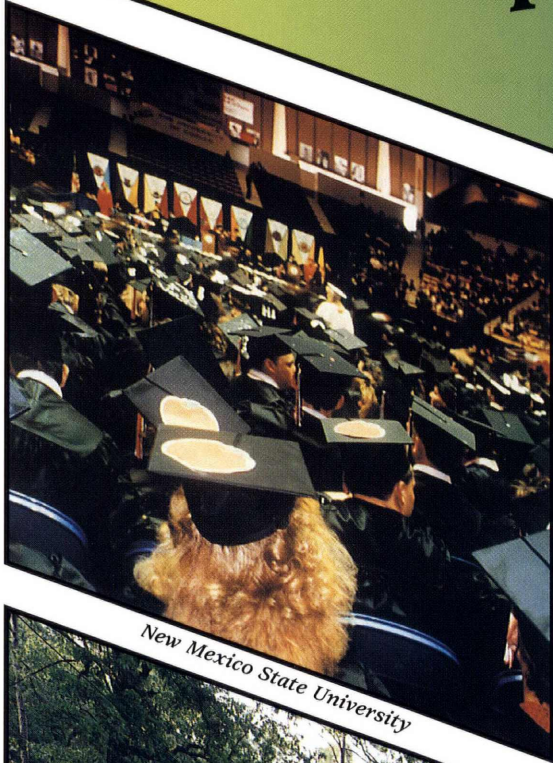
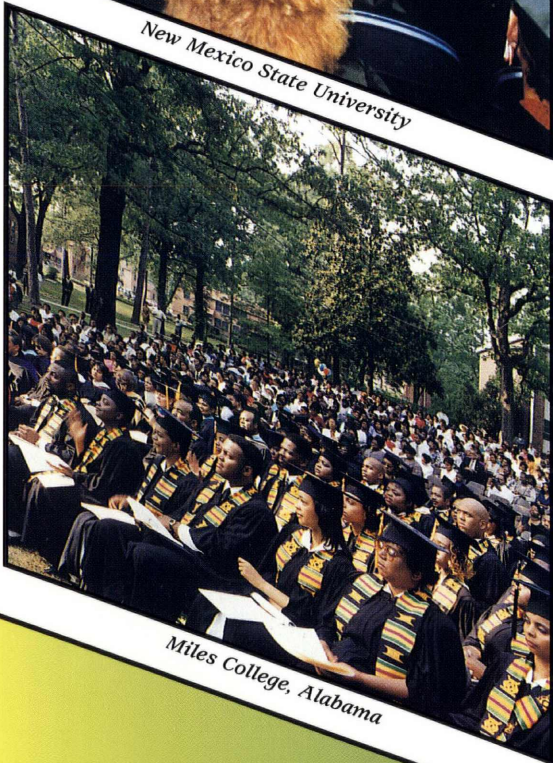


National Science Foundation Alliances Graduate School Opportunities 1996



New Mexico State University



Miles College, Alabama

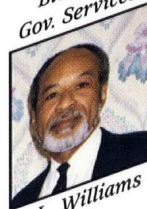
**Graduate
School**

**Opens
Doors**

to

**Better
Opportunities
and
Occupations**

*Biologist
Gov. Services*



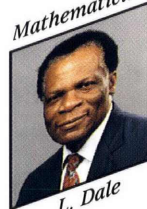
L. Williams

Physicist



M. Gomez

Mathematician



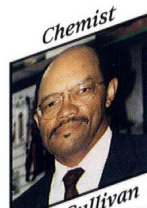
L. Dale

*Regents
Professor*



G. Keller Cardenas

Chemist



R. Sullivan

*College
President*



J. McDonald

*Chemist
Gov. Services*



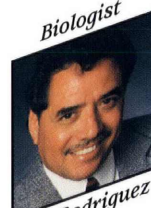
W. McHenry

*University
President*



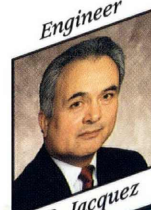
D. Natalicio

Biologist



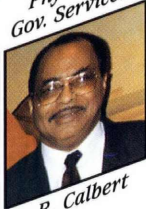
E. Rodriguez

Engineer



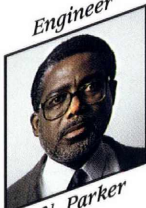
R. Jacquez

*Physicist
Gov. Services*



R. Calbert

Engineer



N. Parker

Biologist



L. Padmore

Physicist



A. Johnson

*University
President*



D. Cross

A Catalog of NSF Alliances Graduate Schools

This magazine was published by Alabama AMP and The University of Alabama at Birmingham through cooperative efforts of the Alabama, California, California State, Chicago, Florida/Georgia, Maryland, Mississippi, New Mexico, New York, North Carolina, Oklahoma, Philadelphia, Puerto Rico, South Carolina, Southern Rocky Mountain Region, Texas and Texas System Alliances for Minority Participation as a supplement to existing NSF and local AMP publications. All rights are reserved by the Alliances.

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Sanyvette Willeam (DVM, MS candidate, Tuskegee University) imaging cells using the scanning electron microscope

To The Student:

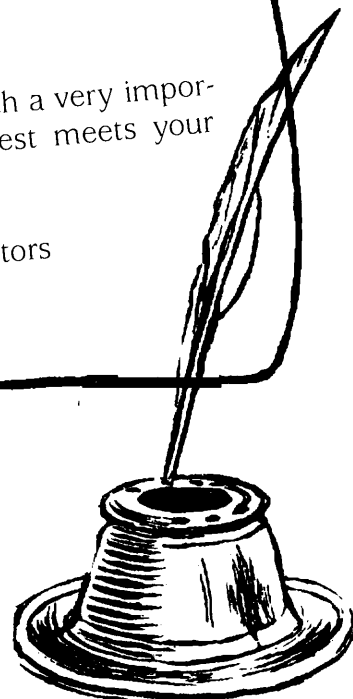
The purpose of this publication is to provide information regarding graduate school opportunities for students attending alliance institutions. Supported by the National Science Foundation, these institutions are providing special programs to enhance the success rate of undergraduate students majoring in science, mathematics, engineering and technology. The students moving through these programs are the workforce of tomorrow. Consequently, the Foundation, through its support, is investing in the nation's future. The quality of this workforce is certainly determined by the quality of these programs.

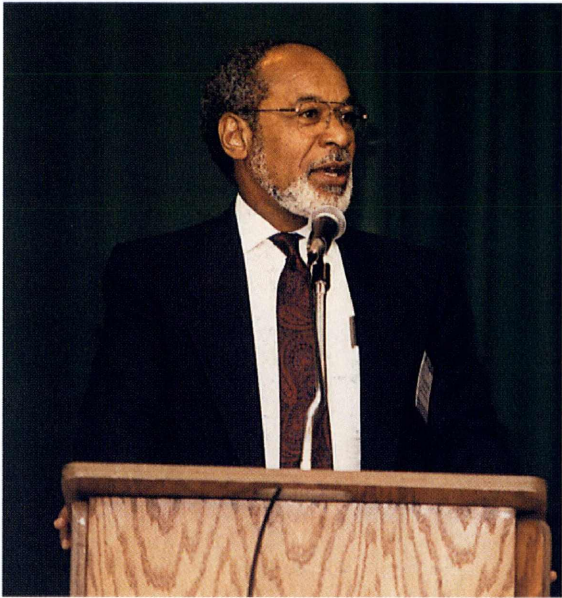
Many students attending Alliance institutions are inclined to attend graduate school at an Alliance Institution. This publication provides a list of these institutions and information about each. Graduate opportunities are listed by Alliance and by geographic area for students desiring to stay in a particular alliance or a geographic area.

Comments are also included from professionals on the advantages of earning a graduate degree.

It is our hope that this publication will help you with a very important decision, choosing the graduate school that best meets your needs.

The Editors





Significant Gains Made In SEM Degree Production

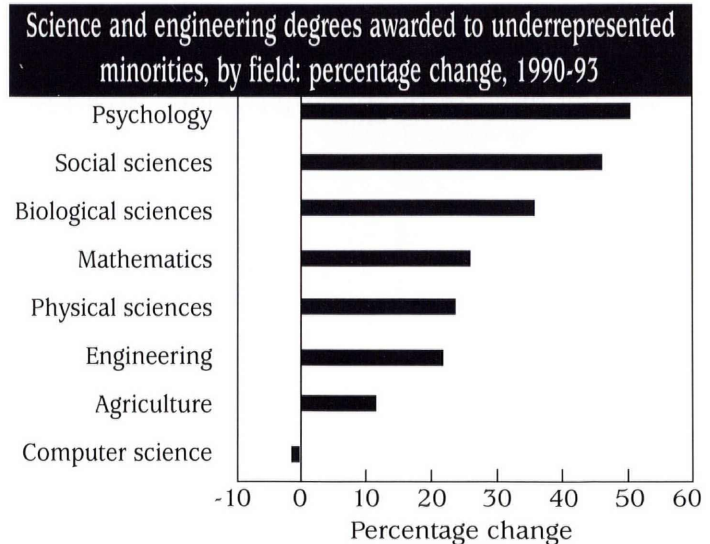
Luther Williams

Data from a recently released NSF study of science and engineering degree production indicate that S&E baccalaureate degrees awarded to underrepresented minority students increased significantly in the early 1990's.* Specifically, from 1990 to 1993 the number of undergraduate degrees increased by more than 11,000 or 34 percent for underrepresented minorities (African Americans, Hispanics and American Indians), with the largest increases for the social sciences. This is a most impressive result by any measure, and with regard to degrees in engineering and the natural sciences, reflects the significance of programs such as the NSF's Alliances for Minority Participation (AMP) Program.

However, the number of S&E degrees earned by all underrepresented minorities in 1993 represents only 12 percent of the total, while these students reflect 28 percent of the college age population. Thus, the nation is not adequately developing the minority talent pool. Further, while there were similar percent increases in masters degree attainment from 1990-1993, the increase in doctoral level degrees for underrepresented minorities was much smaller, that is, 169 or 19 percent.

To effectively extend the gains made at the undergraduate level to include doctoral degree

production, the development of a strategy and programmatic initiative similar in focus to the AMP Program is required. The logical sites for such activities are those AMP Ph.D. institutions that have made significant progress in increasing the production of minority science and engineering baccalaureate degree recipients. NSF is currently in the initial stages of resource identification to support such an effort and will solicit inputs from the broad S&E academic community.



SOURCE: NSF/SRS tabulations of National Center for Education Statistics Completions Survey data

*National Science Foundation, Science and Engineering Degrees, by Race/Ethnicity of Recipients: 1985-93, NSF 95-330 (Arlington, VA, 1995).

IMPORTANCE OF GRADUATE SCHOOL IN MEETING CAREER GOALS

Roosevelt Calbert

For each student that is approaching the completion of requirements for a baccalaureate degree in science, mathematics, engineering, and technology (SMET), a critical decision must be made in terms of continuing one's education by earning an advanced degree in one of the SMET disciplines. The small numbers of underrepresented groups, particularly minorities and women, receiving doctoral degrees in SMET fields relate to their reduced opportunities for experiences to guide them toward and prepare them for advanced study. Some of the barriers facing these students as they consider graduate study include: lack of knowledge about graduate education; financial needs; limited opportunities for relationships with a faculty mentor; and lack of academic role models. One of the most influential factors in determining whether or not a student will continue on to graduate school and obtain a doctoral degree in SMET is whether or not the student can see himself or herself in that role in the future.

In faculty and administrative positions within American colleges and universities, minorities are even more severely underrep-



resented than in the ranks of undergraduate and graduate students. Less than ten percent of faculty and administrative positions are held by minorities. There is a promising trend whereby larger numbers of minority faculty and administrators are employed within institutions participating in the National Science Foundation's Alliances for Minority Participation (AMP) Program. Although many excellent universities are training some outstanding minority and women scientists and engineers, there are few systemic initiatives that address and evaluate this problem.

In terms of one's career development, a graduate degree in a SMET discipline will offer the following advantages:

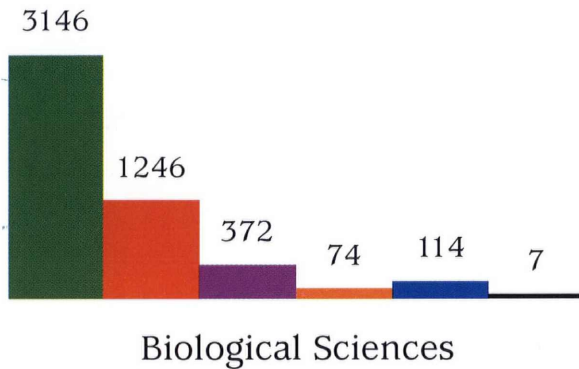
- Training in the latest technologies;
- Increased opportunities in the global job market;
- An enhanced quality of life;
- Ability to provide credible contributions to the base of SMET knowledge;
- Enhanced "Role model" status;
- Opportunities for greater participation in setting National Policies on SMET education and research;
- A greater understanding of requisites for careers in SMET disciplines; and
- Greater prospects for gaining faculty or administrative positions at the Nation's leading colleges and universities.

THE NEXT CHALLENGE

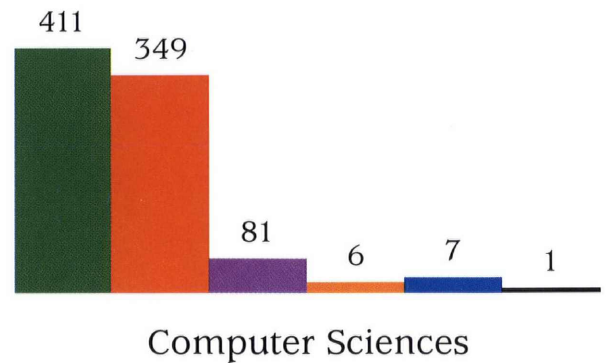
William McHenry

The data listed below came across my desk recently and as I discussed it with many associates it brought home the fact that a lot remains to be done to increase the number of underrepresented minorities receiving doctoral degrees in science, engineering and mathematics. The AMP program has been successful in increasing the number of minority students available for graduate study. Now is the time for universities to reach into this pool of students and do their share of the work needed to improve this underrepresentation. As AMP students and project directors review this data, I am hopeful that it will motivate each of us to do a better job.

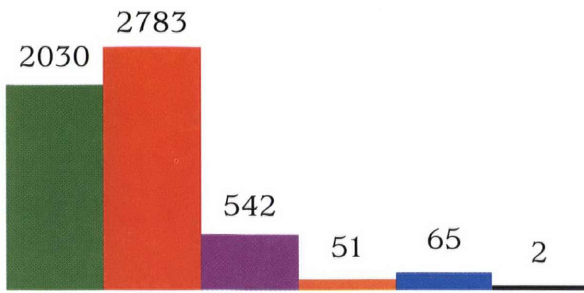
Number of Earned Doctoral Degrees by Field and Race/Ethnicity
1993



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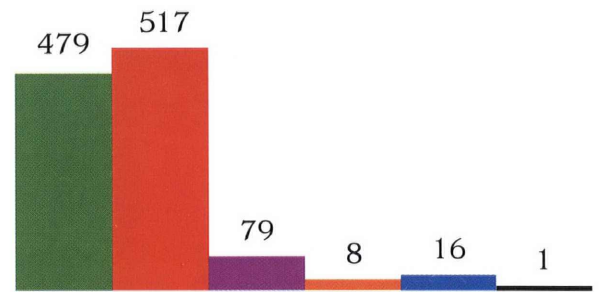


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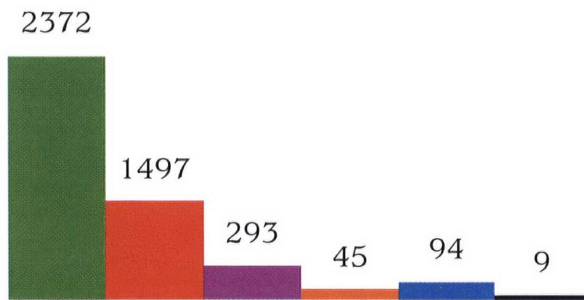
Engineering

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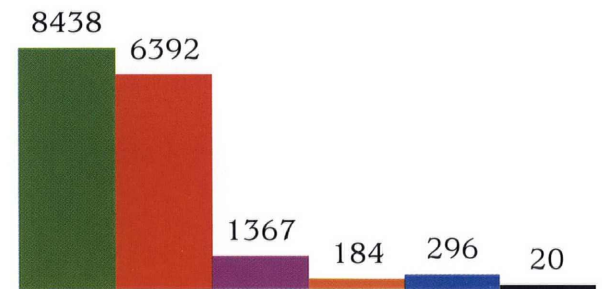
Mathematical Sciences

White Alien Asian Black Hispanic Am. Ind.



Physical Sciences

White Alien Asian Black Hispanic Am. Ind.



Total

White Alien Asian Black Hispanic Am. Ind.

TWO VIEWS OF GRADUATE SCHOOL



The following interview with two advocates of graduate education with different backgrounds and professions was conducted by Dr. M. Carolyn Braswell.

An Administrator

Dr. William McHenry, Chemist
Director of the National Science Foundation
Alliances for Minority Participation Program

Q: Dr. McHenry, you are currently director of the NSF AMP Program, a former chemistry professor, and a former graduate school dean. What do you consider the major challenges in graduate studies nationwide?

McHenry: As we enter the 21st century, America's dependence on developments in science, engineering, and mathematics (SEM) to remain competitive in a globally-based world economy will increase. America has historically invested heavily in building a world-class research university-based infrastructure. One of the major drivers for investing in research was the need to conduct a "cold war" against communism. One only needs to consider the large number of Nobel Laureates who work at research universities or the large number of patent and research publications these researchers produce to know that the investment made by average Americans to support research is paying dividends. America's research infrastructure was fundamental to America's winning the cold war.

This world-class research university infrastructure in SEM fields has major challenges. One of the challenges is maintaining a world-class research infrastructure by better serving students who complete their undergraduate programs in America's colleges and universities. In other words, these institutions are doing a poor job of attracting U.S. citizens to SEM graduate programs. Some universities are graduating more international students than American students in SEM fields. Who will be involved in the 21st century on America's research universities' campuses? Who will make the next major contribution to laser technology or discover a more practical use for super conducting materials, or decode a major human gene? What will be the future preferred means of transportation, or how will space be utilized to better benefit earth citizens? American research universities should be preparing the next generation of SEM problem solvers, not just attempting to solve today's SEM problems.

Q: Dr. Rodriguez, you are currently a scientist and an educator and former project director for the California AMP Program. What do you consider the major challenges in graduate studies nationwide?

Rodriguez: I'm primarily a basic research biochemist interested in the pharmacology and biology of novel drugs from the tropical rainforests of Africa and South America. Although I never had an official administrative position in graduate studies, I have had eight students receive a Ph.D. under me and four (4) were from underrepresented minority groups. Presently at Cornell, I have 5 graduate students, two of which are African Americans and one a Latino student. I have had considerable experience in mentoring graduate students, especially minorities. I think a major challenge facing minorities in graduate school is financial support, coupled with the lack of role models and sensible counseling.

Q: Many minority students receiving bachelor's degrees in science, engineering, and mathematics are eager to join the workforce and begin receiving salaries. Although graduate studies is an option, the majority of these students elect to join the workforce. What do you consider to be the advantages of graduate study at this point in a student's career?

Rodriguez: The advantage of graduate school is quite simple. Your earning power will be greater, your network system will be more extensive and your sense of empowerment (real or unreal) will be greater.

McHenry: If America's research universities are doing a poor job of serving American students who complete undergraduate programs from America's colleges and universities, these institutions have essentially no record of educating a diverse graduate student body. For example, of the more than 5,000 doctorates awarded in engineering in 1993, only 99 were awarded to individuals who were Black, Hispanic or American Indian. Over 2,500 students who completed doctorate degrees on American campuses are international students.

As Eloy stated, not only are the initial financial rewards greater, but over the lifetime of the SEM worker, he/she will experience significant career advancements. I encourage students who are weighing the advantages of graduate study compared to the business or industrial workforce to

A Conversation with Two Advocates

National statistics indicate an increase of over 34% in the number of minority students receiving undergraduate degrees in science, engineering and mathematics. This increase is due in part to the success of the National Science Foundation Alliances and has the immediate effect of increasing the number of students available to enter graduate school.

A Scientist

Dr. Eloy Rodriguez, Biologist
James A. Perkins Professor of Environmental Studies at Cornell
University



visit both. When visiting industrial research laboratories, observe who's in control and what type of credentials they have earned.

Q. For minority students deciding to attend graduate school, selecting the school to meet their particular needs is not always easy. What are some of the graduate school qualities students should consider in making a selection?

McHenry: I would not recommend a student, especially a minority student, attend a graduate school where the student does not feel that the environment is supportive of his or her success. Some of the most productive research universities in America have poor records for retaining and graduating students and/or minority students. Students should not allow a school's reputation to be the only factor considered when selecting a graduate program. Students should not make stereotypical grouping of institutions based on how institutions describe themselves. Are the graduates from "Big Ten" schools any better prepared for research than those who graduate from "Big Eight, Pac Ten or Ivy League" schools? Students should always ask their research advisors where they obtained their graduate degrees. Students should not allow themselves to be recruited by individuals who do not hold tenure in the student's desired graduate department. While the non-tenured university representative might be an advocate for the student in the graduate school, without having tenure in the graduate department, the university representative can provide little assistance to the student once he or she enrolls. I recommend that students who may be considering graduate school consider the following steps:

GET PREPARED

Step 1. Since the best indicators of success in graduate school (and a student's attractiveness to industrial employers) is a student's undergraduate grade point average, you limit your career options when you do not do your best in all your courses.

Step 2. Get involved in undergraduate research both on your campus and in summer programs on other campuses. Visit your campus graduate school dean's office. This office is often a good resource for information on summer

research opportunities and graduate assistantships.

Step 3. Find a respected faculty mentor/advocate who can advise you on graduate school opportunities. Listen to the mentor's advice carefully.

COMPLETE THE APPLICATION IN A TIMELY MANNER

Step 4. Take the GRE during your junior year since some schools use GRE scores to determine financial support as well as admission decisions.

Step 5. Make sure that you complete all forms requested by the graduate school on time. Prepare a quality graduate application "statement of purpose."

Step 6. Apply to more than one graduate school and apply early.

Step 7. Visit your prospective graduate school and talk with professors who are doing research in your field of interest prior to enrolling. Some indicators of quality graduate programs

- strong supportive environment
- good track record for graduating minority students
- access to faculty research supervisors (not their post-docs)
- good financial support (research or teaching assistantships)
- positive support from current graduate students
- some diversity either on the faculty or in the administration

Rodriguez: Students should always aim for the top 15 research universities in the nation, especially the Ivy League institutions (e.g. Harvard, Cornell, Brown, Yale, etc.) which have traditionally excluded minority faculty and students from the sciences.

Q: Many graduate schools use a particular score on the Graduate Record Examination for admission. Do you believe the Graduate Record Examination is an effective tool for predicting success in graduate school?

Rodriguez: The GRE is not an effective tool for predicting success in graduate school, but it is still used to determine if you will be accepted into graduate school and qualify for research stipends, teaching assistant positions, etc. I

recommend all undergraduate students as freshmen practice taking GRE exams (available at all campuses) so that when the day of reckoning takes place they are ready. GRE's are a reality of life and students have to appropriately prepare for them.

McHenry: The GRE is a useful tool for identifying talent. As a former member of the GRE board, I know that many graduate programs misuse GRE scores. Some institutions use the GRE as a pre-screening tool for eliminating prospective applicants. This is not an appropriate use of the GRE and is actively discouraged by the GRE. The reason is simple. When the GRE is used in this manner, it adversely impacts the admissibility of minority and women students.

Q: Transcripts, letters of reference and GRE scores are all used to predict success in graduate school. Which of these do you consider most important and why?

McHenry: All are important and should be considered in making quality admission decisions.

Rodriguez: Letters of recommendation, research experience and transcripts are good indicators of success. I have interviewed all graduate students I have had in my laboratory and in my research group before accepting them.

