Graphics (30% of total courses); Structures/Technology (8%); Other professional courses (22%); Sciences/Math (23%); Humanities/Social Sciences (17%).

Students Total enrollment—1354; in architectural drafting—51; No. graduating this year—20.

Faculty Number of full-time—2, with professional architectural degree—1, with professional registration—1.

Employment Placement service available—employment of graduates: Private architectural firms (20%); engineering firms (10%); Government agencies (30%); Industry (30%); education institutions (5%); other (5%).

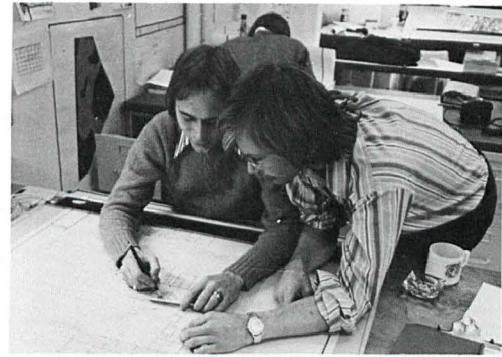
Financial Tuition and fees: in-state \$32/quarter; out-of-state \$137.50/quarter. Estimated cost of books and supplies \$200. Financial assistance available.

Admission Requirements: High School Diploma, academic record, personal interview, GATB.

Additional Information List of courses and program objectives available from Dario Santi, Catawba Valley Technical Institute, Hickory, North Carolina 28601.

CENTRAL PIEDMONT COMMUNITY COLLEGE

Architectural Technology
Charlotte, N. C.



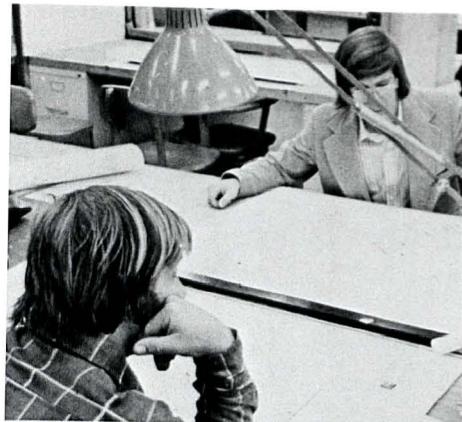
Program	Two year comprehensive technical program offers Associate Applied Science Degree. Accredited.
Curriculum	Drafting/Graphics (21.9% of total courses); Structures/Technology (23.8%); other professional courses (19%); Sciences/Math (21%); Humanities/Social Sciences (14.3%).
Students	Total enrollment—12,000. In architectural drafting—40 with 22 graduating.
Faculty	Full-time—3; Part-time—6; with professional architectural degree—2; with professional registration—4.
Employment	Placement service available—employment of graduates: Private architectural firms (40%); engineering firms (40%); Industry (20%).
Financial	Tuition and fees: In-state \$170/yr.; out-of-state \$340/yr. Estimated cost of books and supplies \$300. Financial assistance available.
Admissions	Requirements: High School Diploma or equivalent.
Additional Information	Bulletin available from A. G. Farkas, Program Director, Central Piedmont Community College, Charlotte, N. C. 28201.

FAYETTEVILLE TECHNICAL INSTITUTE

Architectural Drafting & Design
Fayetteville, N. C.



Program	Two year selected technical program with special emphasis on Drafting and Design for Degree. Accredited.
Curriculum	Architecture (29.73%); Graphic Communications (6.49%); Architectural Presentations (12.97%); Architectural Technology (25.41%); Site Development (4.32%); Mathematical Communications (5.95%); Social Studies (4.86%); Language Communications (4.86%); Physical Sciences (5.41%).
Students	Total enrollment—3,282, in architecture—85, graduated—12.
Faculty	Full-time—2, with professional degree—1, with professional registration—1.
Employment	Professional or office experience required as part of program with cooperation of architects or industry. Placement service available; employment of graduates: architectural firms (12.5%); government agencies (6.75%); industry (62.5%); other (12.5%).
Financial	Tuition and fees: In-state \$126.50; out-of-state \$443.00 Books and supplies: \$50.00/qtr. Financial assistance available.
Admissions	High School Diploma; previous academic record; personal interview, DAT scores.
Additional Information	Bulletin available upon request from William E. Sease, Dean of Instruction, Fayetteville Technical Institute, P. O. Box 5236, Fayetteville, N. C. 28303.



FORSYTH TECHNICAL INSTITUTE
Architectural Technology
Winston-Salem, N. C.

Program Two year comprehensive technical program with AAS degree. Accredited.

Curriculum Architectural Design (25%); Drafting/Graphics (25%); Structures/Technology (10%); Other Professional Courses (10%); Sciences/Math (15%); Humanities/Social Sciences (10%).

Students Total enrollment: 1,344, in architecture—30, graduated—10.

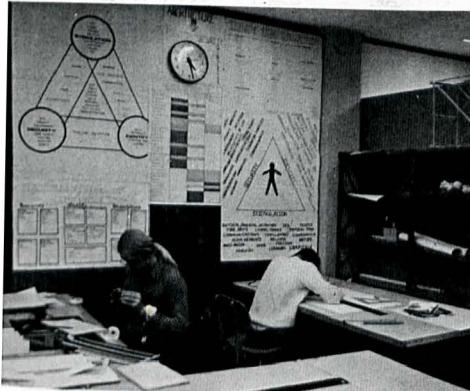
Faculty Full-time—1, Part-time—1, Professional degree—1.

Employment Placement service available. Employment of Graduates: private architectural firms (10%); engineering firms (20%); industry (20%); High Educational Degrees (50%).

Financial Tuition and Fees: In and out-of-state \$140.00/yr. Books and supplies: \$200.00. Financial assistance available.

Admission High School Diploma or equivalent; previous academic record; personal interview; comparative guidance and placement program scores.

Additional Information Bulletin available upon request from M. Mense, Sr., Forsyth Technical Institute, 2100 Silas Creek Parkway, Winston-Salem, North Carolina 27103.



GUILFORD TECHNICAL INSTITUTE
Architectural Technology
Jamestown, N. C.

Program Two year comprehensive technical program with AAS degree. Accredited.

