Roy G. Perry
College of Engineering
Prairie View A&M University

POSSIBILITIES FOR YOUR FUTURE

SPRING 2011 ENGINEERING NEWSLETTER

Engineering Enrollment, Retention Climb as College Ramps Up Student-Centered Programs

Bolstered by a 25 percent increase in enrollment over the past two years coupled with a record-setting retention rates among first-time, full-time freshmen, The Roy G. Perry College of Engineering (COE) is firmly on track with new student support initiatives that are helping students come to school, stay in school and complete their academic goals to become some of the most outstanding engineers, computer scientists and technologist in the nation.

Dr Kendall T. Harris, Dean of the Roy G. Perry College of Engineering

Dean Kendall T. Harris is justifiably proud of his new initiatives that have also prompted an increase in COE student scholarships to more than $450,000 in 2010-2011, including $260,000 awarded directly by the college.

Research funding continues to rise with more than $7.4 million earned by PVAMU researchers and faculty during the past year. Separate mention of these Centers and projects appear throughout this newsletter.

The college's dedicated faculty and student scholars can be found throughout the campus contributing to new discoveries in environmentally-responsible energy and biofuels, looking for ways to keep astronauts and instruments safe from space radiation, engaging in synthetic biology research with their counterparts at UC Berkley, MIT and Harvard, improving battlefield communications for the military and delving into a myriad of research on how to enhance student learning, to mention just a few.

Dr. Harris is determined to maintain the perfect balance of classroom theory and research, equipping his college and its students with the academic and research tools required to position the Roy G. Perry College of Engineering among the global leaders in engineering education, research and service.

FINDING A UNIVERSITY WITH THE RIGHT FIT IS EASY! We're prepared to help. Call 936-261-9890. Or visit the Roy G. Perry College of Engineering at www.pvamu.edu/engr.

INSIDE

www.pvamu.edu/engr

New $5 Million CEES Center Focuses on Energy Engineering

The National Science Foundation (NSF) has picked a diverse team of 11 Prairie View A&M University (PVAMU) faculty and scientists to establish a nationally-recognized center focused on energy engineering. The newly-funded Center for Energy and Environmental Sustainability (CEES), will engage Prairie View students on research questions that lead to scientific and technological breakthroughs needed to fill critical gaps in the future utilization of environmentally responsible and sustainable energy. The Center will specifically focus on biofuels, wind and nuclear energy to replace depleting supplies of fossil fuels and curtail the production of greenhouse gases.

NSF Center for Energy and Environmental Sustainability (CEES) will search for scientific breaktroughs in biofuels, wind and nuclear energy.

Dr. Sukesh Aghara, Associate Professor in the Chemical Engineering Department directs the five-year, $5 million CREST Center. He is backed by a diverse group of faculty and researchers representing two colleges and six departments at PVAMU. Together, these Center leaders will come together to build a robust research environment at PVAMU with emphasis on integrated research and education goals.

Dr. Sukesh Aghara, CEES Center Director

While CEES energy research will focus on innovative technical solutions for biofuels, wind energy and environment-related energy issues, the Center's vision involves two overarching goals, the first being the formation of the national energy research center. Equally important is the second goal to significantly increase the number of students from underrepresented groups who earn their B.S., M.S. and Ph.D. degrees in science, technology, engineering and mathematics (STEM) fields.

(Continued on Page 3)

Summer Outreach Activities Critical to COE Success

Many effective summer outreach initiatives provide an array of student-centered pre-college programs steeped in best-practices and lessons learned through continuous assessment, all designed to produce an academic eagerness for success at the college level.

The flagship is the Roy G. Perry College of Engineering Enhancement Institute (CE2I), a residential math-intensive, five-week summer bridge-to-college program intended to prepare students for the rigors of a pursuing a STEM major in college.

The dual component Engineering Education Workshops, one for Counselors (EEWC) and one for Teachers (EEWT), provide workshops for high school counselors and mathematics/science teachers, respectively. The EEWC is a three-day workshop targeting the counselor's understanding of engineering education. The EEWT is five days. Both are held during July.