Q: How important is it for a student planning to attend graduate school to have undergraduate research experience?

Rodriguez: I feel that undergraduate research is a very positive experience and I recommend it to all serious graduate applicants. My experience in research as an undergraduate made the big difference. As an undergraduate, I co-authored three research papers which was a strong motivation for me to go to graduate school to continue to do what I enjoyed. I always tell students that I had gotten bitten by the "passion bug of research".

McHenry: It is extremely important. I recommend that all students planning to attend graduate school find some means of participating in an undergraduate research experience. Students should consult with the chairman of their major department for assistance in this matter.

Q: Graduate students are assigned advisors. Do you consider an advisor a mentor?

McHenry: While it is desirable for research advisors to serve as mentors, this is not always what is observed. Students can have good experiences in research groups where the research advisor does not serve as a mentor.

Rodriguez: I consider myself as a mentor and an advisor. I tell the students things that are not outlined in the graduate manual. I'm their research mentor and friend.

Q: How important is it for a graduate student to have a mentor?

Rodriguez: Of course it is very important to have a compassionate mentor, but that is not always possible, especially at an institution that does not have a tradition of caring for minorities, especially women of color. I think women of color, African Americans and Chicanas/Latinas,

have great difficulties in finding women mentors, especially those that are like them. It is difficult for many of them to continuously rely on white males that have played a major role in keeping them out of research institutions. A mentor does not have to be a minority faculty member, but it certainly helps and can make a difference.

McHenry: Mentors are important. However, students can be successful without having someone he or she can identify as a mentor. Remember that students can be mentored by faculty members from either gender or any ethnic group.

Q: What was the most rewarding aspect of your graduate school experiences?

McHenry: In graduate school, I began to gain confidence in my ability to compete in chemistry. When I graduated with a bachelor's degree, I had many job offers from leading industries. However, when I visited some of the industries, I was concerned that while a bachelor's degree in chemistry would open many doors, to explore one's own research interest in chemistry, I would have to earn a doctorate degree. I was surprised that universities were willing to award research and teaching assistantships to allow me to earn the doctorate degree. I visited a few graduate schools and selected one that I thought would best meet my graduate education needs while providing me with the environmental support I needed to develop socially.

As a graduate student on a friendly majority campus, I had to develop many coping skills that I continue to value 18 years after obtaining my doctorate degree. There are only a few graduate programs with more than one or two Black or Hispanic graduate students or even one Black or Hispanic graduate faculty member. So, graduate school can be very lonely on some majority campuses. Students have to determine how much "isolation" they can bare and still be productive graduate students.

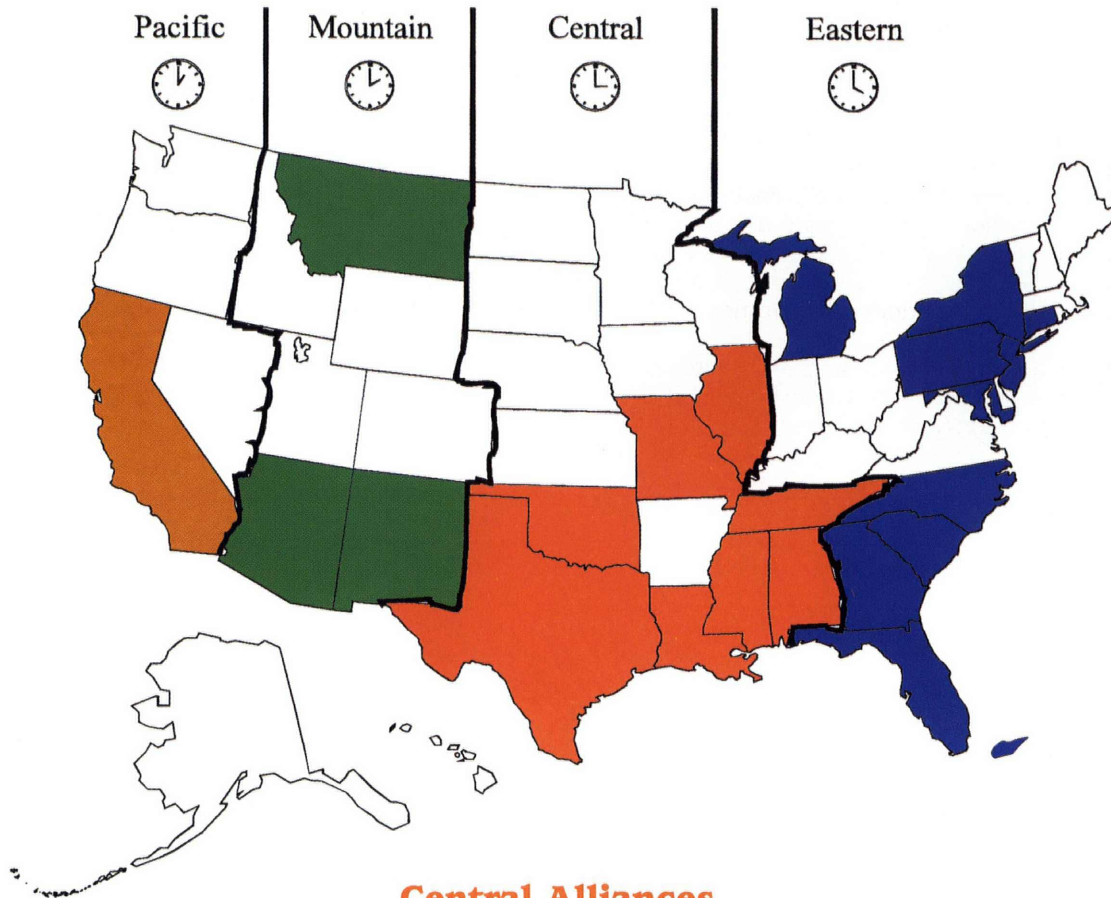
Rodriguez: The most rewarding aspect of my graduate school experience was the freedom to carry out research with no course work and no major financial burdens. It was a time to dedicate myself to my first great "love" which was scientific research.

Q: Do you have knowledge of a graduate student who overcame severe obstacles to earn a graduate degree? If so, describe briefly.

Rodriguez: Myself. My application for graduate school at the University of Texas at Austin was rejected twice. They said it was because of my GRE scores and GPA. I was eventually admitted as a "special student," but with no financial support. Five years later I graduated with a Ph.D. degree and with eighteen (18) publications in refereed journals. Life can be so sweet at times!

McHenry: Whenever I see a minority student walk across a stage in a graduation ceremony to receive a graduate degree, I know (based on the very small number of minority graduate faculty members, the small number of minority students who hold graduate degrees, the relatively limited amount of research assistantship funds awarded to minorities, and the challenges that individual will face in securing a good job and gaining tenure on that job) the student has overcome severe obstacles.

Geographic Locations of Alliances



Central Alliances

Alabama
The University of Alabama at Birmingham

Mississippi
Jackson State University

Tennessee
LeMoyne-Owen College

Illinois
Chicago State University

Missouri
University of Missouri-Columbia

Louisiana
Southern University • Xavier University

Oklahoma
Oklahoma State University

Texas
The University of Texas at El Paso • Texas A&M University

Eastern Alliances

Florida/Georgia
Florida A&M University

New Jersey
New Jersey Institute of Technology

Pennsylvania
Temple University

Maryland
University of Maryland Baltimore County

New York
The City University of New York

Puerto Rico
The University of Puerto Rico

Washington, D.C.
Howard University

Michigan
Wayne State University

North Carolina
North Carolina A&T State University

South Carolina
The University of South Carolina

Mountain Alliances

Arizona
Arizona State University

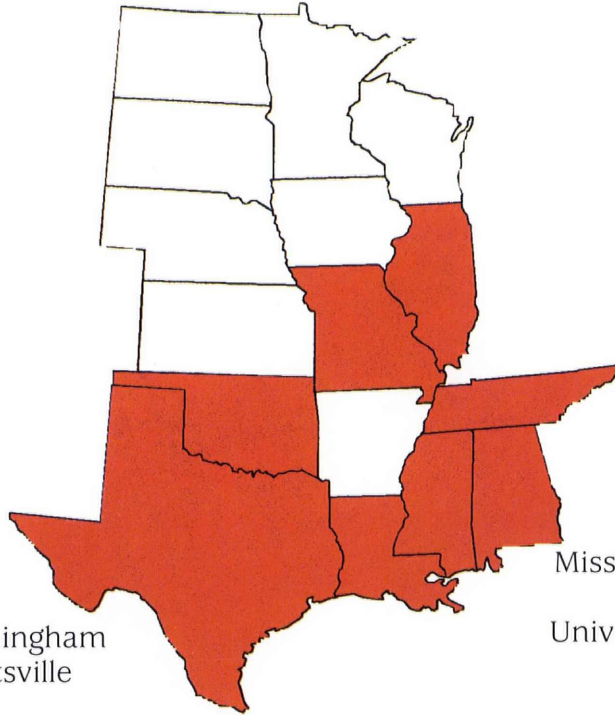
Montana
Montana State University • Salish Kootenai College

New Mexico
New Mexico State University

Pacific Alliances

California
The University of California - Irvine • California State University

Central Alliances



ALABAMA

Alabama A&M University
Alabama State University
Auburn University
Tuskegee University
University of Alabama
University of Alabama at Birmingham
University of Alabama in Huntsville

ILLINOIS

Chicago State University
DePaul University
Illinois Institute of Technology
Loyola University
Northwestern University
University of Illinois at Chicago

LOUISIANA

Xavier/UNCF

MISSISSIPPI

Alcorn State University

MISSISSIPPI (continued)

Delta State University
Jackson State University
Mississippi State University
Mississippi Valley State University
University of Mississippi
University of Southern Mississippi

OKLAHOMA

Oklahoma State University

TEXAS

University of Texas at Arlington
University of Texas at Austin
University of Texas at Dallas
University of Texas at El Paso
University of Texas at Tyler
Prairie View A&M University
Texas A&M University-Corpus Christi
Texas A&M University-Kingsville
Texas A&M University-College Station



Why Graduate School?

Richard Sullivan
Mississippi AMP

I encourage all my students to attend graduate school for the many clear advantages that an advanced degree provides. First, among the many reasons, is the probability of finding a satisfying professional position, which is greatly enhanced for people with graduate degrees as compared to those with baccalaureates. Also, the earning power over a lifetime is dramatically increased for those with masters and doctorate degrees. Moreover, there is a concomitant gain in self-esteem that comes with the self-empowering positive accomplishment of earning an advanced degree and becoming an expert in a particular field. The new knowledge and skills acquired in the process of graduate study also expand the spectrum of possible career choices because employers are more likely to hire people with the proven abilities implied by their graduate degree. Of

course, successful graduate degree earners can expect more responsibilities and unlimited job ceilings in their resulting careers. All undergraduates should apply to graduate school and seriously consider attending before accepting a job. It is the smart thing to do.

Graduate Opportunities Are Attractive

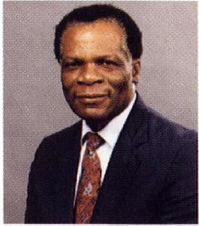
Diana Natalicio

University of Texas System AMP

The University of Texas at El Paso serves a large number of students who are the first in their families to attend college. For many of these students, the idea of continuing their education beyond the bachelor's degree appears to be out of reach. In fact, opportunities for these students to pursue graduate study, particularly in science, engineering, and mathematics, have never been more attractive, and we at UTEP do all that we can to provide them the skills and the encouragement to continue their academic programs beyond the



bachelor's degree. Education has made a difference in my life and in the lives of nearly everyone I know. Opportunities for graduate education should always be carefully considered.

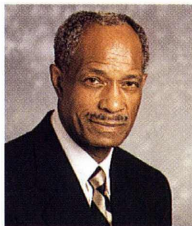


**Graduate School Opens Doors
To A Better Future**
Louis Dale
Alabama AMP

Life contains many critical decision points. In mathematics, a critical point is a point on a curve where the slope of the curve changes direction. A critical decision point in life is a point where the decision made changes the direction of the life. At the time you received your high school diploma you had a choice of attending college or doing something else. You decided to attend college and that changed the direction of your life. Moreover, that decision opened doors to a better quality of life. At the time you receive your bachelor's degree you will have another decision to make, to attend graduate school or do something else. This is another critical decision point, one that will change the direction of your life. Graduate school will open doors to a better future. This future includes better economic opportunities, better job security and better opportunities for career advancement. The choice is yours. Decide for a better future.

Graduate Study Enhances Knowledge
Leonard Price
Xavier-UNCF AMP

The Xavier-UNCF AMP Program will strongly encourage its student participants to seek entrance to graduate schools and to study for graduate degrees in science, engineering and mathematics. Once the program has gotten the student participants through undergraduate school, it is very important that they attend graduate school. It is through graduate study that they can enhance their own knowledge, prepare for a rewarding career in research or teaching, and become leaders by making meaningful contributions to the progress of their communities and the nation in science and technology. The Xavier-UNCF AMP Program is committed to seeking and implementing articulation agreements with selected graduate institutions so as to facilitate the transition of its undergraduate participants into graduate schools pursuing advanced degrees.



Why Go To Graduate School?
Karan Watson
Texas AMP



Many undergraduates do not consider the possibility of going to graduate school because it is not apparent what the advantages will be; or in many situations they have actually been told that

they should not attend graduate school because it will cause them to become too specialized. The goal that they have in going to college is to graduate and obtain a career position which allows them to support themselves, and possibly others in their family. My employers and family were very concerned that I would lessen my career opportunities by getting a Ph.D. in Electrical Engineering. Their concern was based on their view of what the employment opportunities were, and as I learned later, they had no idea what the employment opportunities for Ph.D. degree holders were. They meant no malevolence in trying to steer me away from graduate school; however, they did not understand what type of work environment truly motivates me. I discovered that I had many opportunities available upon receiving my graduate degree. While I must admit the locations for employment were more limited than they had been with a bachelor's degree, the type of work involved in the available jobs was much more satisfying to me. I enjoy research, development, marketing, teaching, management, and design. A graduate degree has given me more opportunities to incorporate all of these areas in my daily activities. The greatest advantage I have found in having a graduate degree is that I have work opportunities which offer me more control and flexibility to tailor the work to my interests. With this control, I have made more choices which have kept me truly motivated in my work. Therefore, I find it not to be surprising to note that a side benefit for those who are highly motivated and well educated is that they are usually well compensated, financially, for their efforts. I believe the most important reason for considering a graduate degree is that it will give an individual the opportunity to control more of the decisions in their career path. This control can almost always result in a chance to find a satisfying and usually fun work environment. In such an environment, a worker is usually more motivated to excel, and thus, the professional contributions made by the worker are usually more significant.



**Graduate School Offers Best
Opportunities**
Dolores E. Cross
Chicago AMP

The Chicago AMP offers a variety of opportunities for higher education. Whether a student is interested in a large or small academic environment or a private or public institution, windows of opportunity to graduate school occur more often for those who persevere.

Graduate education offers the best background for providing career and professional advancement. In graduate school, a student can develop to his/her highest potential through interaction with professors who are at the cutting edge of their fields and through research which helps to push knowledge forward.

A student can find high quality programs, state of the art equipment, advanced technology and faculty who are supportive. Enroll at any of the Chicago AMP institutions and find exceptional programs leading to the master's degree or doctorate degree.

ALABAMA A&M UNIVERSITY

OVERVIEW

Alabama A&M University - "Alabama's Best-Kept Secret" - is a dynamic and progressive institution with a strong commitment to academic excellence.

The picturesque campus, made up of 80 buildings aesthetically spaced over 200 acres of the 2090 acres that comprise the total physical plant, is situated on what many alumni and friends fondly refer to as "The Hill," located only a few miles from downtown Huntsville.

Currently serving over 5,000 students, this land-grant institution is a diverse and vibrant microcosm of the larger world around it. Efforts are continually being made to keep AAMU in step with the burgeoning high-technology center of Huntsville.

AAMU's semester-based academic programs are fully accredited by several associations, including SACS. There are more than 70 disciplines offered at the undergraduate level in the Schools of Agricultural & Environmental Sciences, Arts & Sciences, Business, Education, and Engineering & Technology. The School of Graduate Studies offers the M.S., M.Ed., M.U.R.P., M.S.W., MBA, and Ph.D. degrees. The Ph.D. degree is offered in Applied Physics, Food Science, and Plant and Soil Sciences.

COMMITMENT TO EXCELLENCE!

The School of Graduate Studies is committed to excellence. For the student in search of a strong graduate program, Alabama A&M is a delightful surprise just waiting for discovery. The escalating enthusiasm of our graduates is slowly revealing "the best-kept secret" in Alabama.

SOME OF THE SECRET IS OUT!

—Site of Alabama's and HBCU's oldest baccalaureate degree program in computer science.

—First among HBCU's in NASA research and development funding.

—First among HBCU's in funding from the U.S. Agency for International Development.

—The only 1980 land-grant university offering three Ph.D. degree programs (applied physics, food science, and plant and soil sciences).

—The only HBCU to have designed and analyzed crystal growth experiments flown aboard two U.S. space shuttle missions.

—The only HBCU with a Center in Forest Biotechnology and one of a few universities nationwide to operate centers for the following: Irradiation of Materials, Entrepreneurship & Economic Development; Nonlinear Optics & Materials; and Hydrology Soil Climatology and Remote Sensing.

—Site of the State Black Archives and Museum.

SOME OF AAMU'S RESEARCH EMPHASES

Artificial intelligence/biomass fuels/computer-assisted instruction/early intervention strategies in special education/cytogenetics/genetics/human nutrition/infrared thermometry/materials science/microgravity crystal growth/molecular genetics/optics/nutritional biochemistry/remote sensing/rural development/robotics/plant tissue culture/sensory evaluation.

ADMISSION REQUIREMENTS

APPLICATION: Submit application for admission; submit credentials; minimum GPA of 2.5 on 4.0 scale or appropriate GRE score; holds bachelor's degree from accredited institution; complete English writing proficiency before completing 12 semester hours; and letters of recommendation. Send to Graduate School, Alabama A&M University, Normal, AL 35762.

ADMISSION STATUS: "Full," "Provisional," "Special (Temporary)," "Transient," or "Non-Degree," Contact AAMU's School of Graduate Studies for detailed definitions.

VITAL TELEPHONE NUMBERS

Graduate Studies	(205) 851-5266
Academic Affairs	851-5275
Registrar	851-5254



ALABAMA STATE UNIVERSITY

THE GRADUATE PROGRAM IN MATHEMATICS

The Department of Mathematics offers the M.S. degree with two options: Option I is the master's degree in pure mathematics; covering a broad spectrum of mathematical content: Analysis, Algebra, Topology and Geometry. It is designed for persons who wish to do college teaching or pursue the Ph.D. degree in mathematics. Option II is similar to that of Option I. However, the amount of theoretical mathematics is reduced in favor of more applied courses: discrete mathematics, numerical analysis and operation research. Persons completing this program may pursue the Ph.D. degree in mathematics or applied mathematics, or may begin a career in industry.

In addition to meeting the general requirements of the Graduate School of Admissions, applicants must possess the equivalent of a Bachelor of Science degree in mathematics from an accredited college or university with a transcript which indicates that they are capable of doing graduate work in mathematics. For further information, see the Graduate School catalog, which may be obtained from the Graduate School upon request.

Each candidate enrolling in either option is expected to complete a minimum of 36 semester hours which include six hours in mathematics 529, Research and Thesis, the successful completion of a written comprehensive examination and submission of an approved thesis. The student will be required to demonstrate competency in a foreign language (French, German, or Spanish) by passing a written examination that tests reading knowledge. Six semester hours of an acceptable foreign language in which grades of "B" or better were earned may be presented in lieu of the language required.

PROGRAM FOR THE MASTER OF SCIENCE IN BIOLOGY

The Department of Biology offers graduate study leading to the Master of Science degree. The program is designed to train prospective research biologists and teachers of biological sciences.

In addition to satisfying the general admission requirements of the School of Graduate Studies at Alabama State University, all students admitted to the Master of Science degree program in Biology are expected to have the Bachelor's degree in Biology or Chemistry, and a minimum, cumulative grade-point average of 3.00 (on a four-point scale). Prerequisite courses include General Physics (8 semester hours), General Chemistry (8 semester hours), Organic Chemistry (10 semester hours), Genetics (4 semester hours) and Cell Biology or Biochemistry (4 semester hours). Scores on the General Test and Advanced Test in the area of Biology of the Graduate Record Examination are required.

Each student enrolling in this program is expected to complete 33 semester hours which include the core requirement courses: Biology 500 (Graduate Seminar in Biology), Biology 517 (Cell and Molecular Biology) and Biology 529 (Research and Thesis). Other courses will be selected by the student in consultation with his/her supervisory committee or thesis advisor.

Recommended electives include: Biology 503 (Ecology), Biology 504 (Non-vascular Plants), Biology 506 (Mammalian Physiology), Biology 508 (Parasitology), Biology 510 (Advanced Microbiology), Biology 515 (Cytogenetics), Biology 521 (Biological Techniques & Instrumentation), Biology 605 (Vascular Plants), Biology 607 (Endocrinology), Biology 609 (Protozoology), Biology 611 (Physiological Chemistry), Biology 612 (Advanced Plant Physiology), Biology 614 (Applied Microbiology), Biology 618 (Virology), Biology 619 (Molecular Genetics).

In addition to the completion and oral defense of the thesis, each student is required to perform satisfactorily on a written comprehensive examination and to demonstrate competent reading knowledge of a foreign language, preferably French or German. Upon recommendation of the Department, a substitute language may be offered. Six semester hours of an acceptable foreign language in which a cumulative average of at least "B" is earned may be presented in lieu of the language examination. For information, write to: Graduate School, Alabama State University, 915 S. Jackson St., Montgomery, AL 36195

AUBURN UNIVERSITY

Graduate Studies in Science, Engineering, and Mathematics



The University: Auburn University is a state-assisted, comprehensive, Research I, land-grant institution which was founded in 1856. It has a long tradition of academic excellence and graduate education, awarding its first undergraduate degree in 1860 and first graduate degree in 1870. The largest university in Alabama, Auburn has twelve colleges and schools in addition to the Graduate School - Agriculture, Architecture, Design and Construction, Business, Education, Engineering, Forestry, Human Sciences, Liberal Arts, Nursing, Pharmacy, Sciences and Mathematics, and Veterinary Medicine. More than 1,000 graduate faculty members have terminal degrees from about 150 uni-

versities. Several buildings have been added recently and several more are being built, reflecting the University's continued growth under a program of more than \$150 million.

Student Group: The total enrollment is almost 22,000, of whom over 3,200 are graduate students. Represented are every state, the District of Columbia, Puerto Rico, the Virgin Islands, and over eighty other countries. The 3,200 Graduate School enrollment includes more than 200 minority students, 700 international students, and over 1,000 women. Almost all of the graduate students in science, engineering and mathematics are employed by the University as teaching or research assistants and some have fellowships.

Financial Aid: Auburn University funds approximately 1,400 graduate assistantships annually. Many additional assistantships are provided through grants and contracts from external sources. Various fellowships are also available. Those receiving assistantships are eligible for Alabama resident fees. Auburn University has, in addition, several graduate fellowship programs for minority students in science, engineering, and mathematics. These include the Presidential Graduate Opportunity Program fellowships, the GAAN fellowship program in chemistry, discrete and statistical sciences, mathematics, and physics, the National Consortium for Graduate Degrees for Minorities in Engineering and Science (GEM), MREC scholarships in materials engineering, Patricia Harris fellowships, and many other departmental fellowships.