Curriculum Drafting/Graphics (60% of total courses); Architectural Design (5%); Planning and Urban Studies (5%); Structures/Technology (5%); Other Professional Courses (10%); Sciences/Math (10%); Humanities/Social Sciences (5%).

Students Total Enrollment—2,600, in architecture—55, graduated—15.

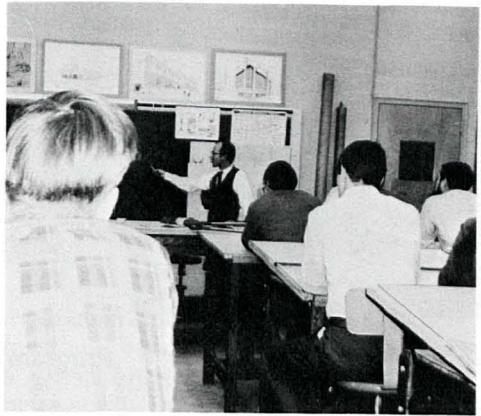
Faculty Two full-time with professional degree and professional registration.

Employment Placement service available. Employment of Graduates: private architectural firms (40%); Engineering firms (20%); Government agencies (10%); industry (20%).

Financial Tuition and Fees: In-state \$100.00, out-of-state \$400.00. Books and supplies \$150.00. Financial assistance available.

Admission High School Diploma or equivalent; personal interview.

Additional Information Bulletin available upon request from Guilford Technical Institute, P. O. Box 1000, Jamestown, North Carolina 27282.



NASH TECHNICAL INSTITUTE

**Architectural Technology
Rocky Mount, N. C.**

Two year comprehensive technical program offers AAS degree.

Drafting/Graphics (50% of total courses); Architectural Design (10%); Structures/Technology (10%); Other Professional Courses (5%); Sciences/Math (15%); Humanities/Social Sciences (10%).

Total enrollment—405, in architecture—14, graduating—4.

One part-time and one full-time.

Placement service available. Employment of Graduates: private architectural firms (75%); engineering firms (15%); industry (10%).

Tuition and fees: In-state \$96.00/yr., out-of-state \$239.00/yr., Books and supplies: \$100/yr. Financial assistance available.

High School Diploma or equivalent; previous academic record; personal interview; 35% on DAT Verbal and Numerical.

Bulletin available upon request from Nash Technical Institute, P. O. Box 2347, Rocky Mount, North Carolina 27801.

Program

Curriculum

Students

Faculty

Employment

Financial

Admissions

Additional Information

PITT TECHNICAL INSTITUTE

**Architectural Technology
Greenville, N. C.**

Two year Comprehensive Technical drafting offering and Associate of Applied Science Degree accredited by Southern Assoc. of Colleges/ and ASC-AIA.

Drafting/Graphics (50% of total courses); Architectural Design (10%); Planning/Urban Studies (3%); Structures/Technology (20%); Others (7%); Sciences/Math (8%); Humanities/Social Sciences (2%). Also offers: ASC/AIA Student Chapters; increased background in design and environmental procedures; and have high concentration on "working drawings" with model building and color presentation work.

Enrollment of 700, architectural drafting—35, graduating—12.

Full-time—2 with professional degrees in architecture.

Placement service is available. Professional or office experience is available as part of program with architects or industry. Employment of graduates: private architectural firms (50%); engineering firms (35%); Government agencies (5%); industry (contractors) (8%); educational institutions (2%).

Tuition and fees: In-state \$32/qtr.; out-of-state \$137.50/qtr. Books and supplies: \$16/qtr. average. Financial assistance is available.

Requirements: High School Diploma; SAT Scores; Personal Interview; also open door policy.

For detailed bulletin write: George McRoy, Director of Student Personnel, Pitt Technical Institute, P. O. Drawer 7007, Greenville, North Carolina 27834.

Program

Curriculum

Students

Faculty

Employment

Financial

Admission

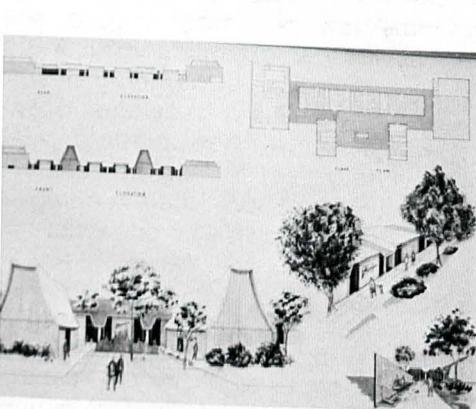
Additional Information





SANDHILLS COMMUNITY COLLEGE
Architectural Technology
Southern Pines, N. C.

Program	Two year comprehensive technical program offers Associate Degree of Science. Accredited.
Curriculum	Architectural Design (5% of total courses); Drafting/Graphics (20%); Structures/Technology (7%); Other Professional Courses (40%); Sciences/Math (17%); Humanities/Social Sciences (11%).
Students	Total enrollment—1,200; in architectural drafting—18; graduating—8.
Faculty	Full-time—3, with professional architecture degree—1, with professional registrations.
Employment	Professional or office experience program requirement, cooperating with architects or industry. Employment of graduates: private architectural firms (20%); industry placement service available.
Admissions	High School Diploma or equivalent.
Additional Information	Bulletin available from Henry I. Rahn, Chairman, Engineering, P. O. Box 28387, Southern Pines, North Carolina 28387.



W. W. HOLDING TECHNICAL INSTITUTE (WAKE TECHNICAL INSTITUTE)
Architectural Technology
Raleigh, N. C.

Program	Two year selected technical program with special emphasis on drafting and graphics. Offers a AAS Degree and is accredited by ECPD.
Curriculum	Drafting and Graphics (50% of total courses); Structures/Technology (5%); professional courses (10%); Sciences/Math (20%); Humanities/Social Sciences (15%).
Students	Total enrollment—1160; in architectural drafting—54; graduating—15.
Faculty	Full-time—1, with professional degree—1, with professional registration—1.
Employment	A cooperative program with architects or industry is required as part of program. Graduates finding employment: in private architectural firms (28%); engineering firms (30%); Government agencies (12%); Industry (15%); educational institutions (10%).
Financial	Annual cost of tuition and fees: In-state \$139.00 out-of-state \$561.00. Financial assistance is available.
Admission	Requirements: High School Diploma; Academic record; personal interview, DAT.
Additional Information	For a more detailed bulletin contact, Director of Admissions, W. W. Holding Technical Institute, Route 10, Box 200, Raleigh, North Carolina 27603.

printed from AIA Journal, November 1973.

