The Roy G. Perry College of Engineering maintains a perfect balance between classroom theory and research application. While students concentrate on basic science, mathematics and engineering courses, they are also exposed to a broad range of humanities and social science classes, keeping them in touch with the world around them. Students’ research experiences have real-work applications through many funded projects from engineering design and homeland security to global collaborative learning.

Prospective students looking to establish a strong, hands-on educational foundation need to look no further than Prairie View’s Roy G. Perry College of Engineering.
Our College has an amazingly rich history and tradition of producing productive people. Over the past 10 years, the enrollment in the college has doubled to over 1,600 students. We offer six Bachelor of Science degrees: *Chemical Engineering, Civil and Environmental Engineering, Computer Science, Electrical and Computer Engineering, Mechanical Engineering, and Engineering Technology*. Also, we offer five graduate degrees: *General Engineering, Computer Science, Computer Information Systems, Electrical Engineering, and Doctor of Philosophy in Electrical Engineering*.
The Roy G. Perry College of Engineering

EXPERIENCE:

The mission of the Roy G. Perry College of Engineering is to sustain an infrastructure that will attract and maintain a world-class faculty that produces graduates with the highest level of professional standards. These graduates will be prepared for a career of lifelong learning that will result in leaders, productive workers, innovators, and entrepreneurs who will positively impact the increasingly multidisciplinary and diverse national economy.

This mission is accomplished through the following six goals:

1. Strive for excellence in engineering education through the dissemination and interpretation of knowledge through the educational programs.

2. Recruit and retain students who have demonstrated a capacity to excel in an environment that integrates advanced information technology with creativity, critical thinking, and problem solving.

3. Recruit and retain a cadre of world-class faculty effective in every endeavor of student-faculty interaction and committed to maintaining an academic standard that will ensure the students are highly competitive for graduate or professional school or for employment in the private or public sectors.

4. Promote scholarly activities through the continual development of our research centers and other collaborations in addition to further enhancing our incorporation of undergraduate and graduate research activities.

5. Continue strong external relations that cultivate and integrate our corporate and alumni constituents into partnerships with the College.

6. Maintain the appropriate infrastructure and support services necessary to provide an atmosphere conducive to learning.
The Roy G. Perry
College of Engineering
Undergraduate Programs

B.S. in Chemical Engineering

We offer two choices of degree programs for undergraduate students: the Bachelor of Science in Chemical Engineering (B.S.Ch.E.), and the B.S.Ch.E. with a Concentration in Bioengineering.

The Bachelor of Science in Chemical Engineering is unique in the engineering profession in that it requires a strong foundation in chemical principles, as well as in the physical and engineering sciences common to all branches of engineering. The primary goal of the program is to prepare engineers who are well-qualified to design and operate chemical processes.

B.A. in Civil Engineering

The Civil Engineering Program, through its rigorous curriculum, hands-on laboratory experiences and design-oriented course projects, will train students in a broad range of civil topics and engage them in research and service activities. The mission is to produce civil engineers who will become innovative practitioners, leaders, researchers, and entrepreneurs.

B.S. in Computer Science

The Computer Science program is designed to prepare students for the future needs and challenges of the industry. Students can engage in leading-edge research in computer science and engineering with faculty and staff who are committed to excellence in service and leadership.
The Bachelor of Science in Electrical Engineering is structured to provide each student with a sound background in the basic engineering sciences along with a thorough foundation in electrical engineering needed for the analysis and design of electrical and electronic systems.

The Bachelor of Science in Mechanical Engineering degree offers a practical hands-on approach to prepare graduates with a solid foundation for a career in their respective field. The goal of the Mechanical Engineering Program is to produce industrial, scientific, and technological leaders capable of systematically identifying, addressing, and solving technical problems whose solutions will benefit society.
M.S. in Computer Science

The Master’s in Computer Science degree programs prepare graduate students for positions in industry and research. Graduates are also provided with a foundation for continuing their study at the doctoral level in Computer Science or Computer Information Systems.

M.S. in Engineering

The Master of Science degree in Engineering is a general engineering program with four areas of concentration:

- Computer Science
- Computer Information Systems
- Electrical Engineering
- Engineering

Each area of concentration has an option of a thesis or non-thesis degree plan. Each option includes 12 semester credit hours of graduate courses in general engineering with the remaining hours to be determined by the student and their academic adviser during the first semester of acceptance to the graduate program as a degree-status student.

Ph.D. in Electrical Engineering

As a doctoral student in the Department of Electrical and Computer Engineering, you can conduct cutting-edge research with our faculty in one of four areas, computer engineering, telecommunications and signal processing, power systems, or microelectronics. You will develop independent research skills and begin to develop your own reputation as a research scientist.
The Electrical Engineering and Computer Engineering programs are accredited by the Engineering Accreditation Commission of ABET.
The Roy G. Perry College of Engineering Enhancement Institute CE2I is an innovative and intensive summer bridge to college program designed to prepare students for the rigors of an Engineering, Computer Science, or Technology curriculum and aid in the transition between high school and college. The institute is a five-week residential program, where participants will complete coursework in Math, Science, and Technology as well as participate in a series of Professional Development activities.