The Summer Transportation Institute (STEI) seeks rising 11th and 12th graders and provides a two-week on-campus learning opportunity that gives participants experiences to enhance their awareness of career opportunities in engineering and transportation. The University Center for Transportation Mobility sponsors the program.

The Minority Introduction to Engineering and Science (MITES) program leans toward sophomore and junior-level high school students with an interest in engineering and science. The two-week program is held in June.

The Summer Engineering Education Camp (SEEC) is a week-long on-campus program for male and female middle school students interested in engineering. Hands-on learning activities, experiments and laboratory tours provide outstanding student enthusiasm.

The ExxonMobil Bernard Harris Summer Science Camp (BHSSC) helps 5th, 6th and 7th grade students discover the excitement of science, technology, engineering and mathematics. More than 60 students are admitted to the two-week on-campus program each summer.

CEES Cemter Director Dr. Sukesh Aghara gives graduate students Khoie Pavastoo and Ruben Gener tips on instrument calibration.

CEES Befriending Environment

(Continued from Page 2)

CEES biofuels research is guided by Dr. P. Biney, Dr. A. Amarasekara and Dr. M. Gyamerah. Together, they will tackle the nation's need to curtail greenhouse gases by advancing bio-renewable substitutes for fossil-based hydrocarbons in order to reduce the nation's dependence on foreign oil. Their work will include fundamental studies to understand the reaction pathways that affect the final composition of bio-oil and other by-products as these are varied to optimize production yields and quality.

Dr. Ziaul Huque and Dr. Donald Harby will focus on research seeking ways to optimize wind production efficiency by determining the optimum shape and construction materials needed for future turbine blades. This team will apply multi-objective techniques with surrogate models to determine the relevant aerodynamic loads on blades, computational fluid dynamics simulations and structural analysis of blades using Finite Element Method (FEM).

Research on energy and the environment, led by Dr. R. Kommalapati, Dr. L. Vasudevan and Dr. S. Aghara, seeks to determine the environmental impact of continued utilization of conventional energy technologies (fossil and nuclear) against the backdrop of advanced technologies including nuclear, biofuels and wind. The group will also assess regional effects of various emission control strategies and identify back-end fuel cycle management strategies for safe nuclear power plant operation and waste management.

Combining all these research groups is the Education and Outreach Team (E&O) that consists of Dr. Aghara (integration), Dr. A. Kumar (K-12 programs), Dr. Felecia Nave (University liaison), and Dr. Kelvin Kirby (College of Engineering liaison). The E&O team will spearhead a multi-level education and outreach strategy built on the development of an "energy engineering Learning community "at the University.

The E&O team will work closely with research teams to develop an undergraduate minor in Energy Engineering and a master's degree with an Energy Engineering focus targeting graduate students.

In addition to a strong academic program, CEES students will participate in research experiences, "job shadowing," mini-projects and senior design projects in partnership with the center's collaborators, all as part of the Center's leading-edge outreach and education components.

CEES scientists and engineers, with involvement of students, will work collaboratively within academic, industry and national laboratory partners on transitional and transformative global energy systems research that addresses national and global challenges of energy and environmental sustainability.

SynBERC Alerts PVAMU Students to Synthetic Biology Research at UC Berkley, MIT, Harvard

Delegates to the Synthetic Biology Engineering Research Center (SynBERC) symposium filled the second floor conference room of the Willie Albert Tempton Sr. Memorial Student Center for the November 5, 2010 gathering which featured addresses by noted biologists and presentations by undergraduate and graduate students involved in the multi-institution research effort to construct the foundation for future synthetic biology advances.

Among the noted speakers was Dr. Raul Cuero, a research scientists and Distinguished Professor of Microbiology, Microbial Biotechnology, Mycotoxins and Environmental Microbiology at Prairie View A&M University.

For the last 14 years, Dr. Cuero has been carrying out simulated biogenesis experiments utilizing different types of bacteria growing in an electrolysis cell with electro-sensors under ultraviolet radiation (UV) and in liquid/soil substrates containing iron. This environment seeks to simulate conditions at the beginning of Earth as well as current conditions on Mars. Dr. Cuero has been able to show growth of bacteria, but differential DNA and RNA expression due to various concentrations of iron and levels of UV radiation.