R. DeAvignon was 1973 student adviser to the
AIA Board of Directors and president of ASC/AIA.

Today's graduates are not qualified to produce the kind of work I need done in the office" has been the typical comment voiced by professionals at conventions, meetings of The American Institute of Architects and in architectural firms throughout the country during the past several years. How often do you hear a fellow practitioner state that "schools are not responding to the needs of the profession"? It is unfortunate that at this time there probably is no one person or group who knows how to really define those needs.

From the educators' and the students' points of view, the question comes down to how practitioners regard students upon graduation. Are they young professionals with knowledge and skills that have been developed through well-rounded programs encompassing education and some basic experience, or are they simply bodies whose primary function is to prove that they can "use a pencil"?

Over the past five years or so, the profession of architecture has seen some tremendous changes take place, dictated from within its own boundaries as well as from external forces—a change from the responsibility of the Beaux-arts architect, whose main concern was to create buildings that were structurally safe and esthetically pleasing, to a profession that is so rapidly expanding its scope and becoming so much more involved that professionals have yet to define the role of the "new architect." Therefore, it is the responsibility of the current professional to know more about numerous other factors that were of little or no consequence to practitioners in days past.

These new horizons opening up within the profession place a great deal of responsibility on those holding the future of architecture.

For the profession it means several things. No longer is the architect able to hide under the mask of the "master builder." He or she must learn to share the knowledge of other professions (planning, real estate, law), exchange new ideas in materials and

building systems, and work on a consulting basis with other practitioners on projects too large for a single firm to handle. With new advances in technology, an increased awareness of the environmental plight facing our society and the current trend toward a more humanitarian approach to design, the profession finds itself creating other alternatives to traditional practice, and even perhaps new professions, all necessitating a background in architecture.

For students this means a much more intensive search into the definition of the meaning of "architecture." They must have the ability to foresee what direction the profession might be taking by the time they have enough background to begin practice. They must have the knowledge and the material to be able to investigate what kind of education would best suit those needs, and then somehow be aware enough individuals to know what is going on around them as well.

Architectural education, just as the practice of architecture, has gone through many levels of change over the past several years, and each school has attempted to respond to the new needs in many different fashions. For the educational institutions this means developing "new" curriculums, though having certain responsibilities toward keeping much of the present material taught as a basis for learning. Therefore, studies such as mechanical systems, graphics and structures must of course stay; however, emphasis on new techniques and methods of application of this material, i.e., computer technology, land planning, etc., is growing more necessary each day.

Because of these increased demands, schools play a major role in determining what is to happen to our profession in the future. Let's look at what the schools are doing today.

Recently, a survey was conducted by the Association of Student Chapters /AIA among a random sampling of architectural students from across the country, representing varying institutional philosophies, levels of education and attitudes concerning the state

THE MYTH: Students are poorly prepared to practice when they graduate.

The question: What do you feel you should know by the time you have reached your first professional degree?

The answers: A synthesis rather than an emphasis on any area would be most desirable, I believe. A design professional needs to understand or have a grasp on the design process, new behavioral information, technology, etc . . . in other words, a grasp on the totality of reality and those tools to deal with it, including economic realities. *Rosemary Rowan, third year, Temple University*

I feel you should know a little about a lot. The emphasis is strictly a personal matter. I don't feel schools should be oriented to "how to pass the registration exam in five easy years." However, all the content should be there, in conceptual form at least. *Dean Bradley, fifth year, Kansas State University*

I feel that one with a Bachelor of Architecture Degree should have a basic knowledge of the important theories of architecture and the general method of doing what a real architect does, complete from initial PR work through programming, design and finally working drawings. However, I don't know how to accomplish all of this in just five school years. I don't think we should be expected to be accomplished in any one area nor do I think we should be expected to perform without the help of other experienced people in the office. We should be expected and respectively should be eager to assume a responsible, productive role in the office. *Steve Payne, fifth year, University of Colorado*

The question: Where do you feel you are the strongest, weakest? Is it a result of your formal education from a school oriented in that direction?

The answers: I am strongest in general design concepts and in relating other disciplines to architecture . . . I am weakest in nuts and bolts know-how, both in the actual construction and approach (i.e., cost estimating). Yes, but I'm happy about this because I feel the nuts and bolts type information can be gained quickly with on-the-job training. *Langston Trigg Jr., 1973 graduate, University of California, Berkeley*



Urban planning and design are my forte . . . drafting and illustrative ability needs work. No, the school I attended claimed to stress design, but it actually failed to stress any area. *Recent graduate, Catholic University.*

My present strengths, derived from academic experience, lie in understanding and attempting to deal with complex urban problems, architectural history and theory; my greatest weaknesses, stemming from insufficient office experience, consist of working drawings and construction management. It was more a result of personal inclinations and particular subgroups within the school that stimulated an interest in the varied fields. *Marion Moffett, sixth year, Massachusetts Institute of Technology*

The question: Do you feel that you are qualified to take the registration exam, or will be as soon as you are eligible?

The answer: Yes, some parts, I'm sure there are certain things that I'll have to be exposed to before I can pass, but I'll be able to pick them up as soon as I work full time in an office. *Jaime Gesundheit, sixth year, University of Southern California*

Yes, if I had continued my "apprenticeship" with Gensler & Associates because of their positive attitude toward involvement in office activities. *Mark Maves, recent graduate, University of California, Berkeley (now with the AIA staff)*

Yes, with some on-the-job training. *Langston Trigg*

THE MYTH: Students are generally not very concerned about gaining experience before graduation.

The question: Do you feel that it is important for a student to have exposure to the "real world" situation before he or she receives a degree? How much experience have you had?

