Engineering opportunities expand in the '80's

If you're a very bright, hardworking young man or woman who enjoys advanced math, physics, chemistry, and figuring how machinery works as well as working on a team that gets things done, then you might want to consider an engineering career.

Just check out your local papers. The employment pages are crying out for technical talent.

The demand for engineers has been building up for the past six years until now, when employment consultants see engineering as a career which will offer continuing high rewards, challenging work, and opportunities for people throughout the eighties.

Consider the rewards: after four years of engineering school, graduates are approached by major companies with offers starting at $21,000 and going all the way up to $29,000 for really top achievers.

Black engineers are in especially high demand by companies concerned with demonstrating they are equal opportunity employers.

Prestigious universities like Howard and Tuskeggee are turning out more and better engineers, while the number of black students, male and female, entering engineering programs throughout the country have never been greater.

Though the numbers of black and other minority engineers are increasing, they are still a relatively small part of the total engineering population.

What is opening doors to minority applicants? Two things — technology and government practices.

Of all the engineering specialists, probably the one companies want most is the electrical engineer with a background or training in microprocessors, the tiny, extremely powerful computers that fit onto silicon chips the size of a fingernail.

These microprocessors are used in everything from videogames to the Space Shuttle.

As more and more businesses computerize their operations, the demand for people who understand the computers and how to build and apply them to new uses will grow.

The revival of the aerospace industry and the current involvement in building new aircraft as well as rocket boosters is raising demand for aeronautical and mechanical engineers.

The energy crisis is causing newly graduated petroleum engineers to be one of the most hotly recruited groups on campus.

And even as these specialists work on solving the energy shortage, HVAC (heating, ventilating, and air - conditioning) engineers are looking for ways to make our homes and workplaces more energy - efficient.

Chemical engineers, too, help to save energy and find solutions that will enable businesses to produce while complying with government air and water pollution requirements.

While it's true that in the 1970s many engineers were laid off and that engineering became perceived as a risky profession in which employment went in cycles, that cyclical trend may not hit engineers as hard as it used to because the supply of eighteen-year-olds is diminishing.

There are fewer people of college age in the population, which means a corresponding drop in the number of people to become engineers.

In other words, given current demand, the supply of engineers can probably pick and choose among tempting job offers.

Last year alone, the 7 percent of students graduating with engineering degrees received 63 percent of all job offers.

How can you decide if you want to be an engineer? For a start, try to talk with engineers working in different industries, or write to the Accreditation Board for Engineering and Technology, 345 East 47 Street, New York, NY 10017. This organization can advise you on engineering careers and programs at various universities nationwide.

Magazines like **Graduating Engineer**, **Black Collegian**, and **Minority Engineer**, available at libraries and college campuses, will give you the student perspective on engineering as a profession.

Woman Engineer will appeal to the women who are entering engineering in greater and greater numbers.

And for students considering an engineering career and wondering how to fund it, NACME, the National Action Council on Minorities in Engineering, is an invaluable resource.

Supported wholly by industry (among corporate contributors: Exxon, GE, AT&T, IBM, Honeywell, DuPont and Xerox), this organization distributes grants of anywhere from $500 to $2,00 a semester to needy minority students.

During the current school year, over $2 million has been awarded to 114 schools and enabled 2,800 minority students to continue their education.

People interested in contacting NACME should write to the Communications Department, NACME, 3 West 35 Street, New York, NY 10001.

But let's assume that you don't want to go on for an engineering degree. That doesn't mean that the high technology boom will pass you by.

Among possible options for people who want good careers without four years of intensive technical training are careers in computer sales, management, marketing, and — given one to two - year programs readily available at community colleges or in the armed forces — well - paying jobs as skilled technicians.

People with writing skills might want to consider careers as technical writers, while people with "people skills" might look to enter the fields of personnel, training, or labor relations.