Programs of Study and Degrees:

Auburn University offers the following programs and degrees in Science, Engineering, and Mathematics:

Aerospace Engineering (M.A.E., M.S., Ph.D.)
 Agricultural Engineering (M.S., Ph.D.)
 Agronomy and Soils (M.Ag., M.S., Ph.D.)
 Anatomy and Histology (M.S., Ph.D.*)
 Animal and Dairy Sciences (M.Ag., M.S., Ph.D.)
 Botany and Microbiology (M.A.C.T., M.S., Ph.D.)
 Chemical Engineering (M.Ch.E., M.S., Ph.D.)
 Chemistry (M.A.C.T., M.S., Ph.D.)
 Civil Engineering (M.C.E., M.S., Ph.D.)
 Computer Science and Engineering (M.C.S.E., M.S., Ph.D.)
 Discrete and Statistical Sciences (M.A.Math., M.P.S., M.S., Ph.D.**)
 Electrical Engineering (M.E.E., M.S., Ph.D.)
 Entomology (M.Ag., M.S., Ph.D.)
 Fisheries and Allied Aquaculture (M.Aq., M.S., Ph.D.)
 Forestry (M.F., M.S., Ph.D.)
 Geology (M.S.)
 Horticulture (M.Ag., M.S., Ph.D.)
 Industrial Engineering (M.I.E., M.S., Ph.D.)

Large Animal Surgery and Medicine (M.S., Ph.D.*)
 Materials Engineering (M.Mtl. E., M.S., Ph.D.)
 Mathematics (M.A.Math., M.S., Ph.D.**)
 Mechanical Engineering (M.M.E., M.S., Ph.D.)
 Nutrition and Food Science (M.A.C.T., M.S., Ph.D.)
 Pathobiology (M.S., Ph.D.*)
 Pharmacal Sciences (M.S., Ph.D.)
 Physics (M.A.C.T., M.S., Ph.D.)
 Physiology and Pharmacology (M.S., Ph.D.*)
 Plant Pathology (M.Ag., M.S., Ph.D.)
 Poultry Science (M.Ag., M.S., Ph.D.)
 Radiology (M.S., Ph.D.*)
 Small Animal Surgery and Medicine (M.S., Ph.D.*)
 Statistics (M.P.S., M.S.)
 Textile Science (M.S.)
 Wildlife Science (M.S., Ph.D.)
 Zoology (M.A.C.T., M.S., M.Z.S., Ph.D.)

*: Through the interdisciplinary doctoral program in Biomedical Sciences.

** : Ph.D. in Mathematics

Applying: Minimum requirements include a four-year baccalaureate degree from an accredited college or university and satisfactory scores on the General Test of the GRE. Some departments also require satisfactory scores on a GRE Subject Test. Admission is competitive. Formulae combining undergraduate grade point averages and GRE scores are used to determine initial eligibility.

Correspondence and Information:

Dr. Overtoun M. Jenda, Director
 Auburn AMP Project

120 Mathematics Annex • Auburn University • AL 36849-5307
 Telephone: 334-844-3942 • Fax: 334-844-3611 • E-mail: jendaov@mail.auburn.edu

TUSKEGEE UNIVERSITY

COLLEGE OF ARTS AND SCIENCES DIVISION OF NATURAL SCIENCES

The graduate programs in biology and chemistry are designed to offer students the opportunity to increase their knowledge through scientific inquiry. Opportunities and experiences are also provided in the area of experimental research. This is achieved through a cooperative arrangement with the School of Veterinary Medicine and the Department of Agricultural Sciences. Graduates completing programs in these fields are qualified to seek employment or further study in a diversity of career choices.

THE GRADUATE PROGRAMS IN BIOLOGY/CHEMISTRY

The purpose of the program in Biology at the graduate level is twofold. This twofold thrust provides students who have attained the baccalaureate degree in biology or other natural sciences the opportunity to broaden and increase their knowledge in the biological sciences. It also offers the students the opportunity to enter or expand their experience in the area of experimental research in biology.

The program in Chemistry is designed to introduce the students to the techniques of serious research and to provide training in the theory and practice of Chemistry at a level beyond that corresponding to the regular undergraduate programs. Graduates of the program are prepared to either continue their education at other institutions or seek immediate employment in government or industry.

In both Biology and Chemistry most students require two calendar years to complete all requirements and obtain the degree. Occasionally, students who devote their full time to course work and research complete all requirements within three semesters and one summer session.

SPECIFIC REQUIREMENTS FOR THE MASTER'S DEGREE

Biology

A total of thirty semester hours of credit in 500, 600, and 700 level courses must be accumulated. Six of the credit hours submitted must be for research (Biology 700) and two credit hours in graduate seminar. Additional requirements include the preparation of thesis based on original research, and the satisfactory performance on a final comprehensive examination covering the general field of biology and the content of the thesis and research.

A quality examination may be required of the entering student prior to application of and approval for candidacy.

Chemistry

The student must accumulate thirty semester hours of

credit in graduate courses. Six of the credit hours may be earned by research for the thesis. In addition to the preparation of an acceptable thesis based on original research, the student must demonstrate satisfactory performance on a final oral examination based on the student's thesis and material studied in courses.

Candidates may exhibit the ability to read scientific articles in German, French, or Russian. As a more used alternative to the language requirement, they may demonstrate the ability to write programs in a generally used computer language, such as Fortran or A.P.L. This requirement may be satisfied by the receipt of a grade of at least "B" in an appropriate course.

THE GRADUATE PROGRAM IN ENGINEERING

Graduate Degrees Offered

Master of Science with specialization in:

Electrical Engineering

Mechanical Engineering

Graduate study in the engineering fields offers the student an opportunity to gain invaluable experiences and to expand skills and knowledge essential to successful engineering practice. The programs are designed to provide maximum utilization of specialized resources for research and experimentation.

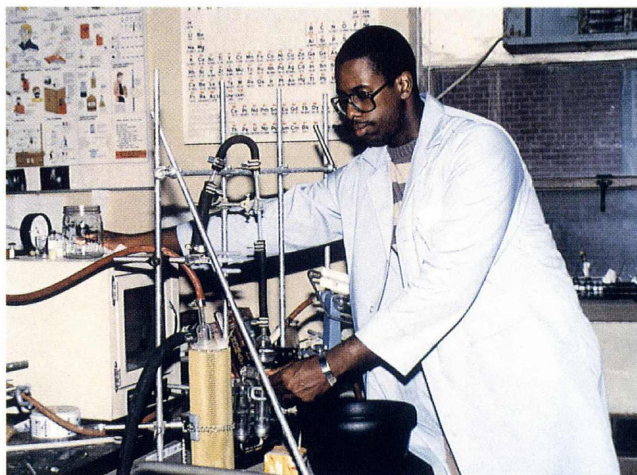
Thesis Option: A minimum of thirty (30) semester credit hours approved for graduation credit is required. Twenty-four (24) of these hours must be earned in courses other than research and thesis.

Non-thesis Options: A minimum of thirty-three (33) semester credit hours approved for

graduate credit, including three (3) hours of 690, "Projects" is required.

If a student's background is deficient in the major area of interest as indicated by the official transcript of previous college work, or academic performance in the graduate program, the student's Advisory Committee in consultation with the Department Head and the Dean may require these deficiencies to be made up by taking certain undergraduate courses. Any deficiencies must be made up prior to admission to candidacy.

All prospective graduates must take both the Aptitude and Advanced portions of the Graduate Record Examination (GRE). Scores that are low could result in the student having to take additional course work. This determination will be made by the Advisory Committee in consultation with Department Head and the School Dean. For information, write to: Graduate School, Tuskegee University, Tuskegee, AL 36088



THE UNIVERSITY OF ALABAMA

On April 18, 1831, the University of Alabama was opened for the admission of students. The University offered graduate degrees from the outset, the first being a master of arts degree conferred in 1832. Today, the University of Alabama campus covers 850 acres in Tuscaloosa, located about 50 miles southwest of Birmingham with a population of approximately 100,000. The University is a major teaching, research and service institution composed of 17 colleges, divisions, and schools. The location of the campus in a mineral and industrial district of Alabama is particularly advantageous for engineering students. The College maintains a close relationship with various manufacturing facilities in the area.

More than 19,000 students are enrolled at the University of Alabama. As a comprehensive university, it offers a diversity of academic programs and a full range of cultural and social events, including music, theater, athletics, and intramurals. The University has over 120 academic departments and more than 300 accredited undergraduate and graduate degree programs. Graduate degrees are offered in astronomy, biological sciences, chemistry, geology, marine science, mathematics, and physics, as well as in engineering.

Engineering instruction was instituted at The University of Alabama in 1837, and the College of Engineering was organized as a separate division of the University in 1909. The primary objective of the College is to provide its students with a quality educational experience which will equip them for rewarding and productive professional careers and for responsible citizenship. Further objectives include the generation of new knowledge through research by the faculty and students, and the provision of a variety of short courses, conferences, and seminars for practicing engineers that enable them to stay abreast of advances in their fields. To accomplish its objectives, the College of Engineering offers students an outstanding faculty, accredited engineering and computer science programs, and some of the best facilities in the nation. Numerous research projects offer students an opportunity to work with the faculty in solving current societal problems and in developing technological resources for the future.

Today, the College of Engineering has 10 departments, approximately 1650 undergradu-

ates and over 300 graduate students. In addition to computer facilities available in each department, the College has four computer laboratories available for use by engineering students. They contain PC's and RS/6000 workstations. The College of Engineering offers the following graduate degrees: Master of science in aerospace engineering, chemical engineering, civil engineering, computer science, electrical engineering, environmental engineering, engineering science and mechanics, industrial engineering, mechanical engineering, metallurgical engineering, and mineral engineering; doctor of philosophy in the fields of chemical engineering, civil engineering, computer science, electrical engineering, engineering science and mechanics, mechanical engineering, and metallurgical engineering (the Ph.D. in metallurgical engineering is offered jointly with The University of Alabama at Birmingham). A Ph.D. degree in the field of materials science is also offered in collaboration with The University of Alabama at Birmingham and The University of Alabama in Huntsville.

As a member of the Alabama Alliance for Minority Participation (AAMP), our minority programs and services administered by the Colleges of Engineering and Arts and Sciences provide an atmosphere of support and commitment to underrepresented groups in science, engineering and mathematics. Through our pre-college involvement with the Southeastern Consortium for Minorities in Engineering (SECME), administrative support through the National Association of Minority Engineering Program Administrators (NAMEPA), and graduate fellowships and internships through the National Consortium for Graduate Degrees for Minorities in Engineering and Science, Inc. (GEM), the University of Alabama is strongly committed to the mission and purpose of the AAMP.

For more information about the University of Alabama College of Engineering, you may access the WWW home page via <http://hamton.eng.ua.edu>. You may also contact:

Mr. Greg Singleton
 College of Engineering
 University of Alabama
 Box 870200
 Tuscaloosa, AL 35487-0200
 (205) 348-1447
gsingleton@coe.eng.ua.edu

THE UNIVERSITY OF ALABAMA AT BIRMINGHAM

The University of Alabama at Birmingham (UAB) is a comprehensive research institution in Alabama's most populated city. With more than 100 major campus buildings occupying 70 city blocks on Birmingham's Southside, UAB has become a nationally and internationally respected center for educational, research, and service programs.

UAB is a comprehensive university and medical complex with an enrollment of over 16,000. On the basis of federal research and development support, UAB ranks as one of the foremost in the nation. The university has all of the library, computer, laboratory and specialized research facilities and equipment characteristic of a large, comprehensive, and research-oriented university.

UAB currently has over \$198 million in active grants and contracts. We rank among the top public institutions in the nation in terms of federal research support. For graduate students, this funding status means the availability of financial support, access to well-equipped laboratories, adequate supplies, and interaction with productive faculty members who have earned peer-reviewed research support.

As a research university in an urban setting, UAB is committed to reversing the decline in minority participation in science and engineering. The geographical location of UAB in a city with a 56% African-American population gives the University a special responsibility to promote racial harmony, a key component of which is educational opportunity. One of our primary goals is to expand doctoral training opportunities for groups underrepresented in the sciences and engineering. Special emphasis will be placed on recruiting and supporting these groups.

GRADUATE PROGRAMS

Financial Aid

Many students need financial assistance in order to enter full-time graduate study. The three main sources of aid available to UAB graduate students are (a) appointment as a fellow or assistant, (b) awards from the individual graduate programs, and (c) federal aid programs administered by the Office of Student Financial Aid.

Each year approximately 165 students are appointed as fellows. In addition to fellowships, many opportunities exist for students as research assistants. Stipends range from approximately \$10,000 to \$15,000, plus full payment of tuition and fees. The graduate program directors nominate students for these appointments, so interested students should contact their graduate programs. The Graduate School also occasionally selects outstanding applicants for special fellowships.

Special Fellowships

Special fellowships for minority students are available through several programs, including UAB's Minority Faculty Development Program and the National Consortium for Educational Access.

Programs

Basic Life and Biomedical Sciences
 Behavioral Neuroscience (Ph.D.)
 Biochemistry (Ph.D.)
 Biology (Ph.D., M.S.)
 Biophysical Sciences (Ph.D.)
 Biostatistics (Ph.D., M.S.)
 Cell Biology (Ph.D.)
 Medical Genetics (Ph.D.)
 Molecular Cell Biology/Microbiology (Ph.D.)
 Neuroscience Molecular and Cellular Pathology (Ph.D.)
 Pharmaceutical Design Pharmacology (Ph.D.)
 Toxicology Physiology and Biophysics (Ph.D.)
 Vision Science (Ph.D., M.S.)

Physical and Mathematical Sciences
 Chemistry (Ph.D., M.S.)
 Computer and Information Sciences (Ph.D., M.S.)
 Materials Science (Ph.D.)
 Mathematics (M.S.) Applied Mathematics (Ph.D.)
 Physics (Ph.D., M.S.)

Engineering

Biomedical Engineering (Ph.D., M.S.B.E.)
 Civil Engineering (Ph.D., M.S.C.E.)
 Electrical Engineering (Ph.D., M.S.Mt.E.)
 Mechanical Engineering (Ph.D., M.S.M.E.)

Allied Health Sciences

Nutrition Science (Ph.D.)

Contact Ms. Wanda Jordan, Assistant Director, The Graduate School, Room 511, Hill University Center, 1400 University Boulevard, Birmingham, Alabama, 35294-1250, (205) 934-2495 or 1-800-975-GRAD.



The University of Alabama in Huntsville

The Community

Huntsville is best known for the high-tech industries clustered around NASA's Marshall Space Flight Center and the U.S. Army's Redstone Arsenal.

UAH is in the 2,000-acre Cummings Research Park, the nation's first research park.

Huntsville boasts one of the highest concentrations of high technology industry in the nation, and is home to two Fortune 500 high-tech firms: Intergraph and SCI.

Students at UAH benefit from the university's close relationships with both government labs and local industry. UAH has one of the most active cooperative education programs in the state. Other students participate in funded research through academic units or one of UAH's twelve research centers.

Graduate Assistantships & Fellowships

Support in the form of teaching and research assistantships, as well as fellowships and tuition scholarships, is awarded to selected students on a competitive basis.

Applicants desiring an assistantship or fellowship should request an application from the chair of the department or program where their interest lies. Teaching and research assistantships include the payment of tuition and are highly competitive with other regional research universities.

Graduate Programs & Options

Engineering

Master of Science in Engineering

Aerospace Engineering
Chemical Engineering
Civil & Environmental Engineering
Computer Engineering
 Software Engineering Option
Electrical Engineering
 Optics & Photonics
 Technology Option
Engineering Management
Industrial & Systems Engineering
Mechanical Engineering
Operations Research

Doctor of Philosophy

Computer Engineering
Electrical Engineering
Engineering Management
Industrial & Systems Engineering
Materials Science
 Chemical Engineering Option
 Electrical Engineering Option
Mechanical Engineering
 Chemical Engineering Option
 Civil Engineering Option
Optical Science & Engineering

Additional graduate programs are offered through UAH's colleges of liberal arts, nursing and administrative science (business).

Science

Master of Arts

Mathematics

Master of Science

Atmospheric Science
Biological Sciences
Chemistry
Computer Science
 Software Engineering
Mathematics
Physics
 Optics & Photonics
 Technology Option

Doctor of Philosophy

Applied Mathematics
Atmospheric Science
Computer Science
Materials Science
 Chemistry Option
 Physics Option
Physics

5th Year Programs (Education)

Biology
Chemistry
Mathematics
Physics

UAH

The University of Alabama in Huntsville

For additional information about graduate programs at UAH or about AMP graduate bridge programs, please contact:

Dr. Adriel Johnson, Coordinator
UAH AMP Program
Wilson Hall, Rm. 218
Huntsville, Alabama 35899
Phone: (205) 895-6260
FAX: (205) 895-6305
e-mail: johnsona@email.uah.edu

Dr. James Johannes, Dean
UAH School of Graduate Studies
Huntsville, Alabama 35899
Phone: (205) 895-6002
Fax: (205) 895-6349
e-mail: johannes@grad.uah.edu
http://info.uah.edu

Chicago State University

The graduate programs at Chicago State University reflect the university's urban mission and represent a community resource and response to the growing need for post baccalaureate knowledge and competencies. Graduate students enroll at Chicago State to pursue a variety of learning opportunities including: (1) master's degree programs in particular disciplines; (2) programs for entry teacher certification, advancement in the teaching profession and preparation for school administration; and (3) enrichment courses and programs for postgraduate general learners.

Graduate Studies Office Contact Person:
 Dr. Kenneth Roy Johnson, Dean
 Cook Administration Building, Room 131
 Chicago State University
 Chicago, IL 60628
 (312) 995-2404

Programs of Study:
 Master of Science
 Programs are offered in the following areas:
 Biological Sciences
 Mathematics

DePaul University

The Doctor of Philosophy, the highest academic degree that DePaul University confers, is offered in the Departments of Philosophy and Psychology. The degree shows that the recipient has demonstrated proficiency in a broad area of learning, as well as the potential to explore and advance that field of knowledge by independent research.

DePaul University Graduate Office
 2320 N. Kenmore Avenue
 Room 477
 Chicago, Illinois 60614

Master/Doctorate Programs:
 Biology
 Chemistry
 Computer Science
 Mathematics
 Physics
 Quantitative Methods
 Systems Analyst

Illinois Institute of Technology:

IIT's graduate program in architecture offers both first and second professional master's degrees. The curriculum provides a broad education, with a goal of refining the student's problem-solving abilities in all areas of architectural and urban design. Architectural skills, theory, and the principles of practice are taught with a concern for social organization, economics, and the wide variety of contemporary constraints that are so much a part of the architects' role in today's complex society.

Office of Graduate Admission
 College of Architecture
 IIT Center-Crown Hall
 Illinois Institute of Technology
 Chicago, Illinois 60616
 (312) 567-5858

Master/Doctorate Programs:
 Biology
 Chemical Engineering
 Chemistry
 Civil Engineering
 Computer Science
 Electrical Engineering
 Environmental Engineering
 Mathematics
 Mechanical Engineering
 Metallurgical Engineering

Loyola University

Loyola University of Chicago is a Jesuit Catholic University dedicated to knowledge in the service of humanity. The University endeavors to develop in the lives of students, faculty and staff the spirit of searching for truth and living for others which characterized Ignastius of Loyola.

Dean of Graduate School
 Dr. James F. Brennan
 6525 N. Sheridan Road
 Chicago, Illinois 60626
 (312) 508-3396

Master/Doctorate Programs:
 Anatomy
 Biochemistry
 Biology
 Chemistry
 Computer Science
 Mathematics
 Microbiology

Northwestern University

Northwestern University's strong commitment to a diverse student population is the impetus for developing programs that encourage minority students and those from other underrepresented groups to consider graduate study at Northwestern.

Northwestern University
 Associate Dean for Graduate Studies and Research
 McCormick School of Engineering and Applied Science
 Northwestern University
 Evanston, Illinois 60208-3103
 (708) 491-7264

Master/Doctorate Programs:

- Applied Mathematics
- Astronomy
- Astronomy and Physics
- Astro Physics
- Biochemistry, Molecular Biology, & Cell Biology
- Bioenvironmental Energy
- Biological Materials
- Biomedical Engineering
- Chemical Engineering
- Chemistry
- Civil Engineering
- Computer Science
- Electrical Engineering
- Immunology and Microbiology
- Industrial Engineering and Management Science
- Manufacturing Engineering
- Materials Science Engineering
- Mathematics
- Mechanical Engineering
- Molecular, Cellular and Integrative Biomedical
- Neurobiology & Physiology
- Neuroscience
- Physiology
- Probabilities and Statistics

University of Illinois at Chicago

The University of Illinois at Chicago has re-engineered its full-time MBA curriculum, bringing in value-added elements that respond to the changing needs of today's business world.

University of Illinois at Chicago
 Dean of Graduate College & Vice Chancellor for Research
 Dr. Mi Ja Ki
 601 S. Morgan Street
 Chicago, Illinois 60607
 Mail Code 192
 (312) 413-2540

Master/Doctorate Programs

- Anatomy
- Biochemistry
- Bioengineering
- Biological Chemistry
- Biological Sciences
- Cell Biology
- Chemical Engineering
- Chemistry
- Civil Engineering
- Electrical Engineering
- Electrical Engineering and Computer Science
- Geological Sciences
- Industrial Engineering
- Industrial Engineering and Operations Research
- Material Science Engineering
- Mathematics
- Mechanical Engineering
- Physics
- Physiology

Mississippi Alliance for Minority Participation

Graduate Studies in Science, Mathematics, Engineering & Technology

Alcorn State University (ASU)

M.S. in Agriculture

Contact: Director, Division of Graduate Studies, Alcorn State University, Lorman, MS 39096
(601) 877-6100

Delta State University (DSU)

M.S. in Biological & Physical Sciences

Master of Mathematics Education

Contact: Graduate School, Box C-2, Delta State University, Cleveland, MS 38733
1-800-468-6378 Ext. 4310

Jackson State University (JSU)

M.S. in Biology, Chemistry, Computer Science, Mathematics

M.S. in Teaching with emphasis in Biology, Chemistry, Mathematics, General Science

M.S. & Ph.D. in Environmental Science

Contact: Office of Graduate School, Jackson State University, Jackson, MS 39217
(601) 968-2455

Mississippi State University (MSU)

M.S. And Ph.D. in Biological Sciences, Chemistry, Computer Science, Mathematics (M.S. only),
Statistics (M.S. Only), Mathematical Sciences (Ph.D. Only), Physics (M.S. Only), Engineering
Mechanics (M.S. Only), Engineering Physics (Ph.D. Only), M.S. And Ph.D. in Computational
Engineering, Computer Engineering, Electrical Engineering and Engineering (Aerospace, Biological,
Chemical, Civil, Engineering Physics, Industrial, Mechanical).

MSU is a GEM Institution.

Contact: Graduate School, PO Box G, Mississippi State University, Mississippi State, MS 39762
(601) 325-7400

Mississippi Valley State University (MVSU)

M.S. in Environmental Health

Contact: The Coordinator, Graduate Studies, Mississippi Valley State University,
Itta Bena, MS 38941

University of Mississippi (UM)

M.S. and Ph.D. in Biological Science, Chemistry, Computational Engineering Science, Engineering
Science, Mathematics and Physics

University of Mississippi is a GEM institution.