The answers: Yes, an internship program at the University of Colorado provides students with the opportunity to work for architects in the area. Usually, eight hours a week are spent in the office. We get three hours credit/semester, but no pay. The architects here seem to value the program as much as we do. It was the most worthwhile class I've taken to date. I've had the internship class (fall and spring) eight hours/week and full time during semester break and summer of 1973. *Steve Payne*

Yes, it makes one appreciate school more and helps to temper the idealism and "ego" so common with architectural students. It helps to emphasize how much more there is to learn. I've had two summers of work in Alabama firms. *Serena Randolph, fourth year, Tulane University*

Yes, it is essential that one understands what architecture means both in school and in practice. Students should make an effort to work while they are in school, not only in architectural offices but also on construction jobs and in all other related fields. *Jamie Gesundheit*

of the profession. Under-graduates and recently graduated students were asked to respond to lengthy and comprehensive self questions, dealing with everything from personal experiences at the college level to what role they believe architects should play in society today. Included here are some of the questions and some of the responses received. These views, though only a few are presented, can be considered to give an accurate reading of what many students are concerned with today.

When asked what kind of education students feel they should have received by the time they reach their first professional degree, the responses were relatively the same: a basic working knowledge in many areas, such as behavioral sciences, design technology and ethics.

Many students feel that their weak links are in the area of technology—the nuts and bolts of the profession. However, the consensus is that this should not be taught in school but should be experienced in some sort of internship program. The idea of work study programs has been growing more popular each year, with a variety of different routes available to fill the experience void. There is unanimous agreement in the belief that experience of some sort is absolutely essential in rounding out a student's education, and every student (beyond the second year of school) who was questioned had already had some experience, whether through an established internship program or simply summer work found on his own. With this in mind, it was no surprise to find students fairly confident in their ability to pass the registration examination as soon as eligible. This gives the candidate at least two more years of office practice experience to concentrate on the more technical aspects that perhaps had not been picked up at the university.

Many students agree that the academic environment sometimes develops a more idealistic attitude with respect to the profession and that some exposure to reality in terms of work experience permits students to look at the education in a somewhat different perspective. The concern voiced by many, however, is that if the student is employed too early, the work might tend to inhibit the growth of design imagination—something worth thinking about.

ng about.

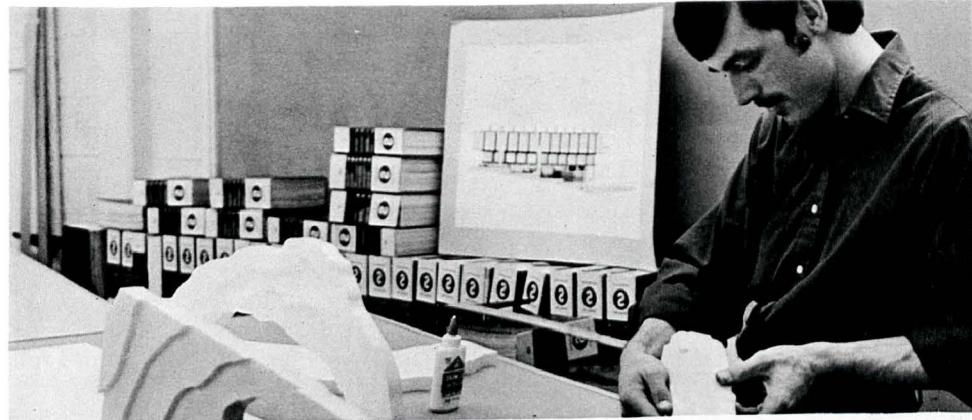
When asked if they would change their educational experience at all if given the opportunity to repeat again the emphasis seems to be more heavily on the time frame for learning rather than the curriculum itself. This tends to be an overall feeling among those recent graduates who have perhaps come out of school with a master's degree, have spent relatively little time in an office situation, and are now wishing that they could have seen all the options before jumping right into the last formal step of education. This exposure plays an important role in helping students decide which route to take (or, in some cases, which not to take) and, as is obvious from the responses to this question, there is definitely a need for professional assistance before the final years of school.

Unlike many recent statistics which state that there has been "no actual shift in emphasis" in curriculums at schools of architecture, all reports from students read differently. Those who have experienced the most apparent changes, of course, are those presently in their final years of school or the recent graduates. There seems to be no doubt in their minds that the pendulum has once again shifted its weight from the initial emphasis on technical (beaux-arts) knowledge to the behavioral and the natural sciences (sociological) half way back again to some fair compromise.

Each student stated his amazement at the kind of education he has received, obviously being led to believe that he would have been dictated to rather than encouraged to pursue an individual identity in the profession. This is a rather disturbing fact, as once again it clearly exposes the gap we seem to find inherent within this profession.

When it comes to determining whether their educational experience was the answer to all of their needs, students became more ambiguous in their responses. The feeling seems to be that a purely academic exposure cannot fulfill all elements necessary to develop their personal as well as professional growth.

The feeling several years ago among students that professionals were not responding to the needs of the public, other professionals and the education of future practitioners is generally shifting in at least some of these areas.



Definitely. In fact, there should be some way each student is guaranteed employment, every summer he or she can work. *Cat Stevens, third year, Prairie View, A & M College*

The question: If you had your education to do over again today, what would you change, if anything?

The answers: I would want more contact with the profession. *Bruce Schafer, 1973 graduate, North Carolina State University (now with the AIA Staff)*

I would change the time sequence and work one year or more before entering graduate school. *Jaime Gesundheit*

I would propose a basic program with specialty options developed within a work/study framework. *Recent graduate, Catholic University*

THE MYTH: Schools are not responding to the current needs of the profession.

The question: Are you receiving the kind of formal education you anticipated as a student first entering architectural school?

The answers: No. I expected to be "trained" for the job market; late nights in the studio cranking out working drawings, watercolor renderings and models of building after building. I expected to be taught things instead of concepts, "tricks" instead of theories; to design for the wants of today, oblivious to the needs of tomorrow. Facts, not ideals. History, not vision. *Phill Allen, fifth year, University of Oregon*

No, but then this is fortunate. I expected the spoon-fed variety of education most college students come to expect through high school conditioning. My education thankfully has been more a broadening rather than a pinpointed education. *Rosemary Rowan*

Both as an undergraduate and graduate I received a much more liberal education than I expected. I expected a beaux-arts type of education with drawing courses and design-like-me courses. I found instead great uncertainty in the profession and in educational circles. *Richard Lee Rice, Jr., sixth year, Harvard University*

The question: Did your formal education provide you with a realistic view of the practice of architecture today?