Top Right, PVAMU undergraduate researchers junior Rami El-Kweif, left; and senior Okoia Uket, both majoring in Chemical Engineering, work with University of California at Berkley Ph.D. candidate Weston Whittaker at Dueber Lab, UC Berkeley. Photo by Peg Skorpinski is courtesy of Synthetic Biology Engineering Research Center, an NSF-funded engineering research center at UC Berkeley.

One of three Prairie View A&M University undergraduate researchers who interned with the program spoke during the meeting. Okoia Uket, a senior majoring in Chemical Engineering, presented a program on determining the frequency and performance of sequences in genes predicted to function as ribosome binding sites. The other undergraduate researchers, junior Rami El-Kweif majoring in Chemical Engineering completed an internship at Dueber Lab at Berkeley while junior Ukenia Bell, interned with MIT in the Prather Lab. SynBERC is funded by the National Science Foundation's Engineering Research Center with University of California at Berkeley serving as the lead organization with Prairie View A&M University, UC at San Francisco, Harvard, Massachusetts (MIT) and Stanford University as partner institutions. The vision is to catalyze biology as an engineering discipline by developing foundational understanding and technologies that will let researchers design and build standardized, integrated biological systems to accomplish many specific tasks.

SynBERC at the University of California, Berkley actively recruits PVAMU undergraduates for Summer 2011 internships. Contact Dr. Felecia Nave for additional information.

Houston's Harmony School Welcomes PVAMU Team

HOUSTON, TX – Ninety-six students attending the new Harmony School of Discovery participated enthusiastically in an Ice Cream Engineering Project and catered luncheon hosted by a team of Prairie View A&M University administrators, faculty members and eight PVAMU students at their Barker-Cypress Road and West Little York campus in Houston on November 18.

Dr. Kendall T. Harris, Dean of the Roy G. Perry College of Engineering, along with Dr. Irvin W. Osborne-Lee, professor and head of the PVAMU Department of Chemical Engineering; and Dr. Abburi Kumar, an Electrical Engineering professor and head of Physics in the College of Arts and Sciences, led the Prairie View delegation to the K-8 campus which will expand to a K-12 facility for the next school year.

Dr. Harris talked with students about the relevance of science, mathematics and engineering to life and careers. Dr. Kumar followed with a presentation on "Technology – Today and Tomorrow."

Dr. Osborne-Lee did an outstanding job of recruiting almost 100 students to make ice cream which was followed by a lunch at Red Lobster.

Dr. Kumar, who returned to the campus during the first week of December to discuss a future partnership in more detail, said faculty and administrators at the high-performing college preparatory charter school are enthusiastic about the prospects of working with PVAMU. Harmony students focus on mathematics, science, engineering and computer technologies. Harmony Public Schools claim a college acceptance rate of 100 percent.

At the top, Dr. Kendall T. Harris, Dean, Roy G. Perry College of Engineering, puts the emphasis on hands-on STEM learning during a recent Harmony School visit.

Salt Lake Students Find Ice Cream Engineering "Cool"

SALT LAKE CITY, UT, – Students from Prairie View A&M University not only put their best foot forward, but managed to amaze about 500 seventh grade students by using engineering skills to make tasty ice cream for more than 500 seventh grade students at Salt Lake City, UT, on Nov. 8, 2010.

Dr. Irvin W. Osborne-Lee, who accompanied the PVAMU chemical engineering students to Utah, for the week-long annual convention of the American Institute of Chemical Engineers (AIChE), said a team of 20 engineering students showed students from Salt Lake's Bryant Middle School to use engineering skills to mix up their own batches of vanilla ice cream.

Prairie View's Sally Torres, a 26-year-old chemical engineering student, was one of the students amazing students with their unexpected coolness as ice cream manufacturers. Torres said she plans to work in the oil and gas industry once she completes her degree plan.

Students couldn't decide which part of making ice cream was the "funnest," Torres helped students put milk, sugar and vanilla inside a small sealed plastic bag, then placed that bag inside a larger one with ice and rock salt. Shaking the combined bags removed the heat from the milk and caused it to freeze.