As high technology industries grow and employ a higher and higher percentage of the nation's workforce, people who are interested in seriously planning their careers will not think of them as weird, frightening places full of lasers, robots, and no human contact at all.

What they are, instead, are opportunities for young people to earn good livings, win respect in their communities, and make a difference in people's lives by developing new products and services.

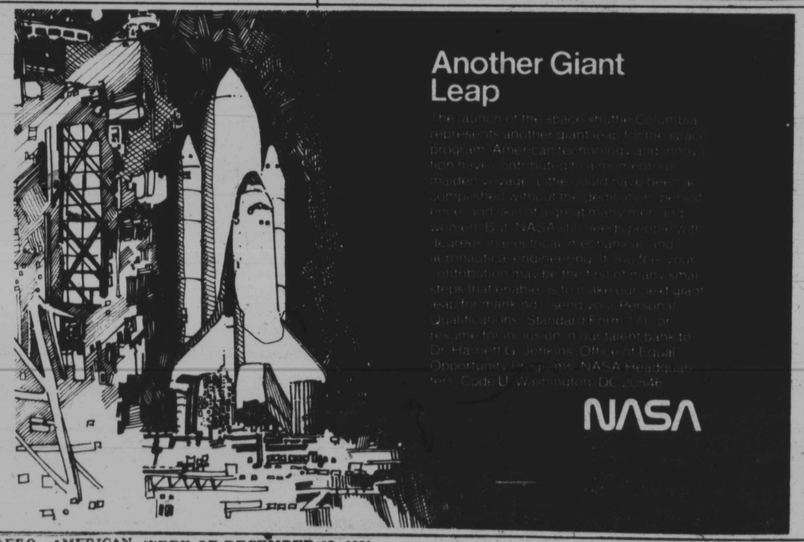
SAINT PAUL'S COLLEGE

LAWRENCEVILLE, VIRGINIA 23868

ACADEMIC PROGRAM
MAJORS
Bachelor of Arts
English
History
Political Science
Sociology
Bachelor of Science
Biology
Business Administration
Office Administration
Mathematics
General Studies
Bachelor of Science in Education
Biology
Business Education
Elementary Education (K - 3 or 4 - 7)
English
General Science
Mathematics
Social Science
MINORS
Accounting
Biology
Chemistry

Economics
English
History
Mathematics
Political Science
Sociology
ACCREDITATION
Southern Association of College and Schools
Virginia State Board of Education
ADDITIONAL ACTIVITIES
Cooperative Education
Financial Assistance
Special Services
Learning Resources Center
Living Learning Center
NOTICE OF NONDISCRIMINATORY POLICY AS TO STUDENTS
Saint Paul's College admits students of any race, color, national and ethnic origin to all the rights, privileges, programs, and activities generally accorded or made available to students at the school. It does not discriminate on the basis of race, color, national and ethnic origin in administration policies, admissions policies, scholarship and loan programs, and athletic and other school - administered programs.

Contact:
Director of Admissions
Saint Paul's College
Lawrenceville, VA 23868
Telephone (804) 848 - 3111



Another Giant Leap

The launch of the space shuttle Columbia represents another giant leap for the space program. American technology and ingenuity have contributed to a renaissance under way at the space center. We have been complemented by the talents of women and people of all ethnic groups, race and women. But NASA still needs people with degrees in electrical, mechanical, civil, and aeronautical engineering. Your contribution may be the first of many small steps that enable us to make our next giant leap for mankind. Send your Personal Qualifications Statement (Form 171) or resume to us in our talent bank to Dr. Harriett G. Jenkins, Office of Equal Opportunity Programs, NASA Headquarters, Code U, Washington, DC 20546.

NASA

Nursing proves to be the art of helping people feel better

If money is not the most important thing in the world to you, but people are . . . if you dislike regimentation, but enjoy becoming absorbed in a task for the sheer enjoyment of a job well done . . . if you can think on your feet, and have enormous patience and understanding . . . then nursing can give your life more meaning than any other profession you might select.