The answers: Not alone. Along with work experience and ASC/AIA involvement, I gained a realistic view. I've met several Ivory tower instructors who totally reject practitioners and the profession. *Langston Trigg*

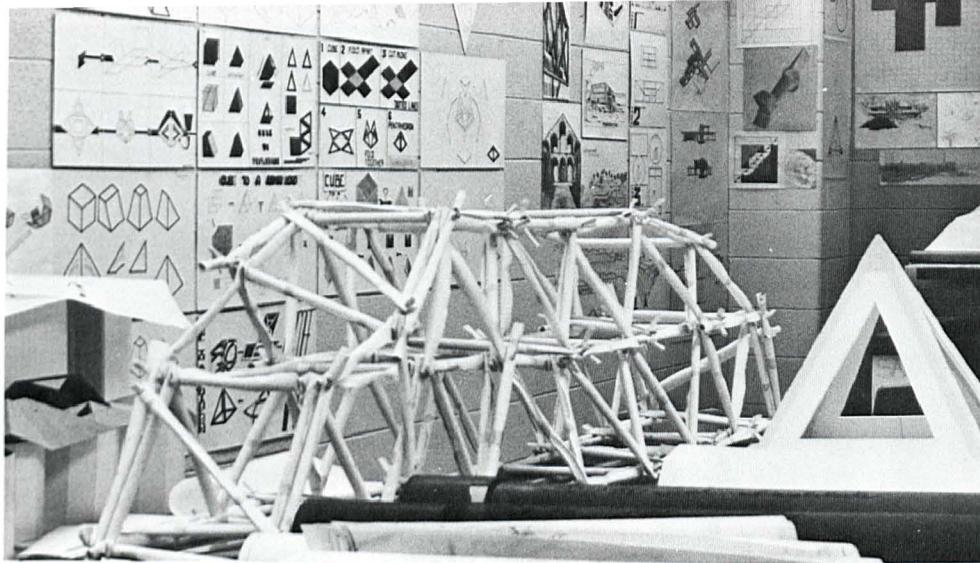
No, but this was not its goal. It was up to me to learn the real world, but the faculty could have made it easier to communicate with architects (i.e., seminars, exchanges, job placement, etc.). *Bruce Schafer*

I think my education pointed out some of the problems with the profession. By taking courses taught by developers at Harvard and MIT, I learned how they think and act. I learned that their demands are not always incompatible with good architecture. Perhaps the ability to communicate is one of those things lacking in our profession and schools today. *Rick Rice, Harvard University*

The question: Do you feel that schools of architecture have shifted emphasis during the period you were receiving your education?

The answers: Yes! My education spans approximately eight years from technology and design to methodology back to technology. *Pat Davis, fifth year, University of Texas, Austin*

Yes. When I began, it was strictly structure in mind. Now it's the human and his environment. *Cat Stevens*



Yes. I started out in the first 4 & 2 program in the country with emphasis on liberal arts. The social and technological aspects were eventually pursued to an extreme, mostly incapable of implementation. During the later part of school, the direction was drifting back to typical practice skills and a refreshing but frustrating effort to translate behavioral and natural science knowledge to implementable tools. *Mark Maves*

THE MYTH: Students feel that professionals have not kept up with their part of the responsibility in assisting students and young professionals to become an important part of the profession.

The question: Do you feel that the architects you have been or are in contact with are generally willing to assist you?

The answers: I've never run across an architect unwilling to spend considerable time talking with me (professional to student). *Phil Allen*

Most architects I know have never offered me a job but have made an effort to become acquainted with what I'm doing and have tried to rap about what they are doing. In general, I feel architects are interested in what goes on in the schools and want to relate to students. *Jaime Gesundheit*

There are some architects who are really interested in students and would help us in any way they can; however, there are at least five noninterested ones for each concerned one. *Serena Randolph*

Yes, most are, if they feel you have something to offer. *Pat Davis*

The question: How helpful has this experience been in defining the part

of the profession in which you would like to be involved?

The answers: Very helpful in realizing the general direction of the profession. More than helping pinpoint a part of the existing profession, it has helped show the task of bridging its parts. *Mark Maves*

All experiences are valuable only if you are willing to let them be, in the sense of doing what you think is best while not falling into the role of the traditional architect. Actually, I thank architects for turning me in the direction I am heading. *Peter Dimatteo, sixth year, State University at Buffalo*

The question: As a product of the shift in emphasis in architectural education, do you feel that your priorities are any different from those of your predecessors?

The answers: Yes, while I am told differently, I think that people graduating today have a stronger social concern. In time, this should translate into improved personal ethics, as well as improved social and environmental conditions. *Recent graduate, Catholic University*

I think there has been a shift in emphasis in everyone's values, especially with regard to our environment. Some of our predecessors have likewise shifted their values in the process; some haven't. *Serena Randolph*

I think that there is a slight difference in the priorities. Perhaps I should say a difference in the degree of emphasis rather than a shift in emphasis. There seems to be more concern for the socio economic and psychological characteristics involved in problem solving for people. *Ella Hall, fifth year, North Carolina State University*

Students now feel that though often helpful in terms of providing opportunities, most practitioners open and willing to spend time changing information and offer advice. This interaction seems to have assisted many students in trying to develop a feel for which direction the profession has chosen, whether or not they felt it was the proper one.

Undoubtedly, there is currently much concern for the "social" impact the built environment upon the world than ever before. This awareness has developed a new consciousness among students in terms of defining the role of the client in the decision-making process, being more sensitive to the client's needs and fulfilling the obligation to the public by making aware of the potential of individual and community efforts. Through academic exposure, students tend to feel pretty strongly that they are more conscious of these new responsibilities and, because of this, hope there will be an improvement in the standing of the profession once they are in practice for themselves. Though this idealism to some extent, their pressures are pretty realistic and founded as a result of some in-depth observations of the current status of the profession.

No student denies that professional and economic pressures do indeed affect the attitude of the practitioner. However, there is little compassion for the selling of one's moral convictions, which makes the insertion rich and the sensitive not eat.