$5 million CRESSE Project Researching Ways To Keep NASA Flight Crews Safe from Radiation

The National Aeronautics and Space Administration (NASA) picked a small, highly-specialized team of Prairie View A&M University (PVAMU) researchers for a five-year, $5 million dual objective mission to find ways of keeping astronauts and their delicate flight instruments safe from the harmful radiation that silently threatens flight crews and spacecraft once they leave the protection of the earth's atmosphere.

When man sets foot on the moon again, embarks on the first interplanetary spaceflight mission to Mars or aims for a historical encounter with an asteroid, researchers at the PVAMU Center for Radiation Engineering and Science for Space Exploration (CRESSE) want to make sure the issue of space environment radiation is way down on the list of things astronauts must be concerned about. Future space flights to Mars and back will expose humans and their electronic equipment to as much as three years of non-stop cosmic radiation.

CRESSE's educational goal focuses on the training of students in radiation engineering and science with the objective of increasing and contributing to the pipeline of underserved minorities qualified to transition confidently into the aerospace workforce. The Center ultimately intends to support three doctoral, twelve masters and approximately 20 undergraduate researchers, augmented by other PVAMU researchers and collaborating departments.

The goal of CRESSE research, currently beginning year three of the five-year program, concentrates on the development of multiple testbeds designed to simulate planetary surfaces so that realistic space radiation experiments can be created on Earth using proton and neutron beam facilities throughout the country.

Dr. Richard Wilkins leads the center's research into the space radiation effects on electronics. His objective is to maximize the Technical Readiness Level (TRL) of CRESSE research instruments.

Space radiation transport modeling by Dr. Sukesh Aghara has as its objective research and design activities that target the collection of experimental data, code comparisons and cross-section data measurements for radiation transport codes and related research.

The design, development and characterization of the response of a suite of radiation detectors and supporting instrumentation and electronics is the objective of Dr. Brad Gersey, who leads CRESSE's space radiation instrumentation and dosimetry component.

CRESSE Investigator Dr. Prem Saganti is making strides in space radiation environmental modeling by developing models for calculated radiation data transported through spacecrafts/spacesuits.

Dr. Jianren Zhou leads the center's micro-composite fabrication efforts. His objectives include the development of novel regolith stimulant/polymer microcomposites that meet the requirements for providing effective shielding of space radiation in a manner suitable for surviving long-term space environments.

CRESSE Deputy Director Kelvin Kirby, left, joins graduate students Quincy Johnson, Ijette and Julian Norman during a recent NASA trip Kennedy Space Center, Florida

Dr. Kelvin Kirby oversees the CRESSE educational objectives that include training and guidance of well-qualified students in those engineering and science disciplines that significantly increase the pipeline of underserved minorities in the aerospace workforce.Seven students will serve as Johnson Space Center summer interns in 2011. Cutreach also includes the website www.cresse-pvamu.com.

PVAMU Computer Science Researcher Yang, Colleagues Conclude Productive Summer, Fall

Dr. Yanggao Yang, an associate professor and interim department head of Computer Science with the Roy G. Perry College of Engineering, was joined by other PVAMU faculty in the preparing of three journal publications and in new presentations given during the Summer and Fall 2010 period.

Dr. Yang and his colleagues also wrote two successful grant proposals providing a total of $230,000 for Prairie View A&M University and attend two major conferences.

"Make 3D Object Surfaces Smoother: Two New Interpolating Subdivision Schemes" is the title of Dr. Yang's IEEE Computing in Science and Engineering journal publication. Dr. Yang was joined by Dr. Lin Li on "Turn Nintendo Wiimote into Handheld Computer Mouse" which will appear at IEEE Potentials. "A New Cross Subdivision Scheme for Surface Design" by Dr. Jian-ao Lian and Dr. Yang was accepted by the Journal of Mathematical Analysis and Applications.

A $170,000 grant from the National Science Foundation was awarded to PVAMU for the Target Infusion Grant proposal written by Dr. Yang, Dr. Lin Li and Dr. Sherri S. Frizell titled, "Infusing the Tablet PC and Problem Based Learning into Computer Science Curriculum to Enhance Student Ability in Computing Problem Analysis and Software Design."

