

TIGER BYTES



ECE Doctoral Program Nationally Recognized

The U.S. News & World Report's "America's Best Graduate Schools" 2008 edition was recently published. In the category of engineering, U.S. News surveyed 199 engineering doctoral programs. Five Engineering programs in LSU's College of Engineering were ranked. These included the Electrical and Computer Engineering Department which placed 96th out of 167 electrical and computer engineering programs.

"This is particularly exciting for ECE since this is the first time our program has been ranked by the U.S. News & World Report. Note that ECE did not creep into the lower reaches of the rankings but jumped in 71 places above the lowest rating. We have been nationally well-known for many years but unaccountably were never before featured in the U.S. News & World Report rankings and assessments," said Dr. Clive Woods, Chairman of the ECE Department. "The fact that we have been placed so highly at our first listing demonstrates the sustained quality of our program and that we are not merely a marginally successful Department. We also salute the other LSU Departments that have substantially improved their positions in these internationally-recognized listings. We echo Associate Dean Constant's comments that Engineering at LSU is now clearly gaining significant momentum as it moves forward."

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Engineering Residential College (ERC)

LSU is implementing one of the oldest ideas in university education, residential colleges. Students may opt for lodging in a university residence with other students intending to study in the same college. For example, the Engineering Residential College is open to students declaring an engineering major or engineering undecided, and who enroll in college trigonometry or calculus courses. Incoming freshmen will be given preference for participation in the program as well as priority scheduling for certain courses. Onsite tutoring will be available as well as regularly scheduled academic advising with LSU College of Engineering counselors and faculty.



LSU's Engineering Residential College

John Scalzo, ECE faculty member and Undergraduate Coordinator, is Associate Rector in the Engineering Residential College. "The primary goal of the residential college is to improve retention rates of freshman engineering students", said Scalzo. "Currently, 40% of freshman engineering students will change their major from engineering before they are sophomores. For most engineering curricula, this means they will decide to no longer be engineering students before they ever set foot into an engineering class," Scalzo continued.

MESSAGE FROM THE CHAIR

Looking back over the past year, which was my first at LSU and also my first as Department Chair, I see considerable progress towards several important goals of this Department. First and foremost, it was frustrating that our Department was continually excluded from the widely quoted *US News & World Report* magazine rankings of the major US research-led engineering programs. Although the benefits (or otherwise) of subject-wide rankings of university departments continue to be hotly debated in higher education, the Department has for many years merited a ranking position but insufficient peer responses from others about our Department made our evaluations statistically insignificant. This has now changed. The ECE Department as LSU now walks with the giants, not just creeping into the bottom of the ranking list but almost making the halfway point of the ECE listing. Even to be listed at all is a major achievement of which we can all be proud, but to enter so highly is an outstanding confirmation of the quality of our faculty and students. This bodes well for the future as the word spreads of the fine quality of education and scholarship here.

Our excellent faculty continue to make news. We were all delighted that the President of Poland awarded Dr. Leszek Czarnecki a titled Professor degree in Technological Sciences— an extremely prestigious award. The ABET course accreditation panel is nationally prominent and Dr. Suresh Rai was recently appointed a member of this highly influential body. ECE faculty have been awarded many new research grants by the National Science Foundation, the U.S. Air Force, the Louisiana Transportation Research Center, the Louisiana Board of Regents, and other funding sources, driving forward our quest for excellence in both teaching and research. As a result, our graduates continue to be in high demand by companies as diverse as Shell, ExxonMobil, Fluor, CenturyTel, EDG, Infosys, Dow, CenterPoint Energy, Alabama Power, Entergy, Broadcom, and others. Another very positive development is that representatives of major companies like Mathworks and Cypress Semiconductor have recently visited us to make full-scale formal presentations of how we can work together in the future.