It should be reemphasized that the four myths presented here are not that myths—and that they represent the frustration of a minority of practitioners who will continue to voice their dissatisfaction with the profession coming out of schools of architecture. As for students and graduates, too, will continue to voice dissatisfaction and anger with professionals who don't see it as their responsibility to help the schools help the students help themselves.

Take the time. We need you. ☐

I have always been interested in buildings and in how they are designed and constructed. I am a native of North Carolina, and spent my early years in Franklinton, North Carolina.

I come from a family of four brothers and four sisters. My father is deceased, and my mother is employed by Burlington Industries.

During my school years in Franklinton, first at B. F. Person Albion and then at Franklinton, I had many experiences that influenced me to continue my education.

My parents always encouraged me and my brothers and sisters to make the best of all opportunities and to continue our education. My high school counselor and several high school teachers gave me a great deal of encouragement to continue my education at the college level in the area of architecture and building. Neighborhood friends also recognized what they thought was aptitude for architecture and building.

During my high school years, I was member of the Student Council, Vice-President of the Tenth and Eleventh Grades, Member of the Newspaper and Yearbook Staff.

I learned of North Carolina A. & T. State University and its program in Architectural Engineering from my High School Counselor and because of my interest in this field I made an application and was accepted for the 1969 Freshman Class.

Since that time I have spent four and one-half years at A. & T. and expect to graduate in May 1974 with a B.S. degree in Architectural Engineering. Based on offerings at A. & T. and other institutions, I don't think I could have chosen a better program of study than the one in Architectural Engineering. The program has given me a background which I think will enable me to make a strong professional contribution to architectural engineering.

I have been active with the Architectural Engineering Society at A. & T. and served as Vice-President during 1973-74. I have engaged in a number of extra-curricular activities which included several months training in karate.

I would certainly encourage those students who are seeking high achievements and who are interested in architecture and building to study Architectural Engineering at North Carolina A. & T. State University in Greensboro, North Carolina.



William Kearney, who received his BS in Architectural Engineering from North Carolina A&T State University in May, 1974.

'PROFILE: Debbie Savikas



Debbie Ellen Savikas, third year student in the College of Architecture, UNC-Charlotte.

The most frequent question I am asked about being a woman in architecture is, "why would a woman choose architecture as a profession?" And I answer, "why not architecture?" I see women choosing or not choosing to be architects largely for the same reasons as men. I also see women as having equal potential with men, a debatable issue perhaps, but one upon which I shall not now elaborate. However, a person's background, i.e., parental, educational and environmental influences, are probably the major contributing factors which would cause a man or woman alike to choose architecture as a profession.

In my own lifetime, I have seen changes in society's attitudes which would tend to promote the idea of women in architecture and which have caused a growing acceptance of women by professional architects. The woman's liberation movement has emphasized the freedom a woman should have to express herself as a creative individual and to become more independent. As a minority group advocating these two ideals, women also find it easier to be accepted into professional schools.

But why would a woman want to go into the profession at all? For one reason, women are better educated than ever before and are more concerned with the state of the physical environment as well as dealing with social, political and economic problems. Because we are exposed to a greater variety of environments, we are often more sensitive than men to the working of those environments. Therefore, women have creative potential which desires and deserves to be developed but not necessarily by sitting behind a keyboard or teaching first grade.

I can also understand why a woman would especially choose not to enter architecture or any career at all for that matter. The time involved in pursuing

an architectural career does not leave much time to be devoted to other interests or hobbies. The required dedication is so great that the additional dedication a woman must have to her family may become burdensome. The educational experience is probably what thins out most women from the field. The hours spent socializing by an architecture student, with other than his/her classmates, are few and far between. Though I must admit that from my personal experience that while the potential quantity of my social life is reduced, the quality has been increased. Most women express to me their fears of the technical knowledge, amount of schooling required, and being outnumbered by men in architecture . . . well, I strongly doubt that a fear of men has ever kept a woman from going into architecture.

How do I see the future of women in architecture? It seems that women are presently accepted as having the potential to be specialists such as interior designers, architectural historians, or researchers, but there is a lack of confidence in them on the whole, as designers. Perhaps this results from their poor exposure to the practical side of architecture, for how many fathers have walked their daughters around a construction site or encouraged them to get a summer job in an architectural office? However, I see women becoming more accepted as I see them placing more value on their education to preparing them for solving some of the present environmental and social problems, and starting at an early age to become acquainted with the whole process of design and building. After all, women must have relative greater potential than the majority of men before they are even recognized. This potential coupled with firm dedication acts in a woman's favor to insure success.

As I mentioned before, a person's background is usually the most im-

ential factor in choosing a career. Although I almost surprised myself and certainly others by entering architecture, I can readily see how I have been influenced with my decision.

My home town has always been Estero, Florida, a small town just south of Palm Beach. Until recently my parents owned and operated a wooden furniture plant. The involvement of both parents in this business had a compound effect upon me in that my father's design abilities and my mother's feel for interiors provided a creative spark while I quickly learned to be independent because my mother worked full time. Although my parents never encouraged me to be an architect, they did encourage me to study some type of design in college. I wish now I had had some additional exposure to architecture and buildings, but being a girl, who would ever have thought . . . ?

I discovered the definite advantage of having attended private schools through high school when coming to UNC-Charlotte, a public institution. Attending a private girl's school in Charleston, South Carolina, where I received a strong academic background, so necessary to the study of architecture, I received additional encouragement to develop my potential, however, not in architecture.

The environments in which I have lived have also influenced the values which I so strongly hold today. Living in Florida one learns to appreciate the outdoor environment as well as a sophisticated and luxuriously built environment so abundantly found in Palm Beach and the Florida Gold Coast. Charleston living quickly taught me to appreciate the value of a distinctive architectural flavor to a community. I must admit that the rural atmosphere of North Carolina was a bit of a shock to my urban orientation, but here I have learned to appreciate the natural environment as never before.

Of my architectural education at UNC-Charlotte, I can say it has been quite an experience. Coming to a new college of architecture as a member of the founding class of about fifty-five and me, the only female, straight from a Southern girls' school, I was in for a rude awakening about a lot of things. Immediately, I became absorbed with the ideals of architecture and was quick to develop a sense of dedication, although I was not confident of my potential in the field and acceptance by my classmates. However, fortunately, I was never singled out as the "female", but was considered, more or less, one of the "guys". Until this, my third year, when we began to get into more complex issues, I still felt the need to prove myself as a designer. After my last two projects, a community for the elderly and a luxury hotel, I felt I had done this and could be assured of my potential as a woman in architecture. In all truthfulness, I think this lack of confidence was held more by myself than by my classmates.