A Thurgood Marshal College Fund Technology Award for Faculty Innovation in Education provided another $60,000 from the proposal written by Dr. Yang, Dr. Li and Dr. Kiranmai Bellam.

Dr. Yanggao Yangdecked out in 3D goggles.

Plasma Physics Is Focus of PV Team

Two Roy G. Perry College of Engineering students and two PVAMU research scientists were in Chicago, IL Nov. 6-12 for the 52nd Annual Meeting of the American Physical Society Division of Plasma Physics at the Hyatt Regency-Riverwalk.

Students Ezra Sidney and Jermain Goss, background, join faculty at the 52nd Plasma Physics meeting.

Students Ezra Sidney, a chemical engineering student; and Jermain Goss, an electrical and computer engineering major, attended the week-long session. Both students work in the Plasma Lab at the Solar Observatory Department on the campus of Prairie View A&M University where they are research associates to Dr. Tian-Sen Huang, a senior research scientist at the solar observatory; and Dr. Xiaokang Yang, a research associate at the same facility.

The PVAMU students attended the meeting for the purpose of to increasing their knowledge of plasma physics and to present their research topics.

SHPE forms COE chapter

The Society of Hispanic Professional Engineers (SHPE) joined the College of Engineering in fall 2009. Members attended the National SHPE Conference in October 2010, where five of six students interviewed with 3M, Delta Airlines, Exxon and others.

SHPE members dedicate their time every three months to pick up trash and collect recycled items for the Adopt-A-Highway project. SHPE's goal is to develop professionalism toward the Hispanic community and their supporters within the Roy G. Perry College of Engineering at Prairie View A&M University.

SHPE also participates in and host events held by the COE and the Multicultural Affairs Department. A primary goal is to establish a junior chapter in hopes of encouraging more high school students to pursue degrees in STEM disciplines.

Dr. Lijun Qian Combines $830,000 in Research Funding with 29 Publications, Journals, Papers

A half-million dollar award involving U. S. Army battlefield research plus $365,000 for for wireless network research funded by the National Science Foundation made a productive year for Dr. Lijun Qian, associate professor in the Electrical Engineering faculty of the Roy G. Perry College of Engineering at Prairie View A&M University.

Dr. Qian's co-principal investigators for the "ARO Center of Battlefield LOS/BLOS Lethality Research" funded from March 2010 to February 2011 by the U. S. Army Research Office are Dr. Dhadesugoor Vaman, endowed professor with the College of Engineering; and Dr. Annamalai Annamalai, associate professor of electrical engineering.

The researcher is joined by Dr. Annamalai as co-principal investigator for "A Software-Defined Radio Based Testbed for Next Generation Wireless Networks Research funded for the next three years by NSF.

Dr. Lijun Qian demonstrates a project using the Universal Software Radio Peripheral (USRP) device funded by the National Science Foundation.

IBM Corporation Investing Heavily in PV Computer Engineering Students

Prairie View A&M University's new Cloud Computing and Simulation Laboratory which opened 10 months ago continues to provide computer engineering students with digital computational facilities umatched anywhere else on the campus.

The $168,000 IBM-donated center provides students and faculty with 56 Blade Center" servers that provide great opportunities for students to practice their skills in a hands-on laboratory equipped with the latest leading-edge technology.

PVAMU computer science graduates, with the support of IBM, are in high demand because of the current expansion of computer and computer-related industries.The increasing application of newtechnology to all aspects of engineering, industrial development, consumer and consumer-oriented industries creates a need for well-trained interface designers, software specialists, networking specialists, and sales representatives.

Cloud Computing and Simulation Laboratory

PRAIRIE VIEW A&M UNIVERSITY

Sponsored by IBM

From the left, Dr. Lin Li, Dr. Kianmai Bellam, Curtis Krajca and Ravi Iyengar check the performance of in-house software used for comprehensive electronic testing using digital ink.

Dr. Li Tackles Student Learning

An associate professor in the Computer Science Department is currently involved in two research projects which investigate ways to enhance student learning while developing in-house software for use in comprehensive electronic testing using digital ink.