CE2I is specifically designed for incoming freshmen admitted to the Roy G. Perry College of Engineering at Prairie View A&M University only, who are interested in taking the necessary steps to jump-start their academic career.

PROGRAM ADMISSION

- First Time Freshman
- Acceptance to PVAMU
- Acceptance into the Roy G. Perry College of Engineering
- Passed all three parts of the TSI (Texas Success Initiative)
- Completed 2021-2022 FAFSA
The Center of Excellence in Research and Education for Big Military Data Intelligence (CREDIT)

The Center of Excellence in Research and Education for Big Military Data Intelligence (CREDIT) is funded by the U.S. Department of Defense and consists of a multidisciplinary team of faculty and research scientists from the Roy G. Perry College of Engineering. The center’s mission is to accelerate research and education in predictive analytics for science and engineering to transform our ability to effectively address and solve many complex problems posed by big data. The CREDIT Center will engage students in cutting-edge big-data research and provide training for them to become next-generation data scientists and engineers who are critical to the nation.

The Center for Computational Systems Biology at Prairie View A&M University (CCSB@PVAMU)

The Center for Computational Systems Biology at Prairie View A&M University (CCSB@PVAMU) will build strong capabilities in the research areas of computational biology and bioengineering, by utilizing the initial seed funding from the Texas A&M Chancellor’s Research Initiative (CRI). The CCSB contains faculty members from Electrical and Computer Engineering, Computer Science, Mathematics, Agriculture, and Biology. As part of the CCSB, a Next Generation Sequencing (NGS) facility will be established in the Roy G. Perry College of Engineering at PVAMU. This facility will provide the infrastructure support for biomedical informatics research, students training, and potential commercialization using high-throughput technology. In addition, the CCSB will pave the way to establish a Computational Biology and Bioengineering program at PVAMU as well as help forge collaboration with the team at Texas A&M University led by Professor Edward Dougherty. The alliance will take advantage of the complementary capabilities of both teams, foster close collaborations, and boost research and education in both institutions.
The Center for Digital Battlefield Communications (CEBCOM)

The Center for Digital Battlefield Communications (CEBCOM) works to achieve national excellence in telecommunication, research, and technology. It transfers and focuses education by collaborating with the U.S. Department of Defense, Texas state, and industry. On education, it helps evolve graduate programs to achieve national pre-eminence, encourages high-standing students to work in the center, and enables the department to recruit well-qualified faculty and provide opportunities for pursuing research in the center. It will also further its research and development focus and to achieve self-sustenance.

The Center for Energy and Environmental Sustainability (CEES)

The Center for Energy and Environmental Sustainability (CEES) at Prairie View A&M University (PVAMU) supports a rigorous and expanding program of research and teaching in the areas of renewable energy and environmental sustainability. The National Science Foundation (NSF) has awarded PVAMU a five-year grant to establish the CEES under the Center for Research Excellence in Science and Technology (CREST) program. CEES promotes research in the areas of biofuels, energy and environment, and wind energy, and will focus on innovative technical solutions in the energy arena.
The Center of Excellence for Communication Systems Technology Research (CECSTR)

The Center of Excellence for Communication Systems Technology Research conducts comprehensive research in the selected aspects of communication systems, Wavelets and Wavelet Transforms, Compressed Sensing/Compressive Sampling Systems, DSP Solutions, Signal/Image/Video Processing, Mixed Signal Systems, Communication Control Systems and High Speed (Broadband) Communication Systems. Among other emerging areas of research, it also seeks solutions to the problems that plague both military and commercial satellite and radar-based communication systems. The CECSTR is the only academic center of its kind in Texas, filling a gap in educating the state’s future leaders in emerging high-technology areas. It supports especially undergraduate and graduate students of electrical and engineering technology departments. CECSTR is funded by various industries and government agencies.

The Center for Radiation Engineering and Science for Space Exploration (CRESSE)

The Center for Radiation Engineering and Science for Space Exploration (CRESSE) focuses primarily on supporting NASA and other agencies that operate in space. Its research is concentrated on science and technology related to radiation protection and the effects of space radiation on electronics and biosystems. The center’s goal is to significantly contribute to NASA’s vast technology base, providing enabling technologies – such as new materials, electronics, shielding, and radio-protectorates for humans – that will make major space missions more successful, more reliable, safer, and less costly. Primary funding is from NASA programs, NASA contractors, and other government agencies.
The Future Aerospace, Science and Technology (FAST)

The Future Aerospace, Science and Technology (FAST) center on Lightweight Structural Materials and Processing conducts research in line with the needs of the Air Force, industry, and the government. Researchers thus use the center to process and characterize composites for both military and civilian uses. The FAST center strives to place Prairie View as a national leader in the development of lightweight, high-temperature polymer matrix composites. The FAST center is funded by the Air Force Office of Scientific Research.