For the future, my plans upon graduation are to take some time, maybe a year or two, to work in an office and get some of the practical experience a school of architecture cannot provide in order to help me bridge the gap between the "ivory tower" attitudes developed in school and those of the real world. When I feel I understand the scope of architecture in the real world, I hope to go to graduate school and continue my formal education.

It has been interesting to realize that ever since I began studying architecture, I have received no discouragement from anyone nor felt any disadvantage for being a woman in architecture. If anything, people are more open and encouraging because I am so dedicated. For this, I am grateful, because to be a woman in architecture demands firm dedication, many sacrifices, and obvious potential to succeed, but she deserves equal consideration.

ASC/AIA: A STUDENT LOOKS AT THE NATIONAL STUDENT ORGANIZATION

Ella Hall

An architect builds houses . . . draws floor plans . . . is only an artist . . . is good in math . . . draws white lines on blue paper . . . is a living myth.

Architecture is a difficult word to define—it exists only as a blending of many professions, of the technical and creative, the concrete and abstract. The scope of architecture is constantly changing, mirroring and supporting the environment.

The architect assumes a diversified role. With the aid of technology and time, the architect must try to respond to public demands yet must also make a conscious effort to change the traditional concept of his role as an architect.

In architectural education, in addition to providing the basic design principles, must also prepare the prospective practitioner to provide the services the public demands. Schools are meeting this challenge by providing the student with a broad, varied education. The differences in design philosophies, both among and within schools, is direct proof of this. Students are being made aware of and encouraged to participate in a total scene—the total environment. Some of the ways of working outside the school and becoming a part of the action are through national organizations, competitions, and community projects.

The largest and most active student architectural organization is the Association of Student Chapters of the American Institute of Architects. This totally student-run organization was first established at colleges and universities offering degrees in architecture. Now any college or high school student interested in architecture may join ASC.

ASC on the national and regional

levels has been working very hard to offer enough different kinds of programs and services to have at least one program which would interest each and every student of environmental design.

ASC programs are a direct response to student cries for better educational routes. Students are concerned about the limitations of a strictly academic environment, and ASC is one answer with many alternatives which can greatly enhance a student's professional education.

ASC offers assistance and information to students on each level of the educational hierarchy. Beginning with the high school student interested in an architectural education, ASC sponsors a Career Awareness Program. This package consists of a slide presentation which depicts the activities of the "typical" architectural student. Information for the program is a compilation of data expressed by deans of architecture schools, selected high school and architecture students, and high school guidance counselors. The Career Awareness Program will hopefully eliminate the "big problem" of inadequately informed students entering design schools.

Once a student enters school, the need for educational alternatives becomes a reality. ASC is trying to reach these students through a Public Relations package — describing in some detail the functions, activities, and goals of the organization. The PR package when completed will be distributed to every entering design student, providing him/her with a mechanism for being creative within the community as well as within the school.

In addition to those students, entering four and five year professional schools,

Ella Hall, National Vice President of ASC/AIA is presently serving a one-year working internship at AIA National Headquarters in Washington. Ms. Hall is a graduate student at North Carolina State University.



there are many involved in various two year programs and junior colleges. These students have specific concerns in that even though academic credits are transferrable, oftentimes ideas and thoughts are not. ASC, recognizing this problem, has established a task force to study the Junior College situation. Again, the deans of architecture schools & junior college students who have successfully made the transition have been consulted in order to evaluate the problem. ASC, representing the concerned students, can then make recommendations to the National Architectural Accreditation Board and other professional organizations in an effort to eliminate the barrier.

Once a student has gathered a working knowledge of design, he/she can begin to become involved in competitions and community projects sponsored by ASC, such as the National Energy Conservation and Design Competition. A traveling exhibit of winning entries and jury comments will be available from ASC for school presentations. In addition, organizations such as the American Institute of Architects, the Union of International Architects, and the National Trust for Historic Preservation periodically promote similar competitive programs.

An increasing public concern for the environment has resulted in the growth of community projects. National organizations such as the National Endowment for the Arts have taken an interest in these projects by offering financial support. Students interested in independent research have found the Endowment most helpful in securing funding for large scale projects.

As a student approaches his final

years as an undergraduate, his education can easily become routine. A school cannot possibly fulfill the demands of each student. An attempt at diversifying the educational process is the Student Exchange Program. ASC is developing a prototype for this program which will investigate the provisions within the school for such an exchange.

Perhaps the most crucial phase of a student's education is the gradual transition from "student to professional". As a result of the close affiliation between ASC and AIA, programs directed at bridging this gap have been given priority. The national Student Job Bank has received tremendous response from architects and students throughout the country. Although only an information system, the job bank does provide the student with an indication of the types of jobs available and the probability of finding a job within a specific area.

Working more with the transition period, ASC has encouraged affiliation with local AIA chapters and student participation on AIA standing committees. This close association has proven to be profitable for students in developing their own role in architecture.

Architecture is not a classroom education but a personal experience. Success depends upon varied and frequent experiences, each contributing to a vocabulary of ideas and philosophies. A cross-section of experiences is needed so that a student can be prepared to assume the variety of roles expected of an architect today.

An architect is . . . a designer . . . a technician . . . an environmentalist . . . a behavioral scientist . . . a developer . . . a researcher . . .

ARCHITECTURAL REFERENCE LIST

The following list of books is suggested for the information of students seeking a basic understanding of the field of architecture. Those titles noted with an asterisk (*) are recommended as an introductory reading program for the reader with limited experience. It is hoped that this listing may be used as a guide for school and community libraries which wish to build a sound, basic list of holdings in architecture and environmental design.