If you seek diversity . . . working with old and young people . . . with mothers and babies or with adolescents; in a hospital setting or visiting patients at their homes . . . in schools or community agencies . . . then you should seriously consider nursing.

If you'd like to have a choice of working evenings or nights instead of days — or vice versa; or if you prefer to work as a private entrepreneur instead of a staff person . . . consider nursing.

What, then is nursing? And how can the job requirements be so flexible as to allow an individual such a variety of choice?

Nursing means different things to different people, but one well - known nurse, Thelma Ingles, says, "Nursing is the art of helping people feel better."

In 1977, a national sample survey of registered nurses was completed. This survey showed that there were an estimated 1.4 million registered nurses in the United States who hold active licenses. Of this number, approximately 87,000 or 6.2 percent, had racial and - or ethnic minority backgrounds: about 2.5 percent were black, 1.4 percent were Hispanic; 0.2 percent were American Indian and 2.1 percent were Asian.

It has been estimated that 40 million blacks, Chicanos, Indians, Puerto Ricans and poor whites (about 20 percent of the population) are denied adequate health care because they can't afford it or because they live in areas where it is not economically feasible to provide health services.

Responding to some of these needs, the Columbus University School of Nursing has created clinical experiences whereby students, under the close supervision of their clinical preceptors, are given the opportunity to respond to the health needs of individuals both within and outside of the hospital.

The students, both graduate and undergraduates, work closely with patients and their families. The importance of health promotion is stressed.

These students are often responsible for recognizing health and social problems and for making the necessary referrals for care and follow up.

In addition to working within the hospital in - patient and out - patient settings, the students go into schools, work sites, community agencies and homes.

They seek out people in need of services, and teach them to recognize their health needs.

In addition to giving direct patient care (injections, baths, exercises etc.) nurses teach both the patient and his or her family how to maintain health and become as independent as possible.

Another important function of the nurse is being an "Ombudsman" or advocate for people with special needs — the educationally disadvantaged or non - English speaking person, the elderly, the young families with children, the people who are not aware of community resources, the individuals who do not know of accepted standards of health care and the people who are ignorant of their rights.

Nursing, then, is helping the patient wherever he or she may be.

If you feel that you can make a difference . . . if your intervention can somehow help your patient to reach his or her goal . . . then perhaps you are ready to consider Nursing as a career — a commitment for the future.

Producing tomorrows polished professionals

Thriving in an atmosphere of innovative learning, dedicated faculty, modern equipment, comprehensive academic programs, and an attractive physical plant, all contribute to the makings of St. Augustine's College.

St. Augustine's, located in Raleigh, North Carolina, is a predominantly black co - educational, Episcopal church - related college, founded in 1867.

Since its inception, St. Augustine's has made many positive strides toward achieving academic excellence.

Over 60 percent of the faculty hold doctoral degrees, qualifying them to teach, plan, and research.

Internationalism among the students is reflected in the fact that they come from twenty - eight states and eleven foreign countries.

This base of human diversity among people is built upon liberal arts because of the schools mission, which is to prepare all of the students to become knowledgeable agents of change. The college produces responsible citizens who can make positive contributions to society.

St. Augustine's is far from the isolated, rural, predominantly black college of the past.

JUNIOR and SENIOR MINORITY ENGINEERS GEM

(National Consortium for Graduate Degrees for Minorities in Engineering, Inc.)

OFFERS

SUMMER WORK

WITH ONE OF 37 MEMBER EMPLOYERS.

GRADUATE FELLOWSHIP

At one of 30 member universities for master's degree in engineering.

THIS OFFER IS TO MINORITIES UNDERREPRESENTED IN ENGINEERING: AMERICAN INDIANS, BLACK AMERICANS, MEXICAN AMERICANS, AND PUERTO RICANS.

For Details and Application Material
Write To:

GEM

Box 537
NOTRE DAME, IN. 46556