The Department continues to embrace alumni relations actively, complementing the “Forever LSU” capital campaign that has also been launched by the University with a significant lead by the College of Engineering. “Forever LSU” includes a high profile ECE Department presence from a strong team led by alumnus Les Broussard. Over the coming months this campaign will be gaining considerable momentum as it reaches out to our alumni and friends.



Dr. R. Clive Woods,
*Department Chair and Voorhies
Distinguished Professor*

**In December 2006 Dr. Woods was elected a Fellow of the Institution of Engineering and Technology, formerly known as the Institution of Electrical Engineers. This is the British counterpart of the IEEE.
Congratulations Dr. Woods!**



ECE in support of *Forever LSU*

In support of the Forever LSU: the Campaign for Louisiana State University, the ECE Forever LSU Campaign Committee was formed. The ECE Campaign Steering Committee (CSC) is chaired by Les Broussard (EE '58) and members include Joe Domino (EE '70), Edwin “Burt” McNeil (EE '46) and William “Bill” H. Higgins (EE '65). The function of the ECE Campaign Steering Committee is to help connect with ECE alumni and friends, to share the good news of what is happening in the department, and to invite them to join in investing in the future of ECE students in a variety of ways.

The goal is to truly transform the department through significant investments by alumni and friends. “We are asking all of our fellow alumni to consider joining us in making a difference in the Department through this campaign,” said Clive Woods, ECE Chairman. The ECE campaign target has been set at \$8 million for departmental initiatives in the next four years and to secure a gift(s) of at least \$10 million to name the department.

The “Case Statement,” which is available upon request, outlines the Department’s priorities for the campaign. It includes investment in graduate student fellowships, faculty support, laboratories and equipment as well as general support for ECE. Alumni and friends who are interested in playing a role in this important endeavor are urged to contact one of the Campaign Steering Committee members, ECE Department Chair Dr. Clive Woods, or to call Tammy V. Abshire at (225) 578-5478.

We are delighted to acknowledge significant support already received from the Mark and Carolyn Guidry Foundation, Shell Corporation and Mr. Burt McNeil.

SPRING COMMENCEMENT



Congratulations to all of our Spring 2007 Graduates!

Bachelor of Science in Electrical Engineering

Brian Aidoo
 Dmitriy Barashkov
 Bryan Keith Burnham
 Joseph Dominic Cali ***
 Marlon Kinte Carlisle Caraballo
 Daivon Jamar Craft
 Celeste Renee Daigle
 Niclolas James Defelice
 Gregory William Domingue
 Bryan Paul Dumas
 Raphael Duplechain III
 Joseph Lyle Felps
 William Stephen Fowler
 Adam Joseph Griffin
 Joshua Stephen Hayden **
 Harlan Phillip Hock, Jr.
 Cheng Yu Ji
 Benjamin Mark Kasten
 Rickey John Kastner, Jr.
 Heath Joseph LeBlanc ***
 Eric O'Neill Leefe
 Michael Christopher Louviere
 James Alexander McAndrew
 Asaduzzaman Mohammad **
 Christian Pierre Naquin
 Brandon Lee Nason
 Adewemimo Akinola Oyekenu
 Justin Michael Price
 Evan Barnard Rinehart
 Derrick Robey
 Ned Joseph Roques
 Ishtiaq Rouf
 Robert Jude Ruiz
 Sebina Shrestha
 Jeffrey David Smith *
 Brandon Francis Staub
 Christian Raymond Theriot ***
 Courtney J. Triggs
 Eric Michael Valenciano
 Lamar Etienne Waguespack III

*** Summa Cum Laude
 ** Magna Cum Laude
 * Cum Laude

Doctor of Philosophy in Electrical Engineering

Xiang Gao
 "Channel Modeling and Resource Allocation in OFDM Systems" (Associate Professor Morteza Narghi-Pour)

Master of Science in Electrical Engineering

Chetan N. Chitnis
 Daniel James Hebert
 Adam Matthew Landry
 Chunbo Ni
 Jeong Tae Ok
 Raghu Ramachandran
 James Harold Thomas
 Hong Zhao

Recent ECE graduate to volunteer his computer knowledge in San Francisco



For the next year, **Eric Leefe** will be the assistant Director of the Computer Training Center run by San Francisco Network Ministries in San Francisco, CA. The agency provides its services for free to the residents of the Tenderloin, the poorest neighborhood of the city. He will be responsible for teaching classes (Word, Excel, web design, etc), running the kids' program (homework, field trips), fundraising, and managing other volunteers. Eric will also be in charge of network administration and site maintenance. Starting in the Fall of 2008, Eric will be entering USC in the Electrical Engineering graduate program.