The Texas Gulf Coast Environmental Data (TEXGED)

The Texas Gulf Coast Environmental Data (TEXGED) is a key player in supplying researchers and decision-makers with the information they need to plan and assess environmental problems along the U.S. Gulf Coast’s southern region. The TEXGED Center collects data from space through TRW Space and Technology and transfers it to a database system. This information serves as a tool for predicting environmental changes in the region and for producing methodology for risk assessment of the ecosystems.

The Thermal Science Research Center (TSRC)

The Thermal Science Research Center (TSRC) allows researchers to conduct both basic and applied research, development, and design in the broad engineering area of thermal science. Much of the work in the TSRC includes both experimentation and engineering modeling and simulation. Project collaboration links center researchers with their counterparts in such places as the European Community, Japan, and the former Soviet Union. The TSRC is funded by the U.S. Department of Energy, NASA, the U.S. Nuclear Regulatory Commission, Sandia National Laboratories, and the Center for Space Power.
Student organizations play an important role in helping students to adjust to the responsibilities of their profession and in recognizing high academic achievement. Students are encouraged to become active members of the organizations sponsored by the department. The department sponsors the following organizations:

**American Institute of Chemical Engineers (AIChE) Student Chapter**

This chapter is part of the national American Institute of Chemical Engineers organization, which is the premier professional society for chemical engineers nationwide. AIChE is the lifelong home of chemical engineers nationwide. The student chapter promotes professionalism, professional development, and service to society.

**Iota Beta Chapter of Omega Chi Epsilon**

This is a chapter of the National Honor Society Omega Chi Epsilon. The objectives of this organization are to promote and recognize chemical engineering academic excellence, graduate research, professionalism, sociability, character, and leadership among chemical engineering students.

**American Chemical Society (ACS) Student Chapter**

This chapter is a part of the national professional society for chemists and chemical engineers and is sponsored in cooperation with the Department of Chemistry.
American Nuclear Society PV Chapter (ANS-PV)

Student Chapter

The objectives of this organization are to promote the diverse field of nuclear science and technology, increase awareness and understanding of its diverse application in modern engineering, and to introduce students to the emergent career opportunities in nuclear engineering nationally and internationally. The student chapter is supported by the nuclear engineering program within the chemical engineering department. Membership is open to all who are motivated to be enlightened in the growing field of nuclear science and technology.

National Organization of Black Chemists and Chemical Engineers (NOBCChE)

Student Chapter

This chapter is part of the national NOBCChE organization. Its goals are to promote professionalism and advance technical careers for African Americans, with chemistry and chemical engineers as a particular focus. Membership is open to all who share these objectives. This chapter is co-sponsored with the Department of Chemistry.

Students of CHEMICAL ENGINEERING are also eligible for membership in the other professional and honor societies of the college and the university.
Admissions and Financial Aid

FRESHMAN ADMISSION

- Completed ApplyTexas application at www.applytexas.org
- Nonrefundable $40 application fee
- Official high school transcript. Distinguished, Recommended or Foundation with Endorsement High School Program, or GED certificate with a Minimum GPA: 2.80 on a 4.0 scale.
- Official SAT/ACT Test Score: Minimum scores: 710 SAT (Critical Reading and Math) or 800 SAT (Total Score) or 15 ACT
- The following STAAR scores are required: English I/Reading and Writing, English II, Biology, Algebra I, and United States History

TRANSFER ADMISSION

- Completed ApplyTexas application www.applytexas.org
- Nonrefundable $40 application fee
- Official transcripts from all institutions attended
- Transferring less than 15 semester credit hours will require the student to satisfy regular freshman admissions requirements
- Required 2.0 cumulative GPA on a 4.0 scale

SCHOLARSHIPS, GRANTS, AND LOANS ARE AVAILABLE FOR ELIGIBLE STUDENTS

Scholarships are available for incoming students as well as current students. All scholarships are renewable by maintaining a certain GPA, course load, and/or active enrollment status.

(Other requirements may apply)
University Contact Information

**Office of Admissions**
P.O. Box 519, M.S. 1009
Prairie View, TX 77446
Tel: **936-261-1000**
admissions@pvamu.edu

**Office of Student Financial Aid and Scholarship**
Willie A. Tempton, Sr. Memorial
Student Center, 3rd Floor
P.O. Box 519, M.S. 1005
Prairie View, TX 77446
Tel: **936-261-1000**
fadmail@pvamu.edu

**Office of Recruitment**
Evans Hall, Room 121
P.O. Box 519, M.S. 1011
Prairie View, TX 77446
Tel: **936-261-1081**
recruitment@pvamu.edu

**Prairie View A&M University**
The Roy G. Perry College of Engineering
P.O. Box 519, MS 2100
Prairie View, TX 77446
Tel: **936-261-9800**
engineering@pvamu.edu