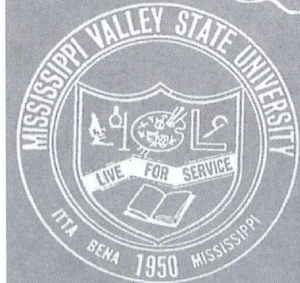
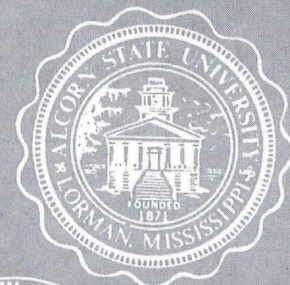
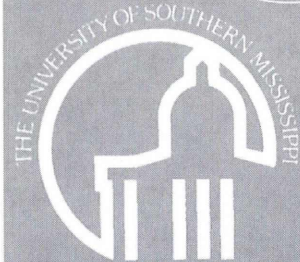
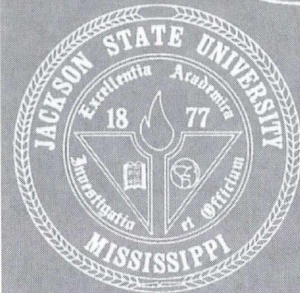
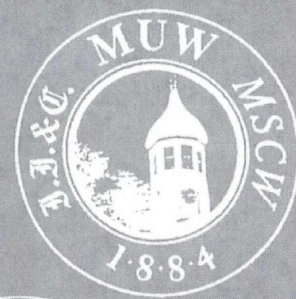
Contact: Dean, Graduate School, Suite 100 Old Chemistry, University, MS 38677
(601) 232-7474

University of Southern Mississippi (USM)

M.S. And Ph.D. in Biological Sciences, Chemistry, Marine Science, Polymer Science, Scientific
Computing, Science Education

M.S. in Computer Science, Computational Science, Engineering Technology, Mathematics,
Physics

Contact: Director of Graduate Admissions, The University of Southern Mississippi, Southern
Station, Box 10066, Hattiesburg, MS 39406-0066
(601) 266-5137



The
University of Mississippi

OKLAHOMA STATE UNIVERSITY

THE GRADUATE COLLEGE COMMITTED TO DIVERSITY

The Graduate College at Oklahoma State University strives to assure itself that it will be the beneficiary of a diverse graduate student population. Outstanding faculty, excellent research facilities, and broadly supported financial opportunities are part of a broader array of services which serve to attract the outstanding minority student to our programs.

FINANCIAL ASSISTANCE

Financial assistance is available through a variety of policy, scholarships, grants, and other opportunities. They include:

- Teaching and Research Assistantships
- In-State Tuition Waiver Scholarships
- The Oklahoma Tuition Aid Grant
- Minority Doctoral Study Grants
- Minority Tuition Waivers
- Miscellaneous Sources of Financial Aid
- Thurgood Marshall Fellowships
- Endowed Graduate Fellowships

A SUPPORTIVE UNIVERSITY

In addition, the University supports a variety of associations and programs which enrich the experience of graduate students.

- Minority Graduate Student Association
- A Minority Component to the Annual Graduate Student Research Symposium
- Office of the Director of Student Academic Services
- Graduate Student Association
- Graduate Student Research Excellence Award

A call to any of these groups can provide assistance regarding the Graduate College.

In State (405) 744-6368
Out of State 1-800-227-GRAD
E-mail grad-I@okway.okstate.edu

GRADUATE DEGREES IN MATHEMATICS AND SCIENCES

Graduate students in a recognized graduate program may be admitted without qualification provided they meet all Graduate College and departmental requirements.

Agricultural Sciences and Natural Resources

Agricultural Economics M.S., Ph.D.
Agricultural Mag

(Agricultural Economics, Agronomy, Animal Science, Entomology, Forest Resources, Horticulture & Landscape Architecture, & Plant Pathology)

Agronomy M.S.

Crop Science Ph.D.

Soil Science Ph.D.

Animal Science M.S.

Animal Breeding Ph.D.

Animal Nutrition Ph.D.

Biochemistry and Molecular Biology M.S., Ph.D.

Entomology M.S., Ph.D.

Environmental Science M.S., Ph.D.

Forest Resources M.S.

Horticulture M.S.

Plant Pathology M.S., Ph.D.

Plant Sciences Ph.D.

Botany M.S., Ph.D.

Chemistry M.S., Ph.D.

Computer Science M.S., Ph.D.

Environmental Science M.S., Ph.D.

Food Science M.S., Ph.D.

Geology M.S.

Mathematics M.S., Ph.D.

Applied Mathematics M.S.

Microbiology, Cell and Molecular Biology M.S., Ph.D.

Physics M.S., Ph.D.

Statistics M.S., Ph.D.

Wildlife and Fisheries Ecology M.S., Ph.D.

Zoology M.S., Ph.D.

Engineering, Architecture and Technology

Architectural Engineering MArchE

Biosystems Engineering MBioE, M.S., Ph.D.

Chemical Engineering MChemE, M.S., Ph.D.

Civil Engineering MCivilE, M.S., Ph.D.

Environmental Engineering MEnvirE, M.S.

Electrical Engineering MElecE, M.S., Ph.D.

General Engineering MGenE, M.S., Ph.D.

Industrial Engineering and Management MIE&Mgmt, M.S., Ph.D.

Mechanical Engineering MMechE, M.S., Ph.D.

Veterinary Medicine

Physiological Science M.S., Ph.D.

Veterinary Parasitology M.S., Ph.D.

Veterinary Pathology M.S., Ph.D.

TEXAS AMP

Graduate School Opportunities

Several of the institutions in the Texas AMP offer degree programs in many fields of science, engineering and mathematics. Many programs offer substantial opportunities for financial support through fellowships and assistantships. In addition, many of the institutions participate in cooperative M.S./Ph.D. programs, where students applying for admission to an M.S. program can simultaneously gain admission to a Ph.D. program, and guaranteed financial support. More information can be obtained by contacting the Texas AMP director by e-mail at: watson@eesun1.tamu.edu.

Master's Degree Opportunities:

Prairie View A&M University

Master of Science in Engineering with areas in Chemical Engineering-Material Science, Civil Engineering-Structural Engineering, Electrical Engineering-Microelectronics, Communications & Signal Processing, Mechanical Engineering-Thermal Sciences, Mechanical Design.

Texas A&M University-Corpus Christi

Master of Science in: Biology, Computer Science, Environmental Sciences, Mariculture, Mathematics, Nursing

Texas A&M University-Kingsville

Master of Engineering in: Chemical Engineering, Civil Engineering, Electrical Engineering, Mechanical Engineering, Natural Gas Engineering, Environmental Engineering.

Master of Science in: Animal Science, Biology, Chemical Engineering, Chemistry, Civil Engineering, Computer Science, Electrical Engineering, Environmental Engineering, Geology, Human Sciences, Industrial Engineering, Mathematics, Mechanical Engineering, Natural Gas Engineering, Plant and Soil Science, Psychology, Sociology.

Texas A&M University-College Station

Master of Engineering in: Aerospace Engineering, Agriculture Engineering, Bioengineering, Civil Engineering, Chemical Engineering, Computer Science, Electrical Engineering, Industrial Engineering, Mechanical Engineering, Nuclear Engineering, Ocean Engineering, Petroleum Engineering.

Master of Science in: Aerospace Engineering, Agriculture Engineering, Bioengineering, Civil Engineering, Chemical Engineering, Computer Science, Electrical Engineering, Industrial Engineering, Mechanical Engineering, Nuclear Engineering, Ocean Engineering, Petroleum Engineering, Life Cycle Engineering Operations-Management, Food Science and Technology, Genetics, Nutrition, Plant Physiology, Toxicology, Animal Breeding, Plant Breeding, Animal Science, Dairy Science, Physiology of Reproduction, Biochemistry, Biophysics, Entomology, Forestry, Floriculture, Horticulture, Plant Pathology, Agronomy, Soil Science, Wildlife and Fisheries Sciences, Geography, Geology, Geophysics, Meteorology, Oceanography, Biology, Botany, Microbiology, Zoology, Chemistry, Mathematics, Physics, Statistics, Economics, Psychology, and Sociology.

Doctor of Philosophy Opportunities:

Texas A&M University-Kingsville

Doctor of Philosophy in: Wildlife Sciences

Texas A&M University-College Station

Doctor of Philosophy in: Aerospace Engineering, Agriculture Engineering, Bioengineering, Civil Engineering, Chemical Engineering, Computer Science, Electrical Engineering, Industrial Engineering, Mechanical Engineering, Nuclear Engineering, Ocean Engineering, Petroleum Engineering, Life Cycle Engineering Operations-Management, Food Science and Technology, Genetics, Nutrition, Plant Physiology, Toxicology, Animal Breeding, Plant Breeding, Animal Science, Dairy Science, Physiology of Reproduction, Biochemistry, Biophysics, Entomology, Forestry, Floriculture, Horticulture, Plant Pathology, Agronomy, Soil Science, Wildlife and Fisheries Sciences, Geography, Geology, Geophysics, Meteorology, Oceanography, Biology, Botany, Microbiology, Zoology, Chemistry, Mathematics, Physics, Statistics, Economics, Psychology, and Sociology.

THE UNIVERSITY OF TEXAS AT ARLINGTON

The University of Texas at Arlington has the following Graduate programs available in Science and Engineering:

COLLEGE OF SCIENCE

Ph.D. Programs

Quantitative Biology
Applied Chemistry & Biochemistry
Applied Physics
Psychology
Mathematical Sciences

M.S. Programs

Biology
Chemistry & Biochemistry
Geology
Physics
Psychology
Mathematical Sciences

COLLEGE OF ENGINEERING

Ph.D. Programs

Civil Engineering
Computer Science Engineering
Electrical Engineering
Industrial Engineering
Mechanical & Aerospace Engineering
Biomedical Engineering

M.S. and M. Eng. Programs

Civil Engineering
Computer Science Engineering (also M.S.C.)
Electrical Engineering
Industrial Engineering
Mechanical & Aerospace Engineering
Biomedical Engineering

INTERDISCIPLINARY PROGRAMS

Materials Science and Engineering, M.S., M.Eng., Ph.D.
Environmental Science and Engineering, M.S., Ph.D.

For information and application materials, prospective

students should contact:

Graduate Advisor

Department of (insert name here)

The University of Texas at Arlington

Arlington, TX 76019

More general information can be obtained from:

Gloria Eyres

Assistant Vice-Provost for Graduate Studies

Office of Graduate Studies

Box 19167

The University of Texas at Arlington

Arlington, TX 76019

THE UNIVERSITY OF TEXAS AT AUSTIN

The objective of graduate study is to develop the intellectual breadth and to provide the specialized training necessary for careers in scholarly teaching, in original research and creative expression, or in the professions. In our increasingly complex world, the need for the intellectual leadership acquired during graduate study cannot be underestimated.

The University of Texas at Austin is a major research institution. UT Austin is one of the three Southwestern members of the Association of American Universities, which is composed of the 58 leading universities in the United States and Canada. The University leads all institutions

in the South in the quality of its graduate programs, as well as in the number of doctoral degrees awarded. Graduate degrees are available in 170 degree programs. The distinguished faculty include members of the National Academy of Sciences, the National Academy of Engineering, and the American Academy of Arts and Sciences, and Pulitzer Prize and Nobel Prize winners.

Assessments of selected programs in the United States have found many UT Austin graduate offerings in law, education, business, engineering, natural sciences and public affairs to be among the best in the United States.

THE UNIVERSITY OF TEXAS AT DALLAS

The University of Texas at Dallas provides superior education for both research-oriented students and professionals keeping abreast of their fields. Graduate students make up 45 percent of the 8,690 students at U.T. Dallas. The University offers a wide range of graduate degrees including: Applied Cognition and Neuroscience, Biology-Molecular and Cell Biology, Master of Business Administration, Chemistry, Communication Disorders, Computer Science, Electrical Engineering (Microelectronics and Telecommunications), Engineering Science (Electronic Manufacturing Systems), Geosciences, Human Development and Early Childhood Disorders, Human Development and Communication Sciences, Humanities (Aesthetic Studies, History of Ideas, and Studies in Literature), Interdisciplinary Studies, International Management Studies, Management and Administrative Sciences (Accounting), Management Science, Mathematical Sciences (Mathematics, Statistics, and Applied Math), Physics, Political Economy, Master of Public Affairs, Science Education.

GRADUATE STUDIES

U.T. Dallas offers a rigorous curriculum taught by a top quality faculty at comparatively low cost. Full academic programs are available in the evening, convenient for employed students. A Texas resident enrolled in 12 graduate semester hours in 1992-93 could expect to pay tuition and fees of \$681 per semester except for Management and Engineering and Computer Science students who would pay \$825 per semester*. Yet at U.T. Dallas, the quality of the faculty and the small classes match some of the best private schools in the United States.

**Tuition and fees are subject to change by legislative action. Changes in tuition or fees will be effective upon date of enactment and will be reflected in fees and tuition charged.*

STUDENT SERVICES

The Student Affairs division provides programs and services that include career planning and placement, recreational sports, student activities, and specialized services for international, disabled, and minority students. It also provides counseling and health services. The availability of evening child care through the YWCA also makes graduate studies at U.T. Dallas convenient.

FINANCIAL AID

Many graduate and research assistantships are available. The Office of Financial Aid and Student Employment also offers a comprehensive program of grants, scholarships, loans, and job opportunities. Call (214) 690-2941

THE UNIVERSITY OF TEXAS AT TYLER

The University of Texas at Tyler provides graduate courses and degree programs for persons seeking to continue their studies past the baccalaureate. The University offers graduate degrees through its four schools — Business Administration, Education and Psychology, Liberal Arts, and Sciences and Mathematics — and the Division of Nursing. Among the graduate degrees offered by UT Tyler are:

School of Business Administration - BUS 109, 566-7360

Master of Business Administration

School of Education and Psychology - UC 250, 566-7050

Master of Education

Master of Science in Kinesiology

Master of Science in Clinical Exercise Physiology

Master of Science in Technology

Master of Science in Psychology and Master of Arts in Professional Counseling

School of Liberal Arts - BUS 215, 566-7368

Master of Public Administration

Master of Arts in English

Master of Arts in History

Master of Arts or Master of Science in Interdisciplinary Studies

School of Sciences and Mathematics - HPR 126, 566-7400

Master of Science in Mathematics

Master of Science in Computer Science

Master of Science in Biology

Division of Nursing - SCI 236, 566-7320

Master of Science in Nursing

Coordinated Dual MSN/MBA Option

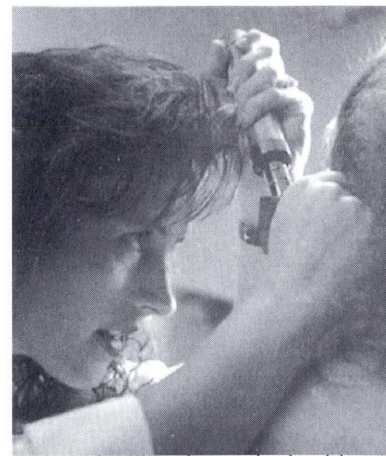
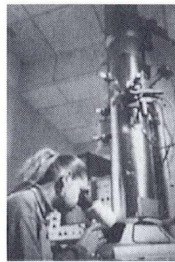
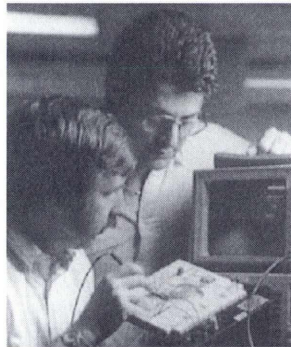
GENERAL GRADUATE ADMISSION REQUIREMENTS

Students applying to take graduate courses must fulfill the following requirements:

- A. Hold a 4-year baccalaureate degree, or its equivalent, from an accredited institution
- B. Complete an application for admission which may be obtained from the Office of Admissions and Student Records
- C. Submit an official transcript from the college or university that awarded the baccalaureate or higher degree
- D. Certify eligibility to return to the college or university the student attended most recently

The completed application and official transcripts must be received by the Office of Admissions and Student Records prior to the semester of initial enrollment. Eligibility to enroll for graduate study does not imply admission to a specific graduate degree program. The academic units make the official determination.

For more information, contact the UT Tyler **Office of Admissions and Student Records, 903-566-7202 or the Admissions Hotline at 1-800-UT TYLER.**



The University of Texas at El Paso (UTEP) offers over 60 master's degrees in business, education, engineering, the liberal arts, the health sciences, and science. Doctoral degrees are currently offered in Geological Sciences, Computer Engineering, Materials Science and Engineering, Psychology, and Environmental Science and Engineering. For information about these programs, contact the Graduate School at (915) 747-5491.

FINANCIAL AID FOR MINORITY STUDENTS AND WOMEN

The Graduate School at the University of Texas at El Paso is committed to enhancing participation of minority students and women in fields in which they have been historically underrepresented. In partnership with the National Science Foundation, the National Institutes of Health, the National Aeronautics and Space Administration, the Department of Defense, and other national agencies, UTEP strives to increase access to graduate training and professional careers by providing stipends and fellowships, research experiences, and mentoring programs.

In addition to financial aid programs through the UTEP Scholarships and Financial Aid offices, qualified minority students who are U.S. citizens or permanent residents are especially encouraged to apply for support through the following programs:

<u>Program</u>	<u>Fields of Study</u>	<u>Contact</u>
Minority Biomedical Research Support Program	Biology, Chemistry Mathematics	Dr. Joan Staniswalis (915) 747-6890
Materials Research Center of Excellence Stipends	Materials Science and Engineering	Dr. Arturo Bronson (915) 747-5554
National Security Agency/UTEP Fellowships	Electrical & Computer Engineering, Computer Science, Mathematics	Dr. Julie Sanford (915) 747-5680
Sloan Minority Doctoral Scholars Program	Computer Engineering, Materials Science & Engineering	Dr. Sergio Cabrera (915) 747-5470, or Dr. Lawrence Murr (915) 747-5468
General Electric Faculty for the Future	Chemistry, Physics, Engineering	Dr. William Herndon (915) 747-5701

RESEARCH AND DEVELOPMENT CENTERS

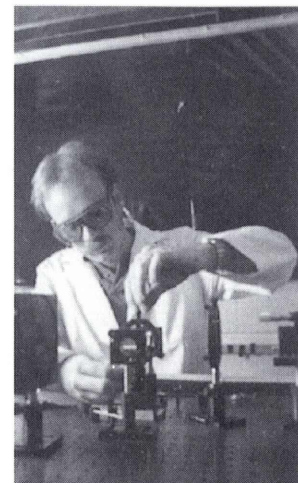
UTEP graduate programs are supported by state-of-the-art research facilities and research and development (R&D) centers that bring together faculty and students from different departments to address challenging interdisciplinary problems. Centers provide research opportunities for students and faculty and sponsor conferences and seminars attended by international experts. Some of the major R&D centers include the following. Other, more specialized centers are maintained within departments.

The Materials Research Center of Excellence (MRCE) is supported by the National Science Foundation under its Minority Research Centers of Excellence Program. Faculty and students in the MRCE conduct research on the synthesis and processing of materials including advanced, optical, and semiconducting materials. A major goal of MRCE is to increase the access of minorities and women to careers in science and engineering by providing outstanding research opportunities to undergraduate and graduate students. Director: Dr. Arturo Bronson, (915) 747-5554.

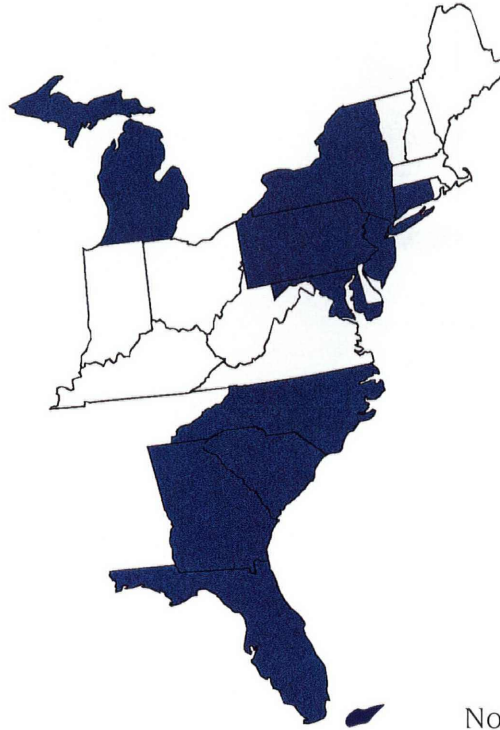
The Center for Environmental Resource Management (CERM) coordinates faculty and student research addressing problems of waste, air quality, water resources, energy, and environmental policy affecting the El Paso Southwest. Students receiving support through CERM get first-hand experiences on projects such as management of water resources in the El Paso/Cd. Juárez area, development of alternative energy technologies including wind energy and solar ponds, and investigations of environmental toxicology in desert habitats. CERM also coordinates education and community outreach programs. Director: Dr. Charles Groat, (915) 747-5494.

Established through a five-year, \$6.5 million grant from the National Aeronautics and Space Administration, the Pan American Center for Earth and Environmental Science (PACES) contributes to NASA's Mission to Planet Earth by maintaining a database of remote sensing, geophysical, geological, and environmental data generated by NASA and other agencies, focused on the southwestern United States and northern Mexico. Faculty and students affiliated with PACES are developing a high-level computer language to facilitate the access and integrated analysis of the data and use the Center's databases for pure and applied research in the earth and environmental sciences. Director: Dr. Scott Starks, (915) 747-6973.

The Border Biomedical Research Center (BBRC) is a cross-departmental initiative to enhance and coordinate biomedical research and teaching activities in cell and molecular biology and biostatistics. It was established in 1992 with a five-year grant from the National Institutes of Health. Director: Dr. John Bristol, (915) 747-6850.



Eastern Alliances



FLORIDA/GEORGIA

Clark Atlanta University
Florida State University
The University of Florida
The University of South Florida

MARYLAND

University of Maryland Baltimore County
University of Maryland at College Park
University of Maryland Eastern Shore

NEW YORK

The City University of New York



Graduate Education Increases Employment Opportunities Neville A. Parker New York City AMP

Along with the pride in the quality and range of graduate work at The City University of New York (CUNY), the administration and members of the faculty feel it is especially important that the programs attract students of diverse backgrounds and ages. A CUNY graduate degree will greatly increase the number of employment opportunities, as well as provide the credentials for advancement in a chosen career. Whether students enroll directly from an undergraduate college to attend full-time or whether they decide later in their lives to return to school for further intellectual enrichment and professional training, they will find at CUNY an environment characterized by high levels of peer and faculty support.

NORTH CAROLINA

North Carolina A&T State University

PENNSYLVANIA

Temple University

PUERTO RICO

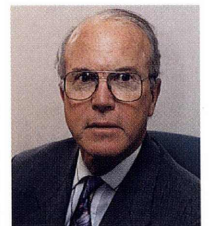
University of Puerto Rico

SOUTH CAROLINA

University of Charleston
University of South Carolina-Columbia

A Graduate Degree Is The Key James England Greater Philadelphia Region AMP

A graduate degree is the key not only to a college or university teaching and research career, but also to management in the corporate environment. It offers many opportunities for leadership, along with significant monetary awards, not normally available to those holding only undergraduate degrees. For minority students in particular, a graduate degree also offers opportunities, as educators and/or role models, to play a significant role in increasing minority representation in the scientific and technological workforce.





Graduate Education Is Important
Lynette P. Padmore
Florida/Georgia AMP

Graduate education serves an important link as the United States strives to maintain its leadership role in the areas of science and technology. Since the focus of preparation through AMP at the undergraduate level is to nurture and train students for post baccalaureate involvement in the SMET areas, the concentration on graduate placement is timely and comes as a logical sequence in the continuum of SMET education. The various workshops, conferences, internships and other avenues to which AMP participants are exposed serve as an impetus for entry into select graduate programs. The concentration on graduate enrollment extends the academic investment of the AMP Program.



Graduate Education Is In The National Interest
Harold L. Martin
North Carolina AMP

As preparations are being made to enter the 21st century, it is imperative to ensure that the United States will have a sufficient pool of talented professionals to fulfill key roles in science, mathematics, engineering, and technology (SMET) fields. The United States has both an opportunity and an obligation to lead other nations of the world into an era of unparalleled revolutionary advancement in all areas of science and engineering. Moreover, the only hope to solving current and future national and international problems is continued progress in science and technology. Such technological advancement will demand greater productivity in graduate education. It is evident that graduate enrollment in SMET fields in the United States has steadily declined in recent years despite the critical, growing needs for a more highly trained workforce. Consequently, the total society must undertake the important goal of encouraging all students at an early age to maximize their knowledge and skills in science and technology. Additionally, it is essential for faculty at all levels of education to join forces in conveying to their students the overall personal and professional significance and value of attaining graduate degrees in SMET disciplines.