University Medal Recipients



Top Row: Zaki Bassiouni, Ph.D., Dean of the College of Engineering, Heath Leblanc (EE), Daniel Englert, and Nancy L. Clark, Ph.D., Dean of the Honors College. Bottom Row: Harold Silverman, Ph.D., Interim Vice Chancellor for Research & Graduate Studies and Dean of the Graduate School, Rick Nugent, Joseph Cali (EE), and Sean O'Keefe, Chancellor, Louisiana State University A&M College.



SPRING COMMENCEMENT

LSU Distinguished Communicators



Kim Powell, Assistant Director of CxC, Warren Waggenpack, Ph.D., Associate Dean for Undergraduate Programs and Associate Professor in Mechanical Engineering, Ishtiaq Rouf, Lillian Bridwell-Bowles, Director of CxC and Professor of English

As a vital component of LSU's progress toward national prominence, the Communication across the Curriculum (CxC) initiative was established with a gift from the Cain Foundation. This program strives to improve the written and spoken communication skills of LSU students, initially within the College of Engineering and ultimately across all colleges of the university.

As a part of CxC, students began working in the Spring of 2006 toward recognition as "LSU Distinguished Communicators," based on exemplary levels of communication skills during their undergraduate years. The program requirements are listed below.

12 credit hours of [communication-intensive courses](#) with emphases on written, oral, visual, and technological communication

A [digital portfolio](#) showcasing communication skills, with evidence approved by CxC Advisors (e.g., papers, speeches, graphics, videos, etc. from both early and later years of study)

[Internship](#), co-op, [service-learning](#), [research](#), or [study abroad](#) experience, with a strong communication component

Leadership on campus or in the community

A GPA of 3.5 in C-I courses

Congratulations Ishtiaq!

ERC, from page 1

"We will attempt to connect students with college of engineering faculty, counselors and alumni during their freshman year, instilling in them a sense of community. We lose too many before they even know what engineering is all about. Among other things, students participating in the ERC will live together in the same dorm, enroll in the same (ERC) sections of math, science, and English, and participate in many social, academic and community activities outside of the classroom."

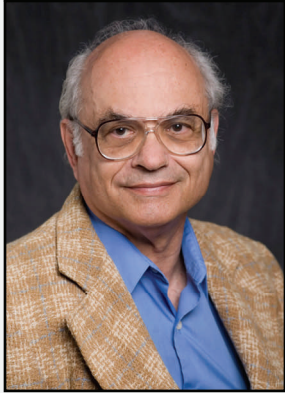
ERC Rector John Scalzo went on to explain that his role in the ERC will be to facilitate the academic (co-curricular) activities, as well as provide onsite academic advising and counseling. "One of the first co-curricular activities the ERC will participate in is the Summer Reading Program. Faculty in the college of engineering will lead discussion groups with students in the ERC. I will also be gathering the syllabi from instructors of ERC sections to use to create additional co-curricular activities. ERC instructors will also visit the dormitory to host review sessions, and occasional office hours. I will have a permanent office in the dormitory where I will be for about 8 hours a week. My presence there will give students the opportunity to come and be advised on academic or career matters. The ERC dormitory will temporarily be located in West Laville for fall 2007. We will be moving into the newly constructed RC1 in spring 2008, formerly on the site of old Graham Hall. The Center for Academic Success will place tutors in the dormitories on a regular basis to assist students with their ERC sections. Counselors in the college of engineering will also hold office hours in the dormitory to assist with academic advising and counseling issues. ERC students will also schedule classes with the help of engineering counselors and me, all occurring in the dormitory."