Dr. Li, who also serves as a Graduate Program Coordinator, presented his research papers at several conferences including the Association of Computer/ Information Sciences and Engineering Departments at Minority Institutions (ADMI), the Association for Computing Machinery (ACM), 2010; as well as the American Society for Engineering Education (ASEE), 2010.

Two new grants totaling $229,000 are under Dr. Li's supervision including a $169,000 award by the National Science Foundation for a project extending from September 2010 to September 2012 and a one-year $60,000 Department of Energy (DOE)/Thurgood Marshall College Fund (TMCF) project extending through September 2011. In addition, Dr. Li holds a continuing COE/TMCF $50,000 grant.

Dr. Li's two published conference papers are augmented by a journal paper accepted to appear in the January/February 2011 issue of IEEE Potentials, a magazine dedicated to undergraduate and graduate students and young professionals that explores career strategies, research and important technical developments.

Regents Professor Perkins in Demand

December was a busy month for Dr. Judy A. Perkins, professor in the Department of Civil and Environmental Engineering and a Texas A&M University Regents Professor.

During the last month of 2010, Dr. Perkins was awarded a $50,000 project by the Texas Department of Transportation for her work on "Synthesis of Best Practices for Emergency Operations."

Dr. Perkins also reported that two papers had been accepted for publication by the International Transportation Economic Development (I-TED) Conference.

With her research interests running toward radio frequency identification (RFID), transportation logistics, emergency management and economic assessment of transportation infrastructure projects, among others. In addition, Dr. Perkins currently has three active research projects:

Team Begins Wind Tower Research

On January 1, 2011, a Roy G. Perry College of Engineering faculty member was announced as part of a three-university research team awarded a National Science Foundation grant for a Network for Earthquake Engineering Simulation Research-Core Research (NEEESR-CR) project to evaluate the most effective foundation system for offshore wind towers.

Dr. Ramalingam Radhakrishnan, a member of the Department of Civil and Environmental Engineering at PVAMU, and researchers at the University of Connecticut are partnering with Texas A&M University in the three-year project to examining the performance of different wind tower systems when the structure is subjected to both wind and wave loading.

Texas A&M is the lead university for the $540,000 study.

Dr. Radhakrishnan, as Co-Principal Investigator, will share in program responsibilities and research resources through December 31, 2013

Fall Activity Schedule Keeps Roy G. Perry College of Engineering Faculty, Students Busy

Dr. Sharma on Move with Conferences, Papers, Publications

Dr. Kal Renganathan Sharma, adjunct professor in the Chemical Engineering Department of the Roy G. Perry College of Engineering, has a lot to show for his June through December 2010 work at Prairie View A&M University.

During that time frame, Dr. Sharma obtained two book contracts, saw three other books go to print published a book chapter and a journal article and presented 15 conference papers.

During the same period, he was accepted an Honorary Fellowship with the Australian Institute for High Energetic Materials at Monash University in Melborne, Australia. He also found time to serve as a reviewer for five papers and as involved in four student papers.

Dr. Shakir Spearheads Distribution of New Environmental Journal

Dr. Safwat H. Shakir last year was the driving force behind the establishment of the new "international Journal for Environmental Science and Engineering (IJESE) that was recently printed and uploaded to the Internet at www.pvamu.edu.edu/texged. A department of Education grant provided $112,000 in funding to begin development the TEXGED Center in 2009.

The new journal was issued by the Texas Gulf Coast Environment Data (TEXGED) in collaboration with the Roy G. Perry College of Engineering at Prairie View A&M University and the Center of Research and Studies of Protectorates at Ain Shams University in Egypt. Future issues of the journal will be published quarterly. Dr. Willie Trotty, vice president of Research at Prairie View A&M University; and Dr. Kendall T. Harris, dean, Roy G. Perry College of Engineering, sit on the editorial board. Dr. Shakir, a research scientist in the Chemical Engineering Department at PVAMU, is the managing editor.

Mrs. Sharon Richards, left, is honored by Dr. Irvin Osborne-Lee, second from right, upon her retirement after 40 years with the and the Department of Chemical Engineering. Present for the celebration, from the left, are Doctors Charles Toliver, Kamel Fotouh, John Fuller and, far right, Shield Lin.