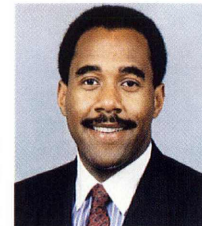


Graduates Enjoy A Better Quality Of Life
Manuel Gomez
Puerto Rico AMP

Attending graduate school will prepare future members of society to face the challenges of a dynamic and changing society which is at the threshold of the 21st century. Armed and empowered by a more profound knowledge of their academic disciplines our graduates will occupy positions of leadership both in private and government agencies and faculty positions at both private and public institutions of higher learning committed to the special needs of minorities. They will form a pool of spe-

cialized scientists and educators, thus becoming agents of change and innovators at all levels of society. As human beings, our graduates will be able to enjoy an ever-increasing quality of life and leave to future generations a better world to live in.

Hints For Applying To Graduate School
Michael W. Howell
South Carolina AMP



Graduate school is an important step for careers in SMET fields. At academic institutions, governmental agencies and in private industry, a Ph.D. is necessary to direct research projects and advance to the highest technological levels. Begin your preparation for graduate study by participating in undergraduate research. This will give you valuable experience and will help you determine what your research interests are. In applying to graduate school, you should consider the following:

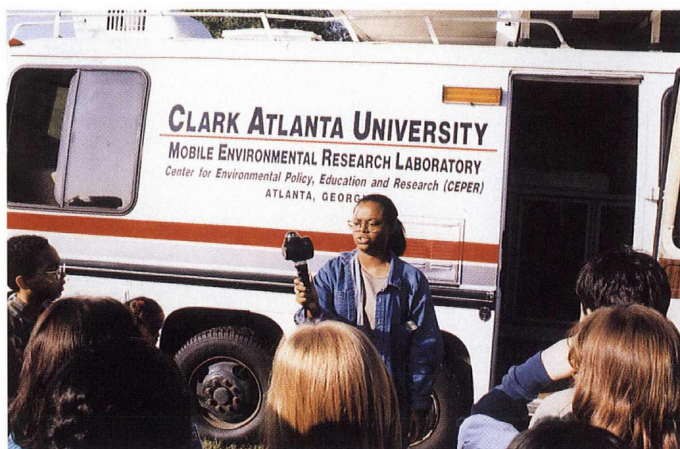
- Consider your personal research interests first.
- Although an institution's or professor's reputation is important, be careful not to overlook factors such as the faculty member's personal attributes.
- What is the funding situation for the research that you would like to pursue?
- Does the department or program have a sufficient number of researchers in the specialties that are complimentary to the research that you want to pursue?
- Does the prospective professor have a good track record when it comes to having students present papers at professional meetings?
- What is the graduate community like? Would you feel comfortable working in those surroundings?
- Finally, **APPLY EARLY!**

Attention Should Be Focused On Graduate Education
Freeman A. Hrabowski, III
University of Maryland System AMP



We know that the proportion of women and minorities in the workforce will increase in the next century. We also know that the number of minorities earning degrees in science and engineering, at all levels, is far below their proportion in the population. If our nation is to be competitive, we will need to focus increasing attention on developing minority scientists and engineers who can serve as professors, role models, and mentors for our youth. It is critical that we encourage larger numbers of our high-achieving minority students to consider graduate opportunities in the future. At UMBC, we are very excited about the large numbers of Meyerhoff Scholars and other high-achieving minority students who earn A's in science and engineering and who are even publishing results of their research before earning their undergraduate degrees. Our campus not only welcomes, but nurtures hard-working minority students in science and engineering and expects them to be the best. Our graduates will become world-class research scientists and engineers.

Clark Atlanta University



According to projections from the U.S. Department of Labor, the number of jobs in science and technology will grow at a faster rate than any other job category except lawyers and judges. Jobs in natural, computer and mathematical sciences will have increased by two-thirds in the last 15 years of the 20th century. Meanwhile, jobs in health fields will have increased more than 50 percent; and opportunities for engineers, technicians, architects, surveyors, and social scientists will grow by more than 40 percent during this period.

In spite of the increasing demands, the statistics and studies regarding the number of women and minorities, particularly African Americans, with careers in the fields of mathematics, science and engineering are grim. According to a 1992 National Science Foundation report, while minorities make up 18 percent of the total work force, they hold only 5 percent of the science and engineering jobs.

Our mission at Clark Atlanta University is to significantly increase the quantity and quality of science, engineering, and mathematics graduates on the undergraduate and graduate levels. The SEM Departments at Clark Atlanta University offer several types of financial assistance and support for graduate studies. These include teaching assistantships, support from the Army Research Office (ARO), the National Aeronautical and Space Administration (NASA), the National Science Foundation (NSF), the National Institutes of Health (NIH), the Office of Naval Research (ONR), and others. The prospective student should contact the department of interest for the type of support available in that department.

Clark Atlanta University offers the following graduate degrees in the SEM:

Biological Sciences

M.S. and Ph.D. – Dr. Juarine Stewart, Chair

Chemistry

M.S. and Ph.D. – Dr. Alfred S. Spriggs, Chair

Computer Science

M.S. – Dr. Ken Perry, Chair

Mathematics

M.S. – Dr. Alexander Fluellen, Interim Chair

Physics

M.S. – Dr. Lonzy Lewis, Chair

GRADUATE ADMISSIONS

Application for admission to the University may be submitted at any time, but should, if possible, be presented at least a month before the opening of each semester or the summer session. Application for admission must be submitted on an application form which may be obtained by request from the Office of Admissions. The application must be accompanied by a fee of \$40.00 for citizens or permanent residents and \$55.00 for international students. This fee is nonrefundable. The applicant must have sent to the University a complete official transcript of the college record as well as a transcript of any graduate work previously undertaken. Three Recommendation Forms must be completed by three references and returned to the Office of Admissions.

Admission to the University is granted to graduates of four-year colleges and universities of approved standing who present satisfactory evidence of character and other qualifications. The applicant's record must show promise of ability to do graduate work and must include a sufficient degree of concentration in the chosen field of work to satisfy both the Committee on Admission and the faculty of the proposed department of study. Admission is by vote of the Committee on Admission.

Students may enter the University three times during the year, in September, January, or June, on the dates specified in the University Calendar.

ONE EXCEPTIONAL EXPERIENCE...

On July 1, 1988, two private historically black institutions—Atlanta University and Clark College—consolidated to form Clark Atlanta University. This new educational institution which unites the strengths of both parent institutions is uniquely positioned to respond to the challenges facing America now and in the future. As a new institution, we have set high standards and a bold course for the future. We will raise the level of our undergraduate and graduate programs, while creating a campus environment that supports personal and academic success. Our vision is national preeminence built on a strong foundation, long traditions of academic excellence and proven reputations in higher education.

The mission of the University is to produce graduates who have met standards of excellence in contemporary higher education and who are educated to be creative, while keeping their perspective on the world and its people. This commits our students not only to excel in their professional careers and personal lives, but also to seek new knowledge and solutions to pressing problems of humankind. Towards this end, the University encourages attainment of the outcome expressed in its dual mottos, "I'll Find a Way or Make One" and "Culture For Service."

As you become a part of the Clark Atlanta University experience, I urge you as students to seize every opportunity we give you for excellence and even create opportunities we might not offer. Your preparation and training will determine to what degree you will be an active participant in a technologically sophisticated world with the advance knowledge, skill and compassion needed to participate actively in the world economy. The world waits for you to seize the day and become leaders of the 21st Century.

FGAMP GRADUATE OPPORTUNITIES THROUGH FLORIDA STATE UNIVERSITY

INTRODUCTION: Florida State University, located in Tallahassee, is one of several universities in Florida's growing statewide system of higher education. The emphasis at Florida State University is on advanced degree programs entailing extensive research activities, which involve the University in service at the state, regional, and national levels. Because of this emphasis, the student body is highly select. Faculty members are, in turn, chosen for their ability in teaching and research at advanced levels.

Research facilities are too numerous to be described in detail, but worthy of special mention are the University computing center, which houses a CRAY-YMP supercomputer, the nuclear research center, which has three accelerators, including a super FN tandem; the Edward Ball Marine Laboratory; the National Antarctic Core Laboratory; the National High Magnetic Field Laboratory; and extensive special laboratories for work in the physical sciences and biological sciences.

APPLICATION PROCESS: Admission to graduate study involves admission to the department or school in which the applicant expects to study. Final admission to the University is subject to approval by the department or school. While there are minimum University admission requirements, the departments can, and frequently do, set admission standards significantly higher than these minima. The student should determine departmental requirements first. In addition to any stated additional departmental requirements, the applicant must meet the following criteria:

- Have a baccalaureate degree from an accredited college or university.
- Be in good standing in the institution of higher learning last attended.
- Present evidence of a grade point average of at least 3.0 on a 4.0 scale on all work attempted while registered as upper-division working toward a baccalaureate degree, or of a 3.0 master's degree from an accredited/approved institution, or of a minimum of 1000 on the combined verbal and quantitative portions of a general aptitude test of the GRE.
- Be approved by the department or school in which he or she proposes to concentrate.

CORRESPONDENCE AND INFORMATION:

For admission applications:

Graduate Admissions Office
Florida State University
Tallahassee, Florida 32306

For fellowship applications:

Dr. Alan Mabe, Dean
Graduate Studies
408 Westcott
Florida State University
Tallahassee, Florida 32306

SEM GRADUATE PROGRAMS AND KEY CONTACTS:

PROGRAM	CONTACT PERSON	PHONE #
Biological Science	Judy Bowers	904-644-3023
Chemical Physics	Sandford A. Safron	904-644-5239
Chemistry	John G. Dorsey	904 644-9625
Computer Science	R. C. Lacher	904-644-4029
Chemical Engineering	Bruce R. Locke	904-487-6151
Civil Engineering	Jerry Wekezer	904-487-6139
Electrical Engineering	Thomas J. Harrison	904-487-6456
Mechanical Engineering	A. Krothapalli	904-487-6335
Molecular Biophysics	Lee Makowski	904-487-0451
Oceanography	David Thistle	904-644-6700
Physics	Kay Caudill	904-644-4473

FGAMP GRADUATE OPPORTUNITIES THROUGH THE UNIVERSITY OF FLORIDA

INTRODUCTION: Florida's first university, the University of Florida is also one of America's truly distinctive universities. Along with Ohio State and the University of Minnesota, the University of Florida offers more academic programs on a single campus than any of the nation's 25 largest universities, private and public.

With its 21 colleges and schools, divided into 140 academic departments, the university's faculty includes some of the nation's leading scholars, working in laboratories and libraries that are among the best in the nation.

The university assists minority students with information on programs, services and financial aid to facilitate their academic, personal and social growth. Fellowships for minorities are available through the graduate school and also directly from the college in which you hope to major.

GENERAL REQUIREMENTS FOR ADMISSION: Admission to programs leading to the master's, specialist, engineer or doctoral degree require application to the Office of Admissions and fulfillment of the following criteria:

- A recognized baccalaureate from an accredited college or university;
- A minimum grade average of "B" for all upper division undergraduate work;
- Acceptable GRE, or other appropriate test score;
- Proof of immunization for measles and rubella, and tuberculosis skin test, if necessary, prior to registering for course work;

SEM GRADUATE PROGRAMS AND KEY CONTACTS:

PROGRAMS

ENGINEERING: Aerospace, Agricultural, Chemical, Civil, Coastal and Oceanographic, Computer, Computer and Information Sciences, Electrical, Engineering Mechanics, Engineering Science, Environmental, Industrial and Systems, Materials Science, Mechanical, Nuclear, Nuclear Engineering Sciences, Surveying and Mapping

ARCHITECTURE: Architecture, Building Construction, Interior Design, Landscape Architecture, Urban and Regional Planning

BUSINESS ADMINISTRATION: Accounting, Finance, Business Administration, Computer and Information Sciences, Management, Marketing

ARTS AND SCIENCES: Astronomy, Botany, Chemistry, Computer and Information Sciences, Geology, Mathematics, Physics, Plant Molecular and Cell Biology, Statistics, Zoology

AGRICULTURE: Agricultural Engineering, Agronomy, Animal Science, Botany, Entomology and Nematology, Aquatic Sciences, Food Science, Microbiology and Cell Science, Plant Pathology, Plant Science, Soil and Water Science, Statistics

CONTACTS

Dr. W. Viessman Jr., Asso. Dean, Academic Programs, 312 Weil Hall, P.O. Box 116550, College of Engineering, University of Florida, Gainesville, FL 32611-6550
(904) 392-0943
FAX: (904) 392-9673

Dean, College of Architecture, Room 331 ARCH, University of Florida, Gainesville, Florida 32611
(904) 392-4836

Dean, College of Business Administration, University of Florida, Gainesville, FL 32611
(904) 392-2397 ext. 1222

Assoc. Dean for Minority Affairs, College of Liberal Arts and Sciences, University of Florida, Gainesville, FL 32611
(904) 392-0788

Dean for Academic Programs, College of Agriculture, Institute of Food and Agricultural Sciences, 2001 MCC, University of Florida, Gainesville, FL 32611
(904) 392-1961

FGAMP GRADUATE OPPORTUNITIES THROUGH THE UNIVERSITY OF SOUTH FLORIDA

INTRODUCTION: The University of South Florida is a multi-campus, comprehensive, research university strongly committed to the balanced pursuit of excellent teaching, significant research, and useful public service. Founded in 1956, USF became one of the first American universities created in the 20th Century. It opened its doors four years later, and by the mid-90's had become one of the country's 20 largest universities with some 35,000 students spread across five campuses. More than 1,860 faculty call USF home. They include 73 Fulbright Scholars and 39 endowed chairholders in disciplines ranging from political science to biology. In 1993-94, faculty generated a record \$85 million in sponsored research.

APPLICATION PROCESS: The Graduate School has overall responsibility for graduate programs and enrolled students. To apply to graduate studies at USF one must send a completed application packet to the Office of Admissions. The respective department will review your qualifications and, through the College, will make a recommendation to the Graduate School regarding your admission. The final determination on admission will be made by the Graduate School.

GENERAL REQUIREMENTS FOR ADMISSION:

- A bachelor's degree or equivalent from a regionally accredited university.
- A minimum grade point average (GPA) of 3.00 (on a 4.0 scale) in all work attempted while registered as an upper division student working towards a Baccalaureate Degree.
- A total verbal plus quantitative GRE General Test score of 1000 or higher, or GMAT score of 500 (both of these examinations must have been taken within five years preceding application)
- An earned Master's, Doctorate, or other graduate degree from a regionally accredited institution.

SEM GRADUATE PROGRAMS AND KEY CONTACTS:

PROGRAMS	CONTACTS
<i>BIOLOGICAL SCIENCE</i> Biology, Botany	Jinny Oliver LIF 136 813-974-4747
<i>CHEMISTRY</i>	Terrence Oestreich CHE 305 813-974-2534
<i>CIVIL ENGINEERING AND MECHANICS</i>	William Carpenter ENB 118 813-974-5598
<i>COMPUTER ENGINEERING AND COMPUTER SCIENCE</i>	Lorrie Miros ENB 118 813-974-4195
<i>ELECTRICAL ENGINEERING</i>	Kenneth Buckle ENB 118 813-974-477
<i>ENGINEERING MANAGEMENT</i>	Lee Weaver ENB 118 813-974-5586
<i>MATHEMATICS</i>	Robert Mandernack PHY 114 813-974-5329
<i>PHYSICS</i>	H.R. Brooker PHY 114 813-974-2871

UMBC

AN HONORS
UNIVERSITY
IN MARYLAND



UMBC President Freeman A. Hrabowski, III, and Graduate School Dean Catherine Fenselau with student researchers at UMBC's Center for Structural Biochemistry, one of the most modern molecular structure analysis facilities on the East Coast.

UMBC GRADUATE SCHOOL

Programs of Study

The UMBC Graduate School emphasizes research programs in science, technology, and public policy. UMBC offers M.A., M.S., M.F.A., M.P.S., and/or Ph.D. programs in applied molecular biology, applied physics, biochemistry, biological sciences, chemistry, computer science, education, emergency health services, engineering (chemical and biochemical, electrical, and mechanical), engineering management, historical studies, imaging and digital arts, instructional systems development, marine/estuarine/environmental science, operations analysis, policy sciences, psychology (applied developmental and human services), sociology, and statistics.

Research Environment

More than 350 faculty members and over \$31 million in external support for research provide a rich environment for training nearly 1,600 graduate students. UMBC offers state-of-the-art computer facilities and well-equipped laboratories for graduate students in all disciplines. The Howard Hughes Medical Institute also has laboratories on the campus.

Location

UMBC is located on a 500-acre suburban campus 10 miles from Baltimore's Inner Harbor and 32 miles from Washington, D.C., enabling students to take advantage of the rich array of scientific, technological, commercial, and cultural resources in the Baltimore-Washington corridor. The Graduate School

enjoys numerous collaborations and partnerships with government, health, science, and social service agencies as well as with biotechnology manufacturers and other businesses and industries.

Special Opportunities

UMBC is committed to providing educational opportunities to minority students, and several programs support minority students in science, engineering, and mathematics. President Freeman A. Hrabowski, III, founder of UMBC's nationally recognized Meyerhoff Scholarship Program, is the principal investigator for an Alliances for Minority Participation grant from the National Science Foundation. Graduate fellowships, government loans, and work study opportunities are available for minority students. Research and teaching assistants receive stipends of \$9,200 and up, plus remission and tuition.

Applications

For applications or general information contact:
Director of Graduate Admissions and Records
UMBC Graduate School
The University of Maryland Baltimore County
5401 Wilkens Avenue, Baltimore, Maryland 21228-5398
Telephone: 410-455-2537
FAX: 410-455-1130
World Wide Web: <http://www.umbc.edu/umgsb>

THE UNIVERSITY OF MARYLAND AT COLLEGE PARK

The Graduate School at The University of Maryland at College Park (UMCP) is the sixth largest graduate school in the nation. There are approximately 1,900 faculty members: 11 percent of our faculty are members of minority groups and 26 percent are women. A number of our graduate programs are ranked among the top in the nation, including computer science, electrical engineering, physics, art history, linguistics, and music.

- The Graduate School offers 86 master's programs and 70 doctoral programs. The M.A. and M.S. degrees, with some exceptions, require a minimum of 24 hours of course work, residence for at least two semesters, and a thesis. Non-thesis programs are available in many departments. The doctorate requires a minimum of three years of full-time graduate study and evidence of the ability to do original research, as demonstrated by a dissertation. Each department may designate special areas or fields of study and language requirements which the student must satisfy. Most programs require written and oral examinations to demonstrate knowledge in the field.
- Each year, UMCP confers nearly 2,000 graduate degrees—approximately 500 doctoral degrees and 1,500 master's degrees. Of these, more than 12 percent are earned by minority students and 50 percent are earned by women.

STUDENTS

- Out of a total student body of nearly 35,000, more than 9,200 are graduate students. UMCP graduate students come from virtually every state in the Union and fifty-eight foreign nations. Minority students comprise 16 percent of the total student body; 7 percent of our graduate students are African American; 5 percent are Asian American; 2 percent are Hispanic/Latino; and .2 percent are American Indian. Forty-eight (48) percent of our graduate students are women.

RESEARCH FACILITIES

- The University has a variety of special equipment and laboratories to meet the needs of the most demanding research in every discipline. Campus resources include two small Van de Graaff accelerators; a 10-KW training nuclear reactor; an array of computers, including Sperry 1190, IBM 4381, two IBM 4341, and PDP-11/44 systems; a full scale low-velocity wind tunnel; laboratories for molecular, materials, biomedical, and meteorological research; and a quiescent plasma device (Q machine) for plasma research.
- UMCP is the home of numerous renowned research centers and institutes. For example, our campus houses: the Center for Automation Research; the Center for Environmental Energy Engineering; the Center for Environmental and Estuarine Studies; the Engineering Research Center; the Science Teaching Center; and the Center for Rotorcraft Education and Research, one of three Centers of Excellence in Rotorcraft Technology created by the U.S. Army Research Office. Institutes include: the Institute for Advanced Computer Studies; the Institute for Physical Science and Technology; and the Institute for Systems Research, among others. These centers and institutes provide opportunities for graduate students to engage in special projects and to interact with visiting scholars, as well as with distinguished UMCP faculty.

FINANCIAL SUPPORT

- UMCP offers more than 300 fellowships to full-time students who are nominated by their departments. These fellowships provide full stipends for 9 1/2 months and are competitive with those offered by other major research universities. In addition, fellows are offered remission of tuition for up to 12 credits for both the fall and spring semesters. Fellowships are offered to students entering at both the master's and doctoral levels and require no duties from the recipients.
- Approximately 2,500 graduate students are supported by departmentally administered graduate assistantships in both teaching and research. Other assistantships are supported by administrative units on the campus. Assistantships provide tuition scholarships for 10 credits per semester.

DIVERSITY

- The Office of Graduate Minority Education in the Graduate School is responsible for campus-wide graduate student recruitment and retention; providing effective and efficient supportive services to minority graduate students; fostering positive faculty-student relations; supporting minority student organizations; securing funding for fellowships and other student support programs; providing support for student development activities; and assisting the Graduate School in creating and maintaining a supportive academic environment. For more information, call (301) 405-4183 or toll free at 1-800-245-4723.

CORRESPONDENCE AND INFORMATION

Graduate school information may be obtained by calling (301) 405-4198. Requests for application forms should be directed to (301) 314-9304. Catalogues may be obtained by calling (301) 314-2665. A small charge is required for mailing the catalog. Address: *The Graduate School, University of Maryland, College Park, Maryland 20742.*

UMES

MARYLAND'S

BEST KEPT

S E C R E T

UMES GRADUATE SCHOOL

Programs of Study

The Graduate School at UMES offers the Master of Science degree in applied computer science, agriculture and extension education, food and agricultural sciences, marine-estuarine-environmental sciences, and toxicology. The M.P.T. degree is offered in physical therapy. Programs in special education and guidance and counseling lead to the Master's of Education degree and a Master's of Arts in teaching program is in the planning and review stages. The Doctor of Philosophy degree is offered in marine-estuarine-environmental sciences and toxicology.

Research Environment

UMES conducts research and creative endeavors in agricultural, environmental and marine sciences, mathematics and computer applications, allied health and other fields. More than 265 faculty members and over \$12M in external support for research and research training provide a unique learning environment for nearly 225 graduate students. UMES offers state-of-the-art chemistry and biology laboratories, computer facilities supported by the latest software, and library research capabilities. Faculty and graduate students work collaboratively with such organizations as ICF Kaiser Engineering, Kellogg Foundation, National Institutes of Health, Agency for International Development, U.S. Departments of Agriculture, Commerce, Defense, Education, Energy, Health and Human Services, the Interior, National Science Foundation, National Aeronautics and Space Administration and over 50 other external funding sources to contribute to the health and welfare of the Nation.

Location

UMES is located in Princess Anne, a small town on the eastern shore of Maryland. The town dates back to 1733 and has many buildings and landmarks of historic interest. The area is quiet and ideally suited for a learning environment, yet it is only 2 1/2 hours by car from the abundant cultural and recreational facilities of Washington, D.C., Baltimore, and Philadelphia. The state's famous seaside resort, Ocean City, is only 45 minutes from the campus. The campus is 13 miles south of the town of Salisbury, which provides ample shopping and recreational facilities.

Financial Aid

Financial assistance is available for qualified students on the basis of merit and/or need, from both institutional and sponsored sources. Examples of financial assistance include teaching, research and other types of assistantships, fellowships, traineeships, and federal work-study and loan programs. Stipends and remission of tuition are common provisions of graduate financial aid awards.

Applications

For applications or general information contact:
 Dr. C. Dennis Ignasias
 Graduate Studies Office
 University of Maryland Eastern Shore
 Princess Anne, Maryland 21853-1299
Voice: (410) 651-6507
FAX: (410) 651-6085
E-mail: ignasias@umes-bird.urnd.edu

THE CITY UNIVERSITY OF NEW YORK

The City University of New York, the nation's largest urban university, consists of ten senior colleges, six community colleges, a technical college, the graduate school, a law school, a medical school, and an affiliated school of medicine. Over 213,000 students are enrolled in academic programs offered at campuses located throughout the five boroughs of the City of New York.