Additional programs related to wellness, career services, ethical issues, and social activities will be facilitated by the Department of Residential Life, and residential college RAs (as well as upper class engineering students) who will live in the dormitory. Student members of the ERC will be encouraged to connect with professional societies attached to their major of interest. Guest speakers will address topics including post-graduate education, engineering ethics, and careers.



John Scalzo

Dr. Martin Feldman elected to International Steering Committee



Dr. Martin Feldman, the Oustalet Distinguished Professor of Electrical and Computer Engineering, has been elected to a five-year term on the Steering Committee of the **International Conference on Electron, Ion, and Photon Beam Technology and Nanofabrication (EIPBN)**, the world's leading symposium on lithography and nanofabrication. The

EIPBN Conference brings together engineers and scientists from industries and universities from all over the world to discuss recent progress and future trends in lithographic science and technology and its application to micro and nanofabrication techniques. Professor Feldman will serve as Program Chair in 2010.

Dr. Feldman joined LSU as Professor of Electrical and Computer Engineering in 1989 following 27 years academic and industrial experience. He spent six years at Cornell University and the University of Pennsylvania followed by 21 years with AT&T Bell Labs. He is a reviewer for several journals, holds over 30 patents and has published over 45 papers in refereed journals.



Dr. Czarnecki receives honorary titled professorship

Professor Leszek S. Czarnecki, IEEE Fellow, was granted a Titled Professor degree in Technological Sciences by the President of the Republic of Poland in November 2006. This title is an honorary recognition of Dr. Czarnecki's contribution to Technological Sciences.

Dr. Czarnecki's nomination to this degree was based on contributions to electrical engineering by the Scientific Council of the Electrical Engineering Department of Warsaw University of Technology. This nomination was then confirmed and supported by the National Council for Scientific Grades in Poland.

Dr. Rai appointed as ABET Program Evaluator

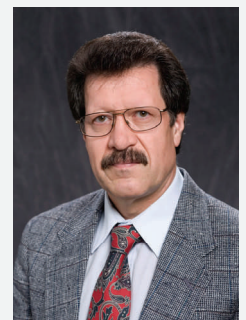


The IEEE Educational Activities Board (EAB) of ABET (Accreditation Board for Engineering & Technology) has completed its selection process for IEEE endorsed ABET Engineering Accreditation Commission (EAC) Program Evaluators for 2007-2008. Professor Suresh Rai, ECE has been selected as an IEEE Program Evaluator for Computer Engineering and Electrical Engineering programs.

Visit <http://www.abet.org/forms.shtml> to see accreditation criteria for engineering programs.

Dr. Naraghi-Pour is the best!

Dr. Mort Naraghi-Pour, Associate Professor of Electrical & Computer Engineering, presented two papers at the International Conference on Wireless Information Networks and Systems (WINSYS 2007), in Barcelona, Spain, July 28-31, 2007. One of these papers, entitled "Resource Allocation for OFDM Systems in the Presence of Time-Varying Channels," authored by Dr. Naraghi-Pour and his Ph.D. student Xiang Gao was selected as the best paper of the conference. In the conference closing ceremonies they were presented with an award certificate.



ECE SCHOLAR RETIRES

Dr. Subhash C. Kak, Donald C. and Elaine T. Delaune Distinguished Professor of Electrical and Computer Engineering, has retired from LSU after 28 years on the ECE faculty. He is now Professor and Head of Computer Science at Oklahoma State University, Stillwater, OK.

Dr. Kak, born in Srinagar, Kashmir, completed his Ph.D. from the Indian Institute of Technology Delhi in 1970. He taught for several years at IIT Delhi and then joined LSU faculty in 1979. He was a part of the communications and computer groups of the Department of ECE. He held sabbatical and visiting positions at Harvard, Imperial College, Tata Institute of Fundamental Research, and Bell Laboratories.