Theory and Philosophy	<i>*Towards a New Architecture</i> Le Corbusier <i>Experiencing Architecture</i> Steen Eiler Rasmussen <i>Kindergarten Chats</i> Louis Sullivan <i>On Architecture</i> Frank Lloyd Wright <i>*Architecture as Space</i> Bruno Zevi <i>Native Genius in Anonymous Architecture</i> Sibyl Moholy-Nagy <i>Complexity and Contradiction in Architecture</i> Robert Venturi <i>Kinetic Architecture</i> Zuk and Clark <i>Architecture 2000</i> Charles Jencks <i>Investigations in Collective Form</i> Fumihiko Maki <i>Theory and Design in the First Machine Age</i> Reyner Banham
History	<i>*The Architecture of America</i> Burchard and Bush-Brown <i>Roots of Contemporary American Architecture</i> Lewis Mumford <i>The Brown Decades</i> Lewis Mumford <i>Sticks and Stones</i> Lewis Mumford <i>*Space, Time and Architecture</i> Siegfried Giedion <i>Modern Architecture</i> Vincent Scully <i>Outlines of European Architecture</i> Nikolaus Peusner
Urban Design	<i>The City in History</i> Lewis Mumford <i>*The Image of the City</i> Kevin Lynch <i>*Death and Life of Great American Cities</i> Jane Jacobs <i>Towns and Buildings</i> Steen Eiler Rasmussen <i>Man Made America—Chaos or Control</i> Tunnard & Pushkarev <i>Design of Cities</i> Edmund Bacon <i>Megalopolis</i> Jean Gottman <i>Townscape</i> Gordon Cullen <i>Explorations in Urban Structure</i> Melvin Webber <i>Team 10 Primer</i> Allison and Peter Smithson <i>A Place to Live</i> Wolf Von Eckhardt <i>Matrix of Man</i> Sibyl Moholy-Nagy
Major Architects of the 20th Century	<i>*An Autobiography</i> Frank Lloyd Wright <i>An American Architecture</i> Edgar Kaufman <i>Gropius</i> Siegfried Giedion <i>Autobiography of an Idea</i> Louis Sullivan <i>The Dymaxion World of Buckminster Fuller</i> Robert Marks <i>Five California Architects</i> Esther McCoy <i>The Sketchbooks of Paolo Soleri</i> Paolo Soleri <i>Kenzo Tange</i> Robin Boyd <i>Mies Van Der Rohe</i> Arthur Drexler <i>Alvar Aalto</i> Frederick Gutheim <i>*The Master Builders</i> Peter Blake <i>*Architects on Architecture</i> Paul Heyer
Technology	<i>Structures</i> Pier Luigi Nervi <i>Philosophy of Structures</i> Eduardo Torroja <i>Robert Maillart</i> Max Bill <i>Structure and Form</i> Curt Siegel <i>*The Turning Point of Building</i> Konrad Wachsman <i>Structure Systems</i> Heinrich Engel <i>*American Building: The Environmental Forces That Shape It</i> James Fitch <i>Tensile Structures</i> Frei Otto <i>An Historical Outline of Architectural Science</i> Henry J. Cowan
Related References	<i>Personal Space</i> Robert Somer <i>Notes on the Synthesis of Form</i> Christopher Alexander <i>Landscape For Living</i> Garrett Eckbo <i>*Creating the Human Environment</i> Ewald and McCue <i>*Design With Nature</i> Ian McHarg <i>RSVP Cycles</i> Lawrence Halprin <i>The Hidden Dimension</i> Edward T. Hall <i>On Growth and Form</i> Darcy Thompson

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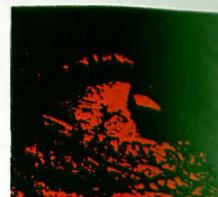
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Carter Williams, FAIA, of Raleigh, has just been appointed chairman of the AIA's newly formed national inquiry committee. The committee, set up to investigate allegations of misconduct by architects, can, if the investigation warrants, bring charges of unprofessional conduct before the AIA's National Judicial Board, state registration boards, or legal authorities.

It will consist of 10 to 50 members named by the Board of Directors; they will form a pool from which panels of three to five members will be drawn to investigate specific charges. The inquiry committee, through these ad hoc panels, will investigate matters that appear to involve unprofessional conduct or violations of AIA's Standards of Ethical Practice involving a major public interest, such as recent allegations of illegal political contributions and kickbacks by architects seeking public contracts. The committee will

also handle cases involving failure to conform to registration laws or violation of criminal statutes committed in relation to the practice of architecture.

Louise Hall, AIA, of Durham, has just completed a year's term of office as President of the

North Carolina Society, Archaeological Institute of America. She reports that members of that Institute (incorporated in 1879, 22 years after ours) keep trying to call themselves the AIA, too. Confusion all around . . .

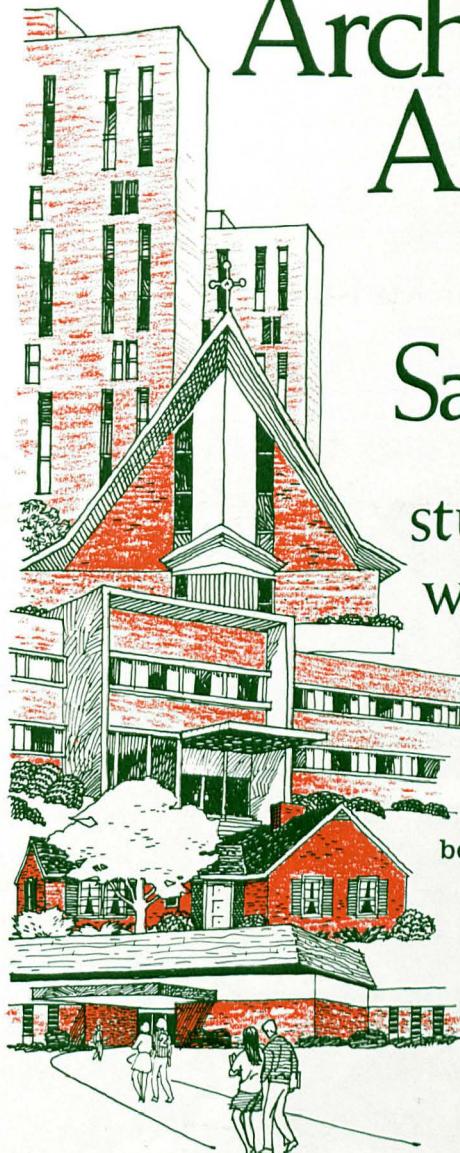
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