THE GRADUATE SCHOOL AND UNIVERSITY CENTER

The primary responsibility of The Graduate School and University Center is to offer the doctoral programs of The City University of New York. The Graduate School is in essence a consortium, combining resources from colleges throughout the City University system to provide quality doctoral and research programs. In addition, The Graduate School and University Center offers a select number of master's programs and administers the university-wide CUNY Baccalaureate Program. The Graduate School and University Center is located in the Graduate Center building at 33 West 42 Street in Manhattan, opposite The New York Public Library, and just off Fifth Avenue - (212) 642-1600. Laboratories for doctoral research in the sciences are located on several of the CUNY college campuses and at the affiliated Mount Sinai School of Medicine.

THE SENIOR COLLEGES AND PROFESSIONAL SCHOOLS

Baruch College

At the graduate level, Baruch College offers programs leading to the degrees of Master of Business Administration (MBA), Master of Science (MS) in business specializations (accountancy, business computer information systems, marketing, operations research, quantitative economics, statistics, and taxation).

Brooklyn College

Brooklyn College, founded in 1930, offers more than 140 program of undergraduate and graduate study in the liberal arts and sciences, education, and the performing arts. Articulated engineering programs are offered with The City College, The College of Staten Island, and Polytechnic University.

The City College

The City College-known as CCNY-is the oldest of the City University colleges, having been founded in 1847 as The Free Academy. The City College offers M.S. and Ph.D. degrees in chemical, civil, electrical and mechanical engineering, as well as computer science in the School of Engineering; M.S. and Ph.D. degrees in mathematics, biology, physics, and chemistry, as well as M.A. degrees in geology and meteorology in the School of Liberal Arts and Sciences.

Hunter College

Hunter also offers graduate degrees in professional fields essential to the city's future: education, urban affairs, urban planning, and health sciences and nursing.

John Jay College of Criminal Justice

Graduate programs include master's degrees in public administration, criminal justice, fire protection management, forensic psychology, and forensic science.

Herbert H. Lehman College

The Graduate Division offers 34 programs, leading to the master's degree in many disciplines, including accounting, art, biology, computing and management, education, English, history, mathematics, music, speech and hearing, and nursing.

The College of Staten Island (CSI)

CSI awards the master's degree in cinema studies, computer science, education, English, environmental science, liberal studies, physical therapy.

Mount Sinai School of Medicine and the Mount Sinai Graduate School of Biological Sciences

The Mount Sinai Graduate School of Biological Sciences offers programs leading to the City University Ph.D. degree under the auspices of The Graduate School and University Center.



North Carolina Alliance for Minority Participation North Carolina A&T State University

North Carolina Agricultural and Technical State University is a unique, comprehensive, doctoral degree granting, state-assisted University located near metropolitan downtown Greensboro, North Carolina. Since its inception in 1891, the University has developed into an educational complex of 7,846 students with a 188-acre campus, an annual budget of approximately \$117 million, and a variety of undergraduate and graduate degree programs. The University serves as a laboratory for the ongoing development and promotion of excellence in teaching, research, and public service. In addition, the University plays a leading role in major sponsored research programs and activities.

The nationally recognized **School of Graduate Studies** offers a total of forty-four (44) areas of study which, among other fields, include numerous degree programs in science, mathematics, engineering, and technology (**SMET**). Currently, more than 900 students from all over the world are enrolled in graduate study seeking degrees at the master's and doctoral levels.

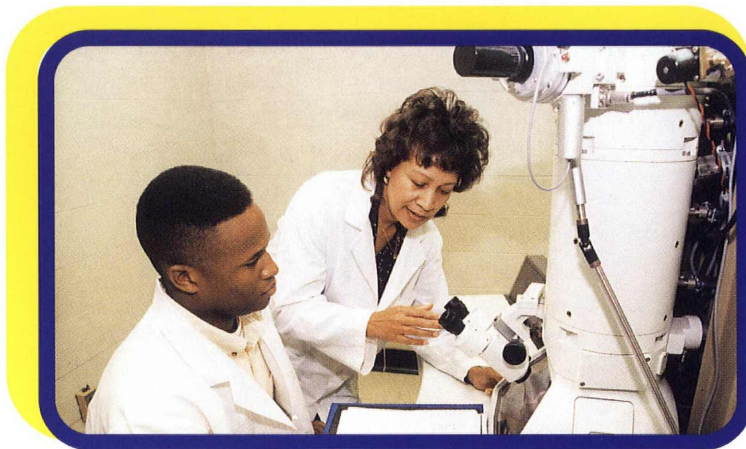
SMET GRADUATE DEGREES GRANTED

DOCTOR OF PHILOSOPHY

Electrical Engineering
Mechanical Engineering

MASTER OF SCIENCE

Architectural Engineering (M.S.)
Biology (M.S.; M.S., Secondary Education
with a concentration in Biology)
Chemistry (M.S.; M.S., Secondary Education
with a concentration in Chemistry)
Civil Engineering (M.S.)
Computer Science (M.S.)
Electrical Engineering (M.S.)
Engineering (M.S., with options in Chemical
and Civil Engineering)
Industrial Engineering (M.S.)
Industrial Technology (M.S.)
Mathematics (M.S., Secondary Education
with a concentration in Mathematics;
M.S., Applied Mathematics)
Mechanical Engineering (MSME)
Physics (Planning authorization in progress
for M.S. in Physics)
Technology Education (M.S.)
Vocational Industrial Education (M.S.)



Dr. Mary Smith, Associate Professor of Biology, directs the research of graduate student Sean Hall in the Transmission Electron Microscopy Laboratory

FINANCIAL ASSISTANCE FOR GRADUATE STUDY

Full-time graduate students may apply to academic departments for assistantships in teaching and research. Some graduate programs also provide special scholarships and fellowships on a limited basis for eligible students. The University Office of Financial Aid facilitates the administration of federal aid programs for students based on financial need and availability of funds. Applicants should contact the appropriate office listed below to request information pertaining to degree programs and specific financial aid opportunities.

College of Arts & Sciences

Dean: Dr. A. James Hicks
(910) 334-7806

College of Engineering

Interim Dean: Dr. Kenneth Murray
(910) 334-7589

School of Technology

Dean: Dr. Earl Yarbrough
(910) 334-7567

Office of Financial Aid

(910) 334-7973

INQUIRIES FOR PROGRAM INFORMATION and APPLICATIONS

Dr. Meada Gibbs, Dean
School of Graduate Studies
Gibbs Hall, Room 120
North Carolina A&T State University
1601 East Market Street
Greensboro, North Carolina 27411
Telephone: (910) 334-7920
Fax: (910) 334-7282
E-mail: GIBBSM@ATHENA.NCAT.EDU



Temple University

Future Faculty Fellows Program

Temple University

Temple University is a comprehensive research university located in the city of Philadelphia. Its total enrollment is over 32,000 students, 22% of whom are either African American or Hispanic. External funding for research at Temple University is on the order of \$53 million annually.

The Future Faculty Fellows Program

The Future Faculty Fellows Program seeks to make a major contribution to the diversity of the faculty in American universities. Initiated in 1987, the Program awards 20 to 25 new full fellowships each year to incoming graduate students who intend to pursue careers in higher education.

Selection criteria include standard academic qualifications and:

Membership in an ethnic or gender group underrepresented in the intended field of study.

A record of exceptional and continuous leadership ability in substantial college or community activities.

Exceptional circumstances, or significant obstacles that a nominee has overcome in her or his educational career.

Some preference is given to applicants intending to pursue advanced degrees in Science, Engineering and Mathematics (SEM). Currently, 29 of the 119 students in the Program are in SEM fields. To date, Fellows have received 10 Ph.D. degrees and 15 Master's degrees in SEM fields.

To be considered, a student must have been admitted to a Temple University graduate program and nominated by that program. The most common pattern of guaranteed support is: in

year 1, a fellowship; in years 2-3, teaching assistantships; and in year 4, a fellowship. Support in year 5 and beyond is negotiated between the Graduate School and the Fellow's department. However, many Fellows are supported on research grants beginning in year 2.

Degree Programs

Both M.S. and Ph.D. degrees are offered in the following SEM disciplines:

- Biochemistry
- Biology
- Chemistry
- Computer & Information Sciences
- Electrical Engineering
- Mathematics
- Microbiology & Immunology
- Molecular Biology
- Pharmaceutical Chemistry
- Pharmacology
- Pharmacy
- Physics
- Physiology
- Statistics

Only M.S. degrees are offered in the following SEM disciplines:

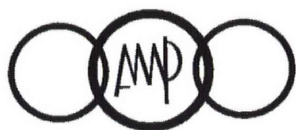
- Computer Applications in Systems Engineering (CASE)
- Geology

To Obtain More Information

For more information and application materials, call (215) 204-6575 or write;

Future Faculty Fellows Program
Graduate School
Temple University
501 Carnell Hall, Box FFF
Philadelphia, PA 19122

PUERTO RICO ALLIANCE FOR MINORITY PARTICIPATION



A consortium of the Ana G. Méndez Foundation, the Mayagüez Campus, the Humacao Campus, and the Resource Center for Science and Engineering of the University of Puerto Rico

Importance of Attending Graduate School

Attending graduate school will prepare future members of society to face the challenges of a dynamic and changing society which is at the threshold of the 21st century. Armed and empowered by a more profound knowledge of their academic disciplines, our graduates will occupy positions of leadership both in private and government agencies and faculty positions at both private and public institutions of higher learning committed to the special needs of minorities. They will form a pool of specialized scientists and educators, thus becoming agents of change and innovators at all levels of society. As human beings our graduates will be able to enjoy an ever increasing quality of life and leave to future generations a better world to live in.

The University of Puerto Rico is an eleven campus system. Currently sixteen graduate SMET programs are offered at the Rio Piedras and Mayagüez Campuses.

University of Puerto Rico - Rio Piedras Campus

Program	Degree		Address
Mathematics and Computer Science	M.S.		Department of Mathematics and Computer Science Faculty of Natural Science UPR Box 23355 San Juan, Puerto Rico 00931-3355 Tel. (809) 764-0000 x7318 fax(809)281-0651
Biology	M.S. and Ph.D.		Department of Biology UPR Box 23360 San Juan, Puerto Rico 00931-3360 Tel. (809) 764-0000 x2572 fax (809) 764-2875
Physics	M.S. and Ph.D.		Department of Physics UPR Box 23343 San Juan, Puerto Rico 00931 -3343 Tel. (809) 764-0000 x3544 fax (809) 764-4063
Chemistry	M.S. and Ph.D.		Department of Chemistry UPR Box 23346 San Juan, Puerto Rico 00931-3346 Tel. (809) 764-0000 x4818 fax (809) 763-6899

Facundo Bueso Building, 3rd Floor, Office 304, Rio Piedras Campus, U;P.R., Rio Piedras
 P.O. Box 23334, University Station, San Juan, Puerto Rico 00931-3334
 Tel. (809) 765-5170 Fax (809) 751-0625



University of Puerto Rico

Mayagüez Campus

Graduate Programs:

Engineering:

Civil	M.S.	-	Ph.D.	<u>Address:</u>
Chemistry	M.S.	-	M.E.	Director
Electrical	M.S.	-	M.E.	Graduate Studies Office
Mechanical	M.S.	-	M.E.	UPR-RUM P.O. Box 5000
Management System	M.S.	-	M.E.	Mayagüez, Puerto Rico
				00680-5000

Agriculture M.S.

Tel. (809) 265-3809

Art and Science:

Fax (809) 831-1115

Marine Science	M.S.	-	Ph.D.
Chemistry	M.S.		
Physics	M.S.		
Biology	M.S.		
Mathematics	M.S.		
Geology	M.S.		

The University of Puerto Rico has state-of-the-art research facilities in a variety of scientific disciplines, due to an aggressive development program (through EPSCoR and other federal programs) over the last 10 years. With active doctoral programs in Marine Sciences, Chemistry, Chemical Physics, Civil Engineering, and Biology, research is focused on exploration of the tropical environment and areas targeted for the economic development of Puerto Rico. Particularly strong interdisciplinary research areas include: Materials Science, Terrestrial Ecology, and Biotechnology. The University of Puerto Rico is particularly proud of its internationally competitive Materials Characterization Center, Laser and Spectroscopy Facility, Civil Infrastructure Research Center and Institute of Neurobiology.

Graduate Programs in Science and Mathematics at the University of Charleston, SC (UCSC)

The University of Charleston, located in downtown Charleston, SC, offers a Master of Science degree in three disciplines:

- The Environmental Studies program, offered jointly by UCSC and the Medical University of South Carolina, prepares students to deal with the interdisciplinary nature of environmental hazards and their remediation. The broad scope of the curriculum enables students to see how environmental science and policy-making work together to prepare them for careers in creating a clean, healthy and safe environment.
- The Marine Biology Program is also offered jointly with other institutions of higher learning in the state (The Citadel, UCSC, MUSC, National Marine Fisheries Service Laboratory, SC Department of Natural Resources). The broad scope of faculty interests and the variety of facilities allow training opportunities in areas such as marine ecology and biodiversity,

marine environmental sciences, fisheries biology, oceanography, mariculture and marine biomedicine/biotechnology.

- The Mathematics program is intended to prepare students for professional opportunities in business, industry and government that require training at the graduate level. Courses also serve as an option for secondary school teachers who wish to maintain certification or enhance their professional experience.

In addition to research and teaching assistantships available to graduate students in general, the UCSC also has a Minority Graduate Student Fund to provide tuition support to approximately 20 full- and part-time minority graduate students each year.

For more information, please contact Mr. John Peters, SCAMP PI, at (803) 953-1422. Department of Biology, 66 George Street, College of Charleston, Charleston, SC 29424.

Graduate Programs in Science and Mathematics at the University of South Carolina - Columbia (USC)

The University of South Carolina, located in the capital city of Columbia, SC, offers M.S. and Ph.D. degrees in 12 SMET disciplines.

Chartered in 1801, it is the largest institution of higher learning in the state with a total enrollment of over 25,000 on the main campus and an additional 14,000 on eight campuses. More than 8,500 graduate students are currently pursuing advanced degrees in 131 master's programs and 61 doctoral programs.

Listed below are the Graduate Program Directors in the College of Science and Mathematics and the College of Engineering. Please contact the appropriate graduate director for more information.

• **College of Science and Mathematics, University of South Carolina, Columbia**

Biology	Dr. Franklyn Bolander	(803) 777-4141
Chemistry and Biochemistry	Dr. Thomas Bryson	(803) 777-5263
Computer Science	Dr. Manton Matthews	(803) 777-2840
Geology	Dr. James Kellog	(803) 777-4535
Mathematics	Dr. Anton Schep	(803) 777-5313
Marine Science	Dr. Chris Kendall	(803) 777-2692
Physics	Dr. Horacio Farach	(803) 777-8104
Statistics	Dr. Laurie Thombs	(803) 777-7800

If sending correspondence, please use the following address:

(Graduate Director) • (Department) • College of Science and Mathematics • University of South Carolina • Columbia, SC 29208

• **College of Engineering, University of South Carolina, Columbia**

Chemical	Dr. Michael Amiridis	(803) 777-4181
Civil	Dr. Michael Meadows	(803) 777-3614
Electrical and Computer	Dr. Leck Mason	(803) 777-4195
Mechanical	Dr. Stephen McNeil	(803) 777-4185

If sending correspondence, please use the following address:

(Graduate Director) • (Department) • College of Engineering • University of South Carolina • Columbia, SC 29208

For more information, you may contact the Graduate School at the University of South Carolina by calling (803) 777-4243 or by sending correspondence to: Graduate School Office, Byrnes International Building, University of South Carolina, Columbia, SC 29208.

Mountain Alliances



ALL NATIONS

Montana State University

NEW MEXICO

Eastern New Mexico University
New Mexico Highlands University
New Mexico State University
New Mexico Tech
University of New Mexico

SOUTHERN ROCKY MOUNTAIN REGION

Arizona State University
University of Arizona
Colorado School of Mines
Colorado State University
University of Colorado at Boulder
University of Southern Colorado
Brigham Young University
University of Utah
Utah State University



**Today's Graduate Students Are
Tomorrow's Leaders**
Gary D. Keller Cardenas
**Southern Rocky Mountain
Region AMP**

Your decision whether or not to attend graduate school is very important to us. The fact is that far too few underrepresented minority students like yourself attend graduate school each year. This is a terrible waste of talent. Like it or not, the teachers, researchers, and leaders of tomorrow, whether they be in business, government, or academe, are the graduate students of today. Why exclude yourself from the chance for a more rewarding life?

**Start Graduate Work
Immediately**
Ricardo B. Jacquez
New Mexico AMP

Speaking from personal experience, I highly encourage you to continue your education in a master's program immediately after you graduate with your B.S. degree. I've found that it's best to do it right away while you are already used to the demands of homework and exams. If you do not start working immedi-



ately after finishing your B.S. degree, you'll need to find your rhythm again when you start graduate school, especially economically, because after graduation generally the first thing you do is incur debt—you buy a car, get married, start a family. Returning to graduate school then becomes much more difficult. I also believe that someone should be paying you to go to graduate school. You can frequently find a position as a teaching assistant or research assistant so that what you earn while going to graduate school will help offset your expenses. You should look at graduate school as a long-term investment—your earning power over your lifetime with a master's or doctoral degree will be drastically more than what you will earn with an undergraduate degree. Finally, research is a fundamental component of both a master's and a doctoral program. I encourage you to find research advisors early in your studies and to initiate research activities as soon as possible. Interaction with other students, participation in research group meetings, and experimental work will provide you with excellent informal learning opportunities. Again, I suggest that the best time is now. In my case, if I had not gone to graduate school immediately, I might not have gone back at all.

Montana State University—Bozeman



Institutional Description

Founded in 1893 as Montana's land-grant college, MSU-Bozeman is a comprehensive, multipurpose university maintaining programs of instruction, research, and public service. The campus is located in the heart of the scenic Gallatin Valley on 1,170 acres 90 miles north of Yellowstone National Park. Student enrollment averages 10,000 (55% men and 45% women). Of the over 500 resident faculty members, 82% hold doctoral degrees. The academic year calendar consists of two semesters and a summer session.

Graduate Degrees Conferred

The first graduate degree, a Master of Science in General Science, was awarded in 1902. Montana State University currently grants the master's degree and doctorate in the following 37 and 14 fields, respectively:

MASTER OF ARTS (M.A.)

History

MASTER OF SCIENCE (M.S.)

Agricultural Education
Agronomy
Animal Science
Applied Economics
Applied Psychology
Biochemistry
Biological Sciences
Business Education
Chemical Engineering
Chemistry
Civil Engineering
Computer Science
Earth Sciences
Electrical Engineering
Engineering Mechanics
Entomology
Environmental Engineering
Fish and Wildlife Management
Health and Human Development
Industrial and Management
Engineering
Land Rehabilitation

Mathematics
Mechanical Engineering
Microbiology
Nursing
Physics
Plant Pathology
Range Science
Soils
Statistics
Veterinary Molecular Biology

OTHER MASTER'S DEGREES

Master of Construction Engineering
Management (M.C.E.M.)
Master of Fine Arts (M.F.A.)
Master of Education (M.Ed.)
Master of Professional Accountancy
(M.P.Ac.)
Master of Public Administration (M.P.A.)

EDUCATION SPECIALIST (Ed.S.)

DOCTOR OF EDUCATION (Ed.D.)

DOCTOR OF PHILOSOPHY (Ph.D.)

Biochemistry
Biological Sciences
Chemistry
Crop and Soil Science
Engineering
Mathematics
Mechanical Engineering
Microbiology
Physics
Plant Pathology
Statistics
Veterinary Molecular Biology

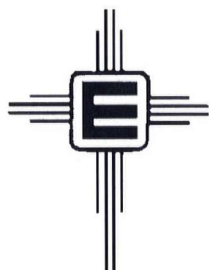
Contact:

Dr. Robert L. Brown, Dean
College of Graduate Studies
Montana Hall, Room 108D
Montana State University-Bozeman
Bozeman, Montana 59717
Tel: (406) 994-4145

Application Deadlines:

June 15 for Fall Semester
November 15 for Spring Semester
March 15 for Summer Session

EASTERN NEW MEXICO UNIVERSITY
GRADUATE PROGRAM

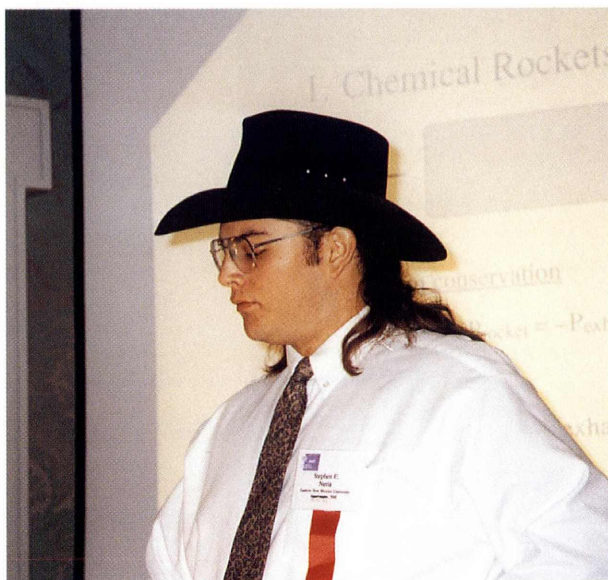


Among the graduate degrees offered by the Graduate School of Eastern New Mexico University are master of science in biology, master of science in chemistry, and a master of arts in mathematics.

The master of science in biology offers a combination of advanced study in general biology and specialization in one of the emphasis areas of botany, microbiology, or zoology. At Eastern New Mexico University, a master's degree in chemistry is offered in the areas of analytical, inorganic, organic, physical and biochemistry. The chemistry program at Eastern New Mexico University is on the approved list of the American Chemical Society. The department of mathematical sciences offers a master of arts degree in mathematics that is designed to prepare graduates for careers in teaching, business, industry, government, or for entering a Ph.D. mathematics program. The areas of specialty of our faculty are applied mathematics, discrete

mathematics, probability, statistics, algebra, logic, differential equations, analysis, and computer science.

The programs of study have been carefully selected to serve the purpose of two distinct groups of post-baccalaureate students: (1) those who wish to study for various master's degrees, and (2) those who wish to pursue graduate work without intending to apply credits toward an advanced degree. All inquiries regarding admission to the Graduate School or requests for Graduate Catalogs should be addressed to the Graduate School, Administration Building Room 216, Eastern New Mexico University, Portales, NM 88130.



Minority graduate students have the opportunity to apply for Eastern New Mexico University's Minority Graduate Fellowship. The award is for \$10,000 per year, and recipients will only have to pay in-state tuition. This fellowship is open to students

who have demonstrated outstanding undergraduate scholastic achievement and financial need. Eligibility is limited to new students admitted to but not attending Eastern New Mexico University as graduate students. Students must be U.S. citizens or permanent residents. For further information and application forms, please phone the toll free number: 1 800-FOR-ENMU.

NEW MEXICO HIGHLANDS UNIVERSITY

GRADUATE PROGRAM

New Mexico Highlands University's (NMHU) School of Natural Sciences offers advanced studies in Biology, Chemistry and Environmental Science leading to the Master of Science degree. Course studies culminate in a master's thesis.

Modern laboratories are provided for Biology, Chemistry, Environmental Science and Geology disciplines and for scientific instrumentation, including two computer laboratories dedicated to student use. This provides the opportunity for students to use state-of-the-art scientific equipment such as a high field NMR, X-ray diffraction, and electron microscopy, and to be completely comfortable with it by the time they graduate. To this end, graduate students are to conduct research which allows them to gain another, and perhaps more realistic, perspective of science. Many of the faculty members have research grants which offer salaries for student researchers.