His awards include the Science Academy Medal of the INSA (1977), Kothari Prize (1977), Halliburton Award (1982), UNESCO Tokten Award (1986), National Fellow of the Indian Institute of Advanced Study (2001), and the Distinguished Alumnus Award of IIT Delhi (2002). He has authored 11 books and more than 300 journal articles in various areas of science (**quantum physics, information theory, neural networks, cryptography, and history of science**). He has also published in **astronomy and mathematics, literary history, art, and music**. He has also published **four volumes of poetry** in English and Hindi that has been translated into several languages including Greek, Bengali, and Serbian. He lectured extensively around the world and two television shows on his work were made by Dutch Public TV. His work has also been showcased on the Discovery and History channels and been interviewed for PBS and other television channels. He was a featured speaker at the Harvard Foundation writer series.



Dr. Kak is the inventor of instantaneously trained neural networks for which he received a patent that was licensed to the industry; this invention was subsequently sold for \$15 million. These networks model short-term biological memory. He is also the inventor of a new three-stage quantum cryptography protocol. He has looked at many different aspects of **information** both at the theoretical and practical levels. This has led him to the study of ideas such as the twin paradox of relativity theory and quantum information as it applies to modern physics. He was advisory board member of a high-technology company in Boston and is the chief scientist of another company, also located in Boston.

Dr. Kak came into the public eye with his application of cryptology to the decipherment of an ancient script of India and the discovery of an astronomical code. Hailed as an “epoch-making discovery” by Professor Klaus Klostermaier of the University of Manitoba who is an authority on the subject, this work has been the subject of numerous newspaper and magazine stories as well as television shows.

During his college days, Dr. Kak was the chess champion at two different universities. He also played ping-pong for his college. He is an avid hiker. He and his wife, Navnidhi, have been married for 28 years and they have two children: Abhinav, who is a final-year medical student at LSU Medical School in New Orleans; and, Arushi, who is a final-year anthropology major at LSU Baton Rouge.

Reception for Dr. Kak

On August 10, 2007, a reception was held to celebrate 28 years of service by Dr. Subhash Kak to the Electrical & Computer Engineering Department and to the College of Engineering. The gathering was large and jovial but at the same time sad to see him and his family leave Baton Rouge.

Dr. Pratul Ajmera presented a summary of Dr. Kak’s technical and literary accomplishments as well as made some personal observations. Other friends and colleagues also related experiences with Dr. Kak. Tonya Rushing presented her insights based on many years of staff-faculty interactions. Overall, the farewell reviews were simultaneously eloquent and humorous.

For this memorable event, Tonya Rushing and James Breedlove planned and organized wonderful decorations that included beautifully carved wooden pieces from Dr. Kak’s home state of Kashmir in India and excellent food table. Dr. Ajmera provided the expertise in identifying appropriate ethnic food items. Special thanks to Mr. Roy Oby from the building maintenance staff for his help with the preparations.



James Breedlove, Dr. Pratul Ajmera, Dr. Kak, Navnidhi Kak and Tonya Rushing

BEST OF LUCK IN YOUR NEW ENDEAVORS DR. KAK, WE’LL MISS YOU!

ECE ADVISORY BOARD NEWS

Board Meeting

The ECEAB met on Friday April 27, 2007 in the conference room of the Electrical Engineering Building. Dr Woods opened the meeting by summarizing the progress made by the Department since the previous meeting, particularly concerning entering the US News & World Report rankings, recent faculty and staff news, and research news.