Engineering Department Salutes Mrs. Richards upon Retirement

Monday, January 31, was a red letter day for Mrs. Sharon Richards, who was honored by Roy G. Perry College of Engineering administrators, faculty and staff upon her retirement.

After completing her higher education goals at Prairie View, Mrs. Richards joined the College fo Engineering Dean's office as a student assistant in 1972, serving in a number of capacities in the early years.

For the past 13 years, Mrs. Richardson was a valued administrative secretary for the Department of Chemical Engineering.

Dr. Kendall T. Harris, Dean of the Roy G. Perry College of Engineering, was the first of a dozen or more administrators and co-workers to laud the honoree in ceremonies that included a luncheon and gifts at the C. L. Wilson Building.

The program included a humorous script narrated by the COE's Chris Galvez and participated in by several of Mrs. Richards' friends and colleagues.

CE²I unmasks engineering careers for 60 eager students

Engineering Enhancement Institute students enjoying field trip

For five weeks each summer, the Roy G. Perry College of Engineering Institute (CE²I) immerses 60 recent high school graduates in an intensive on-campus summer bridge-to-college program leading to a rewarding career in engineering, computer science or technology.

This program is a great opportunity for our students to meet and be taught by some of the most talented faculty that PVAMU has to offer and the opportunity to interact with other students who have common interests.

Participants complete rigorous coursework in technology, science, professional development and an intensive math focus. The goal is for students to achieve a mastery of at least one math-level higher than the student placed when entering the program

Students are also introduced to the basic concepts in chemistry, physics and computings with a currriculum that includes field trips to area engineering and technology industries, personal and professional development workshops.

CE²I allows on-campus participants for five weeks to live the lives of college students, developing time management and study skills, learning style inventories and becoming familiar with the use of study groups.

'Community Scholars' Benefit from ESSC

After more than $600,000 in renovations of renovations that involved a suite of rooms on the second floor of the C. L. Wilson Building, the new Engineering Student Success Center (ESSC) is helping PVAMU students with new computer labs, project rooms and facilities for intense tutorial and study sessions.

Dr. Kendall T. Harris, Dean of the Roy G. Perry College of Engineering (COE) said the ESSC is also helping the college address retention issues, centralizing COE student activities and streamlining the placement of engineering students into permanent intern and cooperative employment and career opportunities.

Photo from 2010 Engineering Week activities

Student Success Center Opens

The Student Success Center opening signals a new era of "Community Scholars" at Prairie View A&M University. Chris Galvez, below, checks out the plan guide on display at the C. L. Wilson Building.

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Roy G. Perry College of Engineering ABET Accreditation on Target

Five Roy G. Perry College of Engineering programs and two engineering technology programs underwent a successful October assessment visit by the Accreditation Board of Engineering and Technology (ABET) in what Dean Kendall T. Harris called the most successful ABET visit to this college, by far, in the last twenty-plus years."

Chemical, Civil, Computer, Electrical and Mechanical Engineering, plus Computer Engineering Technology and Electrical Engineering Technology are all expected to receive full reaccreditation. ABET will issue final reports to the College in July 2011. It will be the first full accreditation designation for the college's newest program, Computer Engineering. The Computer Science program earned full reaccreditation by the Computing Accreditation Commission (CAC) of ABET in July.

ABET accreditation is a voluntary, peer-review process requiring programs to undergo comprehensive, periodic evaluations conducted by teams of volunteer professionals working in industry, government, academe and private sectors within ABET disciplines. The focus is on program curricula, faculty facilities, institutional support and similar areas.

A key element of accreditation is the requirement that programs continuously improve on the quality of education provided by setting specific, measurable goals for students and graduates, assessing their success and enacting improvements based on assessment results.

Accreditation also helps students and their parents choose quality college programs and enables employers and graduate schools to recruit graduates they know are well-prepared. Assessment data is used by registration, licensure and certification boards to screen applicants.

Our Mission . . .

The Roy G. Perry College of Engineering takes pride in an infrastructure that attracts a world-class faculty and produces highly-skilled engineers with the highest levels of professional ethics and personal standards.