Some of the specific graduate research projects currently underway at NMHU include:

Dr. Randall Boehm, (505) 454-3165,
Master Builders, Inc., Theoretical
Studies of the Concrete/Aggregate
Interface;

Dr. Tom Cheavans, (505) 454-3503,
NIGMS/MBRS, Natural Product
Synthesis and Characterization;

Dr. Ron Clark, (505) 454-3539, NASA,
Alliance for Non-Linear Optical
Materials;

Dr. Merritt Helvenston, (505) 454-3167,
EPA, Remediation of Contaminated
Water;

Dr. Ray Kenny, (505) 454-3513, NSF,
Global Climate Change;

Dr. Larry Sveum, (505) 454-3204, NSF,
Aerosol Synthesis and
Characterization of Ceramic
Powders; and

Dr. Gerald Jacobi, (505) 454-3412, US
Forest Service, Macro Invertebrates
as Pollution Indicators.

NMHU participates in the National Institute of Health's Minority Biomedical Research Support Program (MBRS). For information about MBRS contact: Dr. Dick Greene, (505) 454-3365, dick@edison.nmhu.edu

For detailed information on NMHU graduate policies and degree requirements, please contact: Priscilla Mathis, Graduate School, NMHU Office of Academic Affairs, Rodgers Administration Bldg., Las Vegas, NM 87701, (505) 454-3266.

NEW MEXICO STATE UNIVERSITY GRADUATE PROGRAM

NMSU, categorized as a Carnegie Foundation Level I research institution, anchors the southern end of a statewide high-tech corridor that includes national research facilities, military test facilities and national observatories. NMSU offers Master's and/or doctoral degrees in the following SMET disciplines: Agricultural Biology, Agronomy, Animal Science or Range Science, Astronomy, Biology, Chemistry, Computer Science, Engineering (Chemical, Civil, Electrical, Industrial, Mechanical, Environmental), Geology, Horticulture, Mathematics, Molecular Biology, Physics, and Wildlife Science.

Graduate assistantships for minority graduate students are available on a competitive basis through the NMSU Graduate School. Contact Sandra Ledesma at (505) 646-5746 for information on assistantships. For general information about graduate programs, contact Dr. Cecelio Barrera, NMSU Graduate School, Box 30001, Dept. 3G, Las Cruces, NM 88003, (505) 646-2736. You may also access graduate school information through the World Wide Web at <http://www.nmsu.edu/~gradcolg>.

New Mexico Space Grant Consortium (NMSGC)– As part of the NASA Space Grant College Program, NMSGC awards fellowships to graduate students pursuing advanced degrees in engineering and the physical sciences. Contact: Joylynn Watkins, Box 30001, Dept. SG, Las Cruces, NM 88003, (505) 646-6414

National Physical Science Consortium for Minorities and Women (NPSC)– provides fellowships to graduate students in astronomy, chemistry, computer science, geology, materials science, mathematical sciences, physics, and subdisciplines. Contact: E. Gene Bailey, Administrator, c/o New Mexico State University, Box 30001, Dept. 3NPS, Las Cruces, NM 88003, (505) 646-6038 or 1-800-952-4118

Waste-management Education Research Consortium (WERC)– graduate students are trained as research assistants in the management of hazardous, radioactive and solid waste. The Environmental Scholarship, Fellowships & Grants Program is administered through the WERC office. Contact: Dr. Ron K. Bhada, Box 30001, Dept. WERC, Las Cruces, NM 88003, (505) 646-2038

Minorities Biomedical Research Support Program (MBRS)– funded by the National Institutes of Health, is a research-oriented program whose goal is to increase the number of ethnic minority scientists engaged in biomedical research. Contact: Dr. Glenn Kuehn, NMSU Dept. of Molecular Biology, Box 30001, Dept. 3MLS, Las Cruces, NM 88003, (505) 646-2424 or 646-1015

Minority Recruitment and Retention Committee (MRRC)– makes funds available to recruit and retain graduate students and enhance their training. Information about the New Mexico Doctoral Assistance Loan Program may also be requested. Contact: Dr. Juan Franco, Assoc. V.P. for Academic Affairs, NMSU Executive Vice President's Office, Box 30001, Dept. 3445, Las Cruces, NM 88003, (505) 646-1727

Commission on Higher Education Graduate Fellowships– are available for minorities and women beginning their Master's or doctoral studies in any graduate department. Contact: Sandra Ledesma, NMSU Graduate School, Box 30001, Dept. 3G, Las Cruces, NM 88003, (505) 646-5746

Funding opportunities for SMET minority graduate research is available through the Argonne National Laboratory; National Consortium for Graduate Degrees for Minorities in Engineering (GEM); Research Improvement in Minority Institutions (RIMI); EPA-GEM Environmental Engineers & Scientists Graduate Program; New England Board of Higher Education; Hispanic Association of Colleges & Universities (HACU) National Internship Program; Sigma Xi, The Scientific Research Society; Oakridge Institute for Science and Education; and other research programs. For information on these programs, contact Carol Lopez Fischer, New Mexico Alliance for Minority Participation Program Coordinator, NMSU, Box 30001, Dept. 3AMP, Las Cruces, NM 88003, (505) 646-1847, or cfischer@nmsu.edu. Individual SMET departments at NMSU also offer specific research opportunities for graduate students.

New Mexico Institute of Mining and Technology

(New Mexico Tech)

Graduate Program

The graduate program at New Mexico Tech offers advanced instruction and active involvement in research projects. The student is provided the opportunity to learn the spirit as well as the methods of productive scholarship.

A Graduate Council, made up of representatives from all departments offering graduate instruction and a student representative, is responsible for maintaining and improving the quality of graduate education. It recommends general policies to the Faculty Council. The Graduate Dean is the administrative officer who coordinates the graduate programs with the office of Academic Affairs and the academic departments.

Graduate work at the master's and doctoral degree levels is accredited by the North Central Association of Colleges and Secondary Schools.

New Mexico Tech is a member of the Western Association of Graduate Schools.

Admission to graduate study at New Mexico Tech and the award of financial aid are made to qualified individuals without regard to race, color, creed, sex, or national origin. Graduate degrees offered are:

Master of Science

Biochemistry	Geophysics
Chemistry	Hydrology
Computer Science	Materials Engineering
Engineering Science	Mathematics
Mechanics	Mineral Engineering
Geochemistry	Petroleum Engineering
Geology	Physics

ADMISSION

Interested persons who have completed or will complete a bachelor's degree prior to admission and have a record that indicates good potential for advanced study (undergraduate GPA of 3.0 is used as a guideline) and research in Tech's programs are encouraged to apply for admission to graduate study. Applicants should request forms from:

Graduate Office
New Mexico Tech
Socorro, New Mexico 87801
(505) 835-5424
1-800-428-TECH

In addition to the completed forms, the applicant must provide: 1) official transcripts of all college work (these must be mailed to the Graduate Office directly from the institution(s) attended); 2) references from three professors familiar with the applicant's undergraduate work; 3) official Graduate Record Examination (GRE) scores; and 4) an application fee of \$16.00.

The application is not complete without results of the GRE tests; although under exceptional circumstances, admission may be granted without GRE scores.

Provisional Admission may be granted to students whose undergraduate work is deficient in either quality or quantity. Subject to the advisor's approval, students admitted provisionally may be advanced to regular graduate student status after one or more semesters of satisfactory academic performance. Students admitted or placed on provisional status are not eligible for financial support and cannot work on campus.

Special Graduate Status may be granted to those who have baccalaureate degrees and who wish to earn graduate credits as their qualifications warrant. Special graduate students are not degree candidates and are not eligible for assistantships or fellowships. The Graduate Dean will serve as the advisor for special graduate students, and the special graduate student will be allowed to register for no more than nine credit hours per semester. Request for transfer to regular status must be made in writing to the Graduate Dean. Should the special graduate student become a regular graduate student, only 12 credit hours earned as a special graduate student may be applied toward the graduate program.

UNIVERSITY OF NEW MEXICO GRADUATE PROGRAM

The University of New Mexico (UNM), one of only four universities that is both a Carnegie Research I University and a Minority Institution, has a dual commitment to excellence in research and opportunities for minorities. A variety of programs and services provide encouragement and incentives to minority students to pursue graduate degrees in all of the disciplines offered by the institution. Master's degrees and/or doctoral degrees are offered in the following SMET fields as defined by New Mexico AMP: Biology (M.S., Ph.D.), Earth & Planetary Sciences (M.S., Ph.D.), Nuclear Engineering (M.S., Ph.D.), Chemistry (M.S., Ph.D.), Electrical & Computer Engineering (M.S., Ph.D.), Optical Sciences (Ph.D.), Chemical Engineering (M.S., Ph.D.), Manufacturing Engineering (M.E.), Physics (M.S., Ph.D.), Civil Engineering (M.S., Ph.D.), Mathematics (M.S., Ph.D.), Computer Science (M.S., Ph.D.), Mechanical Engineering (M.S., Ph.D.).

Many of the departments have complemented special recruiting methods to attract SMET minority students to their graduate programs. Below are some of the special programs and services available through UNM to prospective and current minority graduate students. For general information about graduate programs, contact the UNM Office of Graduate Studies, Humanities Building 107, Albuquerque, NM 87131, telephone (505) 277-2711, or access UNM through the World-Wide Web: <http://www.unm.edu>. For information about the UNM-AMP program for undergraduate students, contact Dr. Gail Ward, Director of Student Programs, School of Engineering, UNM, Albuquerque, NM 87131, telephone (505) 277-4354.

Office of Graduate Studies - UNM: The Office of Graduate Studies at the UNM provides information about graduate funding opportunities for prospective and current graduate students. Sources include the National Consortium for Graduate Degrees for Minorities in Engineering (GEM), the National Action Council for Minorities in Engineering (NACME), the National Science Foundation (NSF) Graduate Research Fellowships, Minority Graduate Fellowships and Women in Engineering and Computer and Information Science Awards, and the Ford Foundation Predoctoral and Dissertation Fellowship for Minorities. The office administers several minority graduate fellowships for students from a variety of disciplines. These include the Graduate Fellowship, Graduate Scholars Program, and the Minority Doctoral Assistance Loan-for-Service Program. **Contact: Ms. Edwina Murillo (505) 277-7395**

Hispanic Student Services - UNM: The Hispanic Student Services office has a graduate initiative program that consists of several components and is open to all students. Graduate school information received by the office is regularly distributed to students, and information sessions with recruiters are hosted by the office. **Contact: Ms. Veronica Mendez-Cruz (505) 277-5020**

The UNM Center for Autonomous Control Engineering (ACE) - A NASA University Research Center: The vision of ACE is to increase significantly the number of minority Ph.D. candidates in engineering fields related to NASA's strategic needs. Contact: Dr. Mo Jamshidi (505) 277-0300 ace@pajarito.unm.edu <http://www.unm.edu/~ftomei02/ace.html>

Student Education and Training Program for Hispanic Serving Institutions (STEP/HSI) - Funded by the U.S. Department of Transportation: The intent of STEP/HSI is to interest undergraduate and graduate students from multiple disciplines in pursuing careers in the field of transportation. **Contact: Prof. James D. Brogan (505) 277-1314**

Minority Engineering, Math and Science Program (MEMS) - Funded by DOD Army Research Office: MEMS provides graduate fellowships designated for students majoring in math, science or engineering. Contact MEMS Director (505) 277-8795

American Indian Science, Technology, Education Consortium (AISTEC) - Funded by NASA: AISTEC is a graduate fellowship program for Native American students pursuing Ph.D.s in math, science, engineering and education. **Contact: Ms. Carla Buddenhagen (505) 277-5997**

Latino/Native American Network (LANA) - Southwest Hispanic Research Institute: LANA's goal are to assist promising Latino and Native American students in exploring postgraduate options and to increase the potential pool of applicants for doctoral level study. **Contact: Dr. Eligio Padilla (505) 277-2965**

Project 1000 - Southwest Hispanic Research Institute: The UNM is a member of a 75 university consortium that enables minority students to apply to seven graduate schools without paying an application fee. **Contact: Dr. Eligio Padilla (505) 277-2965**

Southern Rocky Mountain Region

M - master's program; D - doctorate's program

ARIZONA

Arizona State University
Graduate College
Box 871003
Tempe, AZ 85287-1003

Bianca L. Bernstein
Dean of the Graduate College
(602) 965-7279
FAX (602) 965-0375

Engineering and Applied Sciences:

Aerospace/Aeronautical Engineering	M, D
Chemical Engineering	M, D
Civil Engineering	M, D
Computer Engineering	M
Computer Science	M, D
Construction Engineering and Management	M
Electrical Engineering	M, D
Engineering and Applied Sciences	M, D
Geological Engineering	M, D
Industrial/Management Engineering	M, D
Manufacturing Engineering	M
Materials Engineering	D
Materials Sciences	D
Mechanical Engineering	M, D
Technology and Public Policy	M

Life Sciences:

Agricultural Sciences	M
Biochemistry	M, D
Botany and Plant Sciences	M, D
Cell Biology	M, D
Developmental Biology	M, D
Ecology	M, D
Genetics	M, D
Microbiology	M, D
Molecular Biology	M, D
Natural Resources	M
Physiology	M, D
Range Science	M
Zoology	M, D

Mathematics and Physical Sciences:

Applied Mathematics	M, D
Astronomy	M, D
Chemistry	M, D
Mathematics	M, D
Physics	M, D
Statistics	M, D

University of Arizona

Administration 322
Tucson, AZ 85721

Thomas J. Hixon
(520) 621-7815
FAX (520) 621-7112
e-mail hixon@cnet.shs.arizona.edu

Engineering and Applied Sciences:

Aerospace/Aeronautical Engineering	M, D
Agricultural Engineering	M, D
Chemical Engineering	M, D

Civil Engineering	M, D
Computer Science	M, D
Electrical Engineering	M, D
Engineering and Applied Sciences	M, D
Geological Engineering	M, D
Industrial/Management Engineering	M, D
Materials Engineering	M, D
Materials Sciences	M, D
Mechanical Engineering	M, D
Mechanics	M, D
Mineral/Mining Engineering	M, D
Nuclear Engineering	M, D
Systems Engineering	M, D
Water Resources	M, D

Life Sciences:

Agricultural Sciences	M, D
Agronomy and Soil Sciences	M, D
Anatomy	D
Animal Sciences	M, D
Biochemistry	M, D
Biology and Biomedical Sciences	M, D
Biophysics	M, D
Botany and Plant Sciences	M, D
Cancer Biology	M, D
Cell Biology	M, D
Developmental Biology	M, D
Ecology	M, D
Entomology	M, D
Environmental Sciences	D
Evolutionary Biology	M, D
Fish, Game and Wildlife Management	M, D
Forestry	M, D
Genetics	M, D
Immunology	M, D
Microbiology	M, D
Molecular Biology	M, D
Natural Resources	M, D
Neurobiology	D
Nutrition	M, D
Pathology	M, D
Pharmacology	M, D
Physiology	D
Plant Pathology	M, D
Range Science	M, D
Toxicology	M, D

Mathematics and Physical Sciences:

Applied Mathematics	M, D
Astronomy	M, D
Chemistry	M, D
Earth Sciences	M, D
Geology	M, D
Mathematics	M, D
Meteorology and Atmospheric Sciences	M, D

Optics Sciences	M, D
Physical Sciences	M, D
Physics	M, D
Planetary Sciences	M, D
Statistics	M, D

COLORADO

Colorado School of Mines Arthur J. Kidnay
 Graduate School (303) 273-3247
 1500 Illinois FAX (303) 273-3244
 Golden, CO 80408 e-mail j.kidnay@mines.edu

Engineering and Applied Sciences:

Chemical Engineering	M, D
Engineering and Applied Sciences	M, D
Environmental Engineering	M, D
Geological Engineering	M, D
Materials Engineering	M, D
Materials Sciences	M, D
Mechanics	M
Metallurgical Engineering and Metallurgy	M, D
Mineral/Mining Engineering	M, D
Operations Research	M, D
Petroleum Engineering	M, D

Life Sciences:

Environmental Sciences	M, D
Natural Resources	M

Mathematics and Physical Sciences:

Applied Mathematics	M, D
Applied Physics	D
Chemistry	M, D
Geochemistry	M, D
Geology	M, D
Geophysics	M, D
Physics	M, D

Colorado State University Dean Jaros
 Graduate School (303) 491-6817
 208 Administration Annex FAX (303) 491-2194
 Fort Collins, CO 80523 e-mail jschool@vine@colostate.edu

Engineering and Applied Sciences:

Agricultural Sciences	M, D
Bioengineering and Biomedical Engineering	M, D
Chemical Engineering	M, D
Civil Engineering	M, D
Computer Science	M, D
Construction Engineering and Management	M
Electrical Engineering	M, D
Engineering and Applied Sciences	M, D
Engineering Management	M
Environmental Engineering	M, D
Geotechnical Engineering	M, D
Industrial/Management Engineering	M, D
Manufacturing Engineering	M, D
Materials Engineering	M, D
Mechanics	M, D

Mechanical Engineering	M, D
Structural Engineering	M, D
Technology and Public Policy	D
Water Resources	M, D

Life Sciences:

Agricultural Sciences	M, D
Agronomy and Soil Sciences	M, D
Anatomy	M, D
Animal Sciences	M, D
Biochemistry	M, D
Biology and Biomedical Sciences	M, D
Botany and Plant Sciences	M, D
Cell Biology	D
Developmental Biology	M, D
Ecology	M, D
Entomology	M, D
Environmental Sciences	M
Fish, Game and Wildlife Management	M, D
Food Science and Technology	M, D
Forestry	M, D
Genetics	M, D
Horticulture	M, D
Immunology	M, D
Microbiology	M, D
Molecular Biology	M, D
Neurobiology	M, D
Nutrition	M, D
Pathology	M, D
Physiology	M, D
Plant Pathology	M, D
Plant Physiology	M, D
Radiation Biology	M, D
Range Science	M, D
Zoology	M, D

Mathematics and Physical Sciences:

Chemistry	M, D
Earth Sciences	M, D
Geology	M
Mathematics	M, D
Meteorology and Atmospheric Sciences	M, D
Physics	M, D
Statistics	M, D

University of Colorado at Boulder Carol Lynch
 Graduate School (303) 492-2890
 Campus Box 26 FAX (303) 492-5777
 Boulder, CO 80309 e-mail lynch.carol@colorado.edu

Engineering and Applied Sciences:

Aerospace/Aeronautical Engineering	M, D
Architectural Engineering	M, D
Chemical Engineering	M, D
Civil Engineering	M, D
Computer Engineering	M, D
Computer Science	M, D
Electrical Engineering	M, D
Engineering and Applied Sciences	M, D
Environmental Engineering	M, D
Mechanical Engineering	M, D

Southern Rocky Mountain Region

Structural Engineering M, D
Telecommunications M

Life Sciences:

Biochemistry M, D
Biology and Biomedical Sciences M, D
Biopsychology M, D
Botany and Plant Sciences M, D
Cell Biology M, D
Developmental Biology M, D
Ecology M, D
Genetics M, D
Microbiology M, D
Molecular Biology M, D
Neurobiology M, D
Physiology M, D
Plant Physiology M, D
Zoology M, D

Mathematics and Physical Sciences:

Applied Mathematics M, D
Astrophysics M, D
Chemistry M, D
Geology M, D
Geophysics D
Mathematical Physics D
Mathematics M, D
Meteorology and Atmospheric Sciences M, D
Physics M, D
Plasma Physics M, D

University of Southern Colorado

Admissions Jon Valdez
2200 Bonforte Blvd. (719) 549-2147
Pueblo, CO 81001

Engineering and Applied Sciences:

Engineering and Applied Sciences M
Systems Engineering M

Mathematics and Physical Sciences:

Physical Sciences M

NEW MEXICO

Eastern New Mexico University

Graduate School Renee Neely
Station 9 Dean of Graduate School &
Portales, NM 88130 Academic Studies
(505) 562-2147
FAX (505) 562-2168

Life Sciences:

Biology and Biomedical Sciences M

Mathematics and Physical Sciences:

Chemistry M
Mathematics M
Physical Sciences M

New Mexico Highlands

University
Graduate Office
Las Vegas, NM 87708

John M. Pacheco
Vice President for Academic
Affairs
(505) 454-3311
FAX (505) 454-3558
e-mail johnpacheco@merlin.nmhu.edu

Life Sciences:

Biology and Biomedical Sciences M

Mathematics and Physical Sciences:

Chemistry M

**New Mexico Institute of
Mining and Technology**

Graduate School
801 Leroy St.
Socorro, NM 87801

Jay A. Smoake
Dean of Graduate Studies
(505) 835-5513
FAX (505) 835-5476
e-mail graduate@nmt.edu

Engineering and Applied Sciences:

Computer Science M, D
Materials Engineering M, D
Mechanics M
Mineral/Mining Engineering M
Operations Research M
Petroleum Engineering M, D
Water Resources M, D

Life Sciences:

Biochemistry M

Mathematics and Physical Sciences:

Astrophysics M, D
Chemistry M, D
Geochemistry M, D
Geology M, D
Geophysics M, D
Mathematics M
Meteorology and Atmospheric Sciences M, D
Physics M, D

New Mexico State University

Graduate School
Box 30001 Dept. 3G
Las Cruces, NM 88003-0001

Timothy J. Pettibone
Dean of Graduate College
(505) 646-2736

Engineering and Applied Sciences:

Agricultural Engineering M, D
Chemical Engineering M, D
Civil Engineering M, D
Computer Engineering M, D
Computer Science M, D
Electrical Engineering M, D
Engineering and Applied Sciences M, D
Geological Engineering M, D
Industrial/Management Engineering M, D
Mechanical Engineering M, D

University of Utah

Graduate School
310 Park Bldg.
Salt Lake City, UT 84112

Ann W. Hart
Dean of Graduate College
(801) 581-7642
FAX (801) 581-6749
e-mail ann.hart@gradsch.adm.utah.edu

Utah State University

School of Graduate Studies
Logan, UT 84322-0900

James P. Shaver
Dean of Graduate Studies
(801) 797-1191
FAX (801) 797-1192
e-mail james@grad.usu.edu

Engineering and Applied Sciences:

Bioengineering and Biomedical Engineering	M, D
Chemical Engineering	M, D
Civil Engineering	M, D
Computer Science	M, D
Electrical Engineering	M, D
Engineering and Applied Sciences	M, D
Engineering Management	M
Geological Engineering	M, D
Information Science	M, D
Materials Engineering	M, D
Materials Sciences	M, D
Mechanical Engineering	M, D
Mechanics	M
Metallurgical Engineering and Metallurgy	M, D
Mineral/Mining Engineering	M, D
Nuclear Engineering	M, D
Petroleum Engineering	M, D

Life Sciences:

Anatomy	M, D
Biochemistry	M, D
Biology and Biomedical Sciences	M, D
Cell Biology	D
Ecology	M, D
Evolutionary Biology	M, D
Genetics	M, D
Immunology	M, D
Microbiology	M, D
Molecular Biology	M, D
Neurobiology	M, D
Nutrition	M
Pathology	D
Pharmacology	M, D
Physiology	D
Toxicology	M, D

Mathematics and Physical Sciences:

Biostatistics	M
Chemistry	M, D
Geology	M, D
Geophysics	M, D
Mathematics	M, D
Meteorology and Atmospheric Sciences	M, D
Physics	M, D
Statistics	M

Engineering and Applied Sciences:

Aerospace/Aeronautical Engineering	M, D
Agricultural Engineering	M, D
Civil Engineering	M, D
Computer Science	M
Electrical Engineering	M, D
Engineering and Applied Sciences	M, D
Environmental Engineering	M, D
Geotechnical Engineering	M, D
Manufacturing Engineering	M
Mechanical Engineering	M, D
Structural Engineering	M, D
Transportation and Highway Engineering	M, D
Water Resources	M, D

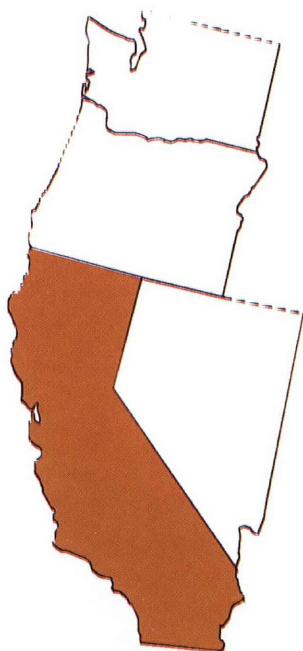
Life Sciences:

Agricultural Sciences	M, D
Agronomy and Soil Sciences	M, D
Animal Sciences	M, D
Bacteriology	M, D
Biochemistry	M, D
Biology and Biomedical Sciences	M, D
Botany and Plant Sciences	M, D
Cell Biology	M, D
Ecology	M, D
Entomology	M, D
Environmental Biology	M, D
Environmental Sciences	M, D
Fish, Game and Wildlife Management	M, D
Food Science and Technology	M, D
Forestry	M, D
Genetics	M, D
Immunology	M, D
Microbiology	M, D
Molecular Biology	M, D
Natural Resources	M
Nutrition	M, D
Parasitology	M, D
Physiology	M, D
Range Science	M, D
Toxicology	M, D
Virology	M, D
Zoology	M, D

Mathematics and Physical Sciences:

Chemistry	M, D
Geology	M
Mathematics	M, D
Physics	M, D
Statistics	M

Pacific Alliances



CALIFORNIA

California State University

Bakersfield
 Chico
 Dominguez Hills
 Fresno
 Fullerton
 Hayward
 Humboldt
 Long Beach
 Los Angeles
 Northridge

Pomona
 Sacramento
 San Bernardino
 San Diego
 San Francisco
 San Jose
 San Luis Obispo
 San Marcos
 Sonoma
 Stanislaus

University of California

Berkeley
 Davis
 Irvine
 Los Angeles
 Riverside
 San Diego
 San Francisco
 Santa Barbara
 Santa Cruz



Graduate Study Pays Returns For A Lifetime Laurel L. Wilkening California AMP

Today more than ever, advanced study is essential for entry into the most challenging and rewarding jobs in the sciences. The bachelor's degree lays the foundation for a plethora of careers in research and development or teaching. Whether you dream of making breakthroughs in the frontiers of science or teaching the thrill of discovery, a graduate degree will assure you a future in the arenas where history is made. It is a rigorous road to the Ph.D. or M.D. or other professional degrees, but it represents an investment that pays returns for a lifetime. It requires unparalleled commitment and discipline. At UCI, we have two remarkable examples of what it takes to believe wholeheartedly in your work regardless of popular opinion. Professor F. Sherwood Rowland won the 1995 Nobel Prize for chemistry, along with his colleague Mario Molina, the first Mexican-born researcher to win a Nobel Prize, for discovering in 1974 the chlorofluorocarbons (CFSs) used in aerosol spray cans were depleting the earth's protective ozone layer. Molina, a graduate student at the time, is now at MIT. Professor emeritus Frederick Reines won the physics prize for his 1956 discovery of the neutrino, an elusive subatomic particle that has changed theories about the nature of the universe. Each of these scientists waited more than 20 years for the recognition they deserved. Both Rowland and Reines were subjected to ridicule for their ideas. In time, and because they endured and tirelessly pursued their beliefs and scientific truths, they emerged in the full

light of global recognition for their contributions to the advancement of science. It is with this example that I encourage you to find your own truths. Pursue them doggedly and prepare for the future. Learn about graduate opportunities and, diligently, prepare today for an advanced degree.