John Scalzo addresses the ECE Advisory Board



Don Eisenberg, Burt McNeil, Les Broussard and Joe Domino

Don Eisenberg from the College of Engineering Development Office briefed the meeting on the "Forever LSU" campaign, and introduced Les Broussard, an LSU ECE Alumnus (1958), who is chairing the ECE Campaign Steering Committee and who is leading the ECE Department campaign. Dr Kinney summarized recent developments in Alumni relations, and Mr. Scalzo made a presentation on enrollment and the Engineering Residential College. The ECE Advisory Board also toured the Department's facilities, including recently acquired space in the newly renovated Engineering Research and Development building. The lunch break was held with faculty joining Board members.

Spotlight on Bill Higgins, ECEAB Chairman

Bill Higgins is now the Executive Vice President and Chief Operating Officer of Dick Corporation, a national general contractor.

Until recently he was a Senior Vice President with Westney Project Services providing executive consulting services to major oil companies and service companies within the petroleum industry. As Executive Vice President for McDermott International, he was responsible for worldwide operations including on-shore and offshore engineering and construction, as well as McDermott's equity interests in production sharing agreements in both Azerbaijan and Sakhalin, Russia. During this time he gathered extensive international experience and lived in various overseas countries for thirteen years. In addition to 28 years at the executive level with McDermott, Bill was also President and CEO of a major general contracting firm.



Bill has served on the board of the Construction Industry Institute (CII) as well as the Offshore Marine Operators Association. He holds a BS in Electrical Engineering from Louisiana State University (LSU) and is a graduate of the Executive Business Program at Stanford University. Bill has served the LSU College of Engineering as a member of the Dean's Advisory Board continuously since 1994. In addition, he is in his second year as Chairman of the ECEAB.



Jerry Rispone, newest board member

Jerry Rispone is currently President of Industrial Specialty Contractors, L.L.C. (ISC) the company he co-founded in 1989, four short years after completing his BS in EE at LSU.

Under Jerry's leadership, ISC currently employs approximately 1,500 engineers and craftspeople from the corporate office in Baton Rouge and regional offices in Houston and Beaumont. Jerry and his team supply engineering, construction and maintenance services to customers throughout the nation. Engineering News Record (ENR) ranks ISC as one of the top five electrical contractors in the nation with approximate annual revenues of \$160 million.

Jerry maintains an active membership and has served in many leadership roles in associations that impact and support engineering and construction, including Associated Builders and Contractors (ABC), Louisiana Chemical Industry Alliance (LCIA), National Society of Professional Engineers (NSPE), Louisiana Engineering Society (LES) and LSU Construction Industry Advisory Council (CIAC).

He is married to Bronwen Bonadona Rispone, also a graduate of LSU engineering, (1996 BS ChemE) and has 15 year old twins, Lane and Blair.

ECE welcomes new Computer Manager



Richard Capone has joined the ECE staff as Computer Manager. He primarily supports Windows & Linux environments for research & instructional labs as well as faculty, staff, and student activities.

He received his B.S. in Computer Engineering at LSU in May 2005. As a student he was active in IEEE activities including the Robotics team, serving as team leader. While Richard was team leader, LSU ECE won back-to-back first place honors at IEEE Region 5 robotics competitions. He also served as a Student Computer Analyst under previous Computer Manager Rhett Smith. After graduation, he worked as a Research Associate in the LSU Center for GeoInformatics managing a state-wide network of GPS reference stations in support of subsidence research and geodetic measurements. In the wake of Hurricanes Katrina and Rita, he supported aerial photographic and LIDAR assessments of affected areas by setting up geodetic-quality GPS reference stations in Grand Isle & Cameron, LA.

Shell makes a donation to Engineering Departments at LSU

At a check presentation on Friday, August 24, the LSU Foundation received a philanthropic donation from Shell Oil Company, from which \$64,000 was designated specifically for Departments in the College of Engineering. Electrical Engineering received \$5,000 to be used for upgrades to three workstations for digital and power laboratories. Shell hires more graduates from LSU than any other university outside Texas. "We are extremely grateful to Shell for their continuing support of our Department", said ECE Chairman Dr. Clive Woods.



Visit http://www.eng.lsu.edu/news_events/viewnews.php?id=163 on the web for more details.