Consider Graduate School Before You Graduate A.F. Ratcliffe California State AMP



Students who participate in the California State University AMP undergraduate programs are encouraged to give very serious attention to graduate school, well before they graduate.

While engineering students may find opportunities with just a bachelor's degree, many more interesting jobs will become available for those with a Master's and graduate study, at any level, should enhance their skills and desirability.

Students with baccalaureates in science or mathematics, who desire to teach at any pre-college level, will discover that the State of California requires graduate study in education for all credential candidates who seek employment in public schools. Public community colleges require graduate study at the Master's level for professors in each and every discipline.

As important as gaining more knowledge is for self-satisfaction, practical considerations should inform students that further study means both increased opportunities in terms of careers and even greater intellectual stimulation.

CSU-AMP GRADUATE SCHOOL OPPORTUNITIES FOR MINORITY STUDENTS

The California State University System offers two programs leading to or supporting graduate study by minority students in Science, Engineering or Mathematics. Students from all of the system's twenty campuses are eligible for both.

The first program is the California Pre-Doctoral Program for undergraduate and graduate students in the California State University. Eligible students from CSU member campuses must have the potential for doctoral study, have a faculty sponsor and be either an underrepresented ethnic minority in any field, a woman in science, engineering or mathematics, or a disabled student in any field. In addition, the students must be U.S. citizens or permanent residents at the time of application.

The program provides funds for appropriate travel, summer research opportunities and funds for membership in professional organizations or special research costs and equipment.

The second program is the California State University Forgivable Loan/Doctoral Incentive Program. Eligible students must possess the potential of obtaining a doctorate and of competing for a faculty position in the CSU; they must have a faculty sponsor, be accepted for full-time enrollment in a doctoral program (at any accredited institution) and, preferably, be a member of an underrepresented group, especially in SEM.

Up to \$10,000 per year, and \$30,000 over five years will be lent with repayment forgiven at a 20% per year rate for those who complete the doctorate and who become CSU faculty within a year thereafter.

Campus Pre-Doctoral Advisors

Bakersfield

Dr. Edwin Sasaki

Pomona

Dr. Stanley J. Cook

Chico

Dr. Judith Brasseur

Sacramento

Dr. Donald Zingale

Dominguez Hills

Dr. Sam Wiley

San Bernardino

Dr. Julius Kaplan

Fresno

Dr. Vivian A. Vidoli

San Diego

Dr. Michael Seitz

Fullerton

Dr. William Haddad

San Francisco

Dr. Paul Fonteyn

Hayward

Dr. Carl J. Bellone

San Jose

Dr. Serena W. Stanford

Humboldt

Dr. Susan Bicknell

San Luis Obispo

Dr. Susan Opava

Long Beach

Dr. Keith I. Polakoff

San Marcos

Dr. Leonel Maldonado

Los Angeles

Dr. Costello L. Brown

Sonoma

Dr. Katharyn Crabbe

Northridge

Dr. Mack I. Jackson Dr. Diane Mayer Demetrulias

Stanislaus

A.F. Ratcliffe, PI
CSU-AMP, CSU Northridge

Tobi Roffman, Executive Director
CSU-AMP, CSU Northridge

Graduate Study is in Your Future

Choose The University of California!

Home of Nobel Laureates



“As the world changes, so must your preparation. An advanced degree is your key to the future.”

—Chancellor Laurel L. Wilkening, UCI

■ **Laurel L. Wilkening, Principal Investigator**

■ **Manuel N. Gómez, Statewide Director
Vice Chancellor, UCI**

A Renowned Research University

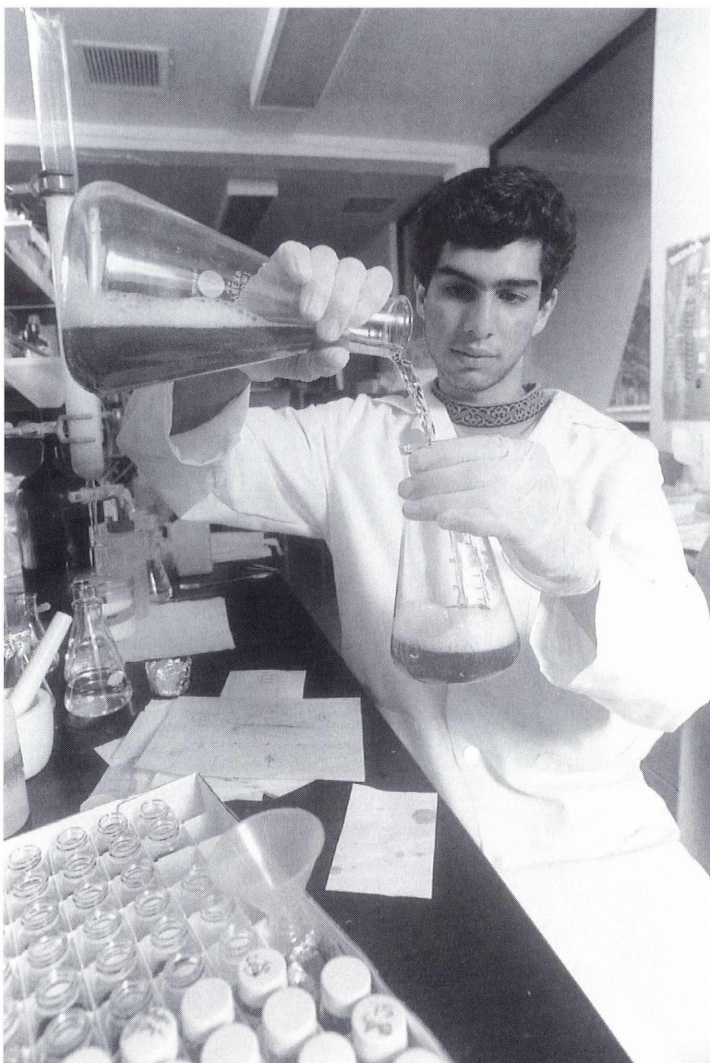
The University of California is one of the most prestigious institutions of higher education in the world today. Its nine campuses are distinguished for their commitment in teaching, research and public service. They include five medical schools, three law schools, and a school of veterinary medicine. Courses are taught by renowned faculty well-known for scientific achievements. The University of California has 20 current Nobel Laureates among its faculty. UCI celebrated two new Laureates in 1995. Dr. F. Sherwood Rowland won the prize in chemistry for his pioneering work in warning of the dangers of neglecting the earth's ozone layer. Dr. Frederick Reines, a physicist, was awarded the prize for discovering the neutrino, one of the smallest particles in the universe.

High Marks for UC's Doctoral Programs

The extraordinary quality of UC's doctoral programs was underscored recently in the latest National Research Council study of doctoral programs at 274 universities. More than half of UC's programs ranked in the top 20 in their fields based on faculty quality, a performance unmatched in higher education.

UC: The Nation's Best

No other university came close to UC's level of quality over a wide range of disciplines at so many campuses. Based on the study, UC Berkeley is the nation's best comprehensive doctorate institution, public or private. UCLA, UC San Diego and Michigan are the next three best public universities. With UC San Francisco as the highest ranked institution in the biological sciences, UC



Plan Today for your next step

What will you do after graduation? Early planning can help you achieve your goal of the kind of career you envision. The University of California provides an extensive range of study from psychobiology to space physics to marine science. Each of the nine campuses offer a diverse range of graduate and professional degree programs.

Step into your future

Take the first step to find out what graduate school can offer you. Your best source of information is the graduate studies office on each campus. The only problem will be trying to narrow it down to one! At the University of California the minimum criteria for admission is a bachelor's degree and a B average. Students must follow the general regulations of the Graduate School as well as the special requirements of the department or area program. Acceptance is based on the student's previous academic record, graduate placement test scores, and letters of recommendation. Each school or department develops their own specific qualifications in order to attain their academic target. Contact any of the following schools for additional information.

Financial Support

The University of California recognizes the financial need for graduate studies and has developed a variety of programs on all nine campuses to support the financial

UC Berkeley

Office of Outreach & Retention
316 Sproul Hall
University of California
Berkeley, CA 94720
(510) 643-6010

UC Davis

Office of Graduate Studies
University of California
Davis, CA 95616
(916) 752-7486

UC San Diego

Office of Graduate Studies & Research
University of California
La Jolla, CA 92093-0003
(619) 534-3871

UC Irvine

Office of Research & Graduate Studies
University of California
Irvine, CA 92717-3180
(714) 824-5879/824-8155

UC Los Angeles

Graduate Division
1248 Murphy Hall
University of California
Los Angeles, CA 90024-1419
(310) 206-1280

UC Santa Barbara

Graduate Division
University of California
Santa Barbara, CA 93106-2070
(805)893-3803

UC Riverside

Graduate Division
University of California
Riverside, CA 92521-0208
(909) 787-3680

UC San Francisco

Graduate Division
Box 0244
University of California
San Francisco, CA 94143-0244
(415) 476-2310

UC Santa Cruz

Division of Graduate Studies
University of California
Santa Cruz, CA 95064
(408) 459-4109

needs of minority students. In addition, each campus and department offer their individual financial assistance programs.

Make a checklist & timeline

Get acquainted with the checklist for the University of California application process.

1. Letters of Recommendation:

Ask for three letters from professors who are familiar with your work. Recommendations from staff and community members are also appropriate.

2. Contact your institution and have them send out your official undergraduate transcript.

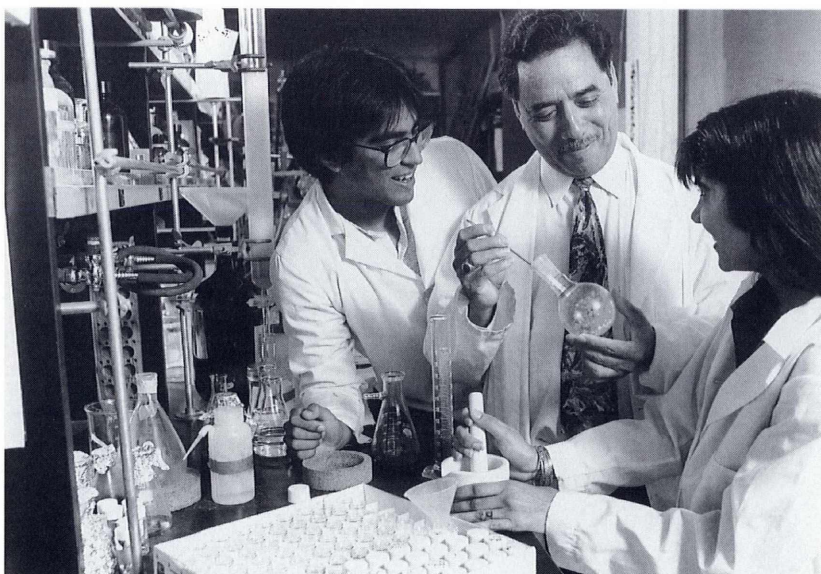
3. Draft your Personal Statement. You will probably be required to write a Statement of Purpose. The essay should include descriptions of your background and your reasons for wanting to continue your studies.

4. Include special materials that you think would be of importance to your admission. Include any published work and/or a resume.

5. Prepare any necessary financial statement & documents for financial support.

6. Be sure that all materials being sent out are complete and accurate. Send it before the deadline. Keep a copy!

7. Follow-up with the institutions you have applied to make sure that your application has been received and is complete.



ALLIANCE GRADUATE SCHOOLS BY STATE

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Logan, UT53

Cover Page Biographical Data

Dr. Luther Williams

Graduated from Purdue University in 1968 with a Ph.D. in Biology. His research interest is microbiology/molecular biology. His present position is Assistant Director for Education and Human Resources at the National Science Foundation where he is the Chief Administrator for science, mathematics, engineering and technology education. His accomplishments include more than 50 scientific publications, NIH Career Development Awardee, achievement of full professorship and appointment to major academic leadership positions. He has also served as a mentor for more than 15 M.S. and Ph.D. graduate students.

Dr. Joseph McDonald

Graduated from the University of Montana in 1981 with a Ph.D. in Curriculum Foundations/Administration. His research interest is regional institutional accreditation. His present position is President of Salish Kootenay College. His accomplishments include the formation and development of Salish Kootenay College and the development of the National Tribal College Network that includes the American Indian Higher Education Consortium and the American Indian College Fund.

Dr. Roosevelt Calbert

Graduated from the University of Kansas in 1971 with a Ph.D. in Plasma Physics. His research interest is F and D components of the solar wind. His present position is Division Director of Human Resource Development, Directorate for Education and Human Resources at the National Science Foundation where he is responsible for the development and implementation of intervention strategies in research and education for underrepresented groups in science, mathematics, engineering and technology (SMET). The underrepresented groups include minorities, women and girls, and persons with disabilities. His accomplishments include establishing a cadre of programs for underrepresented groups over the past 20 years at the National Science Foundation. These include: Minority Research Initiation, Research Improvement in Minority Institutions (RIMI), Minority Research Centers of Excellence (MRCE), and the Comprehensive Partnerships for Minority Student Achievement (CPMSA). He serves as a role model for minority researchers and educators at NSF.

Dr. Manuel Gomez

Graduated from Cornell University in 1967 with a Ph.D. in Theoretical Physics - Condensed Matter. His

research interests are nanoscale composites and optical properties of solids. His present position is Director of the Resource Center for Science and Engineering, and Advisor to the President of the University of Puerto Rico for Research and Academic Development. His accomplishments include his leadership in systemic education reform in SMET from K-16 and his development of research infrastructure at universities that led to the establishment of an R&D base for industrial development. He was a major contributor to the establishment of a science and technology policy for industrial development in Puerto Rico.

Dr. William McHenry

Graduated from Mississippi State University in 1977 with a Ph.D. in Organic Chemistry. His research interests include organic heterocyclic synthesis, flash vacuum thermolysis and design and synthesis of new pesticides. His present position is Program Director at the National Science Foundation where he manages undergraduate programs in the Division of Human Resource Development. His accomplishments include a U.S. patent (#4626528 for the synthesis O, O-Dialkyl O-p-N-Alkyl (carbamoyl) phenylphosphorothinates and Insecticidal Compositions Including the Same), the establishment of the Combinations of Institutions series of programs designed to increase the participation of minority students in graduate education in Arkansas, Mississippi and Alabama, and he helped in the formation of the National Alliance for Minority and Women Graduate Education Opportunities, Inc. He served as Dean of the Graduate Schools at Mississippi State University, was selected as Outstanding Research Scientist at Mississippi State University in 1987, and as an outstanding educator by the College of Arts and Sciences students at Mississippi State University. In addition, he received a distinguished service award from the Patricia Roberts Harris Project Directors and Outstanding Service Awards from NSF for three consecutive years.

Dr. Neville Parker

Graduated from Cornell University in 1971 with a Ph.D. in Civil /Transportation/Systems Engineering. His research interest is pavement management. His present position is Herbert G. Kayser Professor of Civil Engineering at The City College of the City University of New York where he is responsible for the directorship of CUNY Institute for Transportation Systems. His accomplishments include the development of the Department of Civil Engineering at the

University of Dar Es Salaam in Tanzania and the co-authorship of the textbook "Essentials of Highway Engineering," published by McMillan, U.K., 1988.

Dr. Louis Dale

Graduated from the University of Alabama in 1972 with a Ph.D. in Mathematics. His research interest is the ring theory. His present position is Professor of Mathematics and Associate Vice President for Academic Affairs at the University of Alabama at Birmingham where he is responsible for implementing policies and procedures regarding Academic Affairs, monitoring affirmative action matters, and he oversees grant and research activity within Academic Affairs. He is also Director of the Alabama Alliance for Minority Participation Program. His accomplishments include publishing mathematics research papers in national and international journals, ascending academic ranks to a full professor of Mathematics, ascending administrative ranks to Associate Vice President for Academic Affairs, implementing the AMP Program at twelve universities and colleges, serving as a member of the Birmingham Board of Education for ten years and as its president for six years.

Dr. Diana Natalicio

Graduated from the University of Texas at Austin in 1969 with a Ph.D. in Linguistics. Her research interest is psycho linguistics. Her present position is President of the University of Texas at El Paso.

Dr. Lynette Padmore

Graduated from Howard University in 1970 with a Ph.D. in Genetics. Her research interest is developmental genetics. Her current position is Professor of Biology and Director of BIONR, FGAMP, and MSIP Programs. Her accomplishments include the Teacher of the Year Award, an award for Superior Accomplishment, and the Outstanding Academic Advisor Award. She has made presentations on enhancing undergraduate education at several forums.

Dr. Gary D. Keller Cardenas

Graduated from Columbia University in 1971 with a Ph.D. in Hispanic Linguistics. His research interests include assessment and measurement. His present position is Regents' Professor at Arizona State University. His accomplishments include the Charles A. Dane Foundation Award for Pioneering Achievement in Education in 1993.

Dr. Eloy Rodriguez

Graduated from the University of Texas in 1975 with a Ph.D. in Plant Biochemistry/Natural Products Chemistry. His research interests include medicinal

plant chemistry and plant biochemical ecology. His present position is James A. Perkins Professor and Research Scientist at Cornell University. His accomplishments include the establishment of the discipline zoopharmacognosy and 150 publications.

Dr. Anthony Johnson

Graduated from City College of the City University of New York in 1981 with a Ph.D. in Physics. His research interest is nonlinear optics. His present position is Distinguished Member of the Technical Staff, Photonic Circuits Research Department at AT&T Bell Laboratories where he is a scientist. His accomplishments include over 50 publications and four U.S. patents in ultra fast optoelectronics.

Dr. Richard Sullivan

Graduated from Howard University in 1972 with a Ph.D. in Physical Chemistry. His research interests include physical and organic chemistry. His present position is Professor and Chair of the Department of Chemistry at Jackson State University. His accomplishments include the conception and development of the computational modeling laboratory at Jackson State University.

Dr. Ricardo Jacquez

Graduated from Virginia Polytechnic Institute and State University in 1977 with a Ph.D. in Civil Engineering. His present position is Professor of Civil Engineering at New Mexico State University where he is the Associate Director of Waste Management Education and Research Consortium. He is a recipient of the Hispanic Engineering Achievement Award for College Level Education and the SHPE Jaime Oaxaca Award.

Dr. Dolores Cross

Graduated from The University of Michigan, Ann Arbor, in 1971 with a Ph.D. in Higher Education Administration. Her present position is President of Chicago State University. She has led the university to new heights of excellence, increasing access and educational opportunity for its predominantly minority student population. Taking a leadership role in issues of access for women and minorities, she serves on the boards of several national organizations, including the American Council on Education, the College Board, Campus Compact and the Association of Black Women in Higher Education. She serves as Senior Consultant in a strategic planning project for South Africa's Historically Black Colleges.

Directory of Participating Alliances

National Science Foundation

Dr. Luther S. Williams, Assistant Director
Education and Human Resources

Dr. Roosevelt Calbert, Division Director
Human Resource Development

Dr. William E. McHenry, Director
Alliances for Minority Participation
4201 Wilson Blvd.
Room 815.15
Arlington, VA 22230
(703) 306-1636
(703) 306-0423 (fax)

Alabama AMP

Dr. Louis Dale, AMP Project Director
Office of Vice President for Academic Affairs
401 E1 Campbell Hall
University of Alabama at Birmingham
Birmingham, AL 35294-1170
(205)934-8762
(205)934-1650 (fax)

California AMP

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600 Administration
University of California, Irvine
Irvine, CA 92717-1023
(714)824-6578
(714)824-3048 (fax)

California State AMP

Dr. Alfonso F. Ratcliffe, AMP Project Director
AMP Administrative Headquarters
School of Engineering & Computer Science
California State University, Northridge
18111 Nordhoff Street
Northridge, CA 91330-8295
(818)885-4501

Chicago AMP

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Chicago State University
9501 S. King Drive
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Florida/Georgia AMP

Dr. Lynette Padmore, AMP Project Director
Department of Biology
Florida A&M University
Jones Hall
Tallahassee, FL 32307
(904)561-2467
(904)561-2446 (fax)

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President
University of Maryland Baltimore County
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Baltimore, Maryland 21228
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(410) 455-1210 (fax)

Mississippi AMP

Dr. Richard Sullivan, AMP Project Director
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Jackson State University
Jackson, MS 39217-0619
(601)968-2845/2174
(601)968-2025 (fax)

All Nations AMP

Dr. Joseph McDonald, AMP Project Director
Salish Kootenai College
Box 117
Pablo, MT 59855
(406) 675-4800
(406) 675-4801 (fax)

New Mexico AMP

Dr. Ricardo Jacquez, AMP Project Director
Civil Engineering Department
New Mexico State University
Box 30001, Dept. 3CE
Las Cruces, NM 88003
(505)646-3463/2397
(505)646-4149 (fax)

New York City AMP

Dr. Neville A. Parker, AMP Project Director
The City College
Convent Ave. & 138th St.
Bldg. Y - Room 313 A
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