Student Organizations

Enhance the College Years at the Capstone

EXCELLENCE AND LEADERSHIP IN ENGINEERING EDUCATION
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Correction
In the Spring 2004 edition of the Capstone Engineer, the following Capstone Engineering Society contributors were omitted from our listing of longtime members. We sincerely apologize for these errors.

Paul Lammers
Margaret Ferne Wlodarski

Lifetime Members
Mr. Kenneth Rule Daniel
Mr. Samuel R. Hart
Mr. Fred S. McFarland
Mr. and Mrs. Robert H. Pogue Jr.
Mrs. Katherine Wade Thompson

The University of Alabama is an equal-opportunity educational institution/employer.
MC6927
It is an honor and privilege for me to serve as the interim dean of UA’s College of Engineering. During the past few months, I’ve had an opportunity to work with many of the engineering faculty as part of my role in research at the University. I know firsthand that the College is comprised of a strong and positive team that is proud of being one of the oldest engineering colleges in the nation.

Since arriving at the College, I have been meeting with department heads and other key individuals to assess the status of the College. This process will take a couple of months to complete as I evaluate the departments, programs, processes and goals. We will be developing a plan for the College that will enable us to become one of the top 50 engineering schools in the country.

President Witt’s goal is for The University of Alabama to become a Tier I public university, and it is my goal for the College of Engineering to have an integral part of the University’s success in reaching that goal.

Also, I want to quickly update you on the search for the new dean. The committee has been formed, and hiring a new dean is one of the top priorities of Provost Bonner and President Witt. We look forward to the new dean embracing the College’s strategic plan and working with the faculty, staff, students, alumni and prospective students to help us become a top 50 engineering school.

I am committed to working with all of the College’s constituents to ensure that the College offers the best programs, admits outstanding students, conducts world-class research, and accelerates its growth. I encourage you to share your thoughts with me about the College by e-mailing me at dean@coe.eng.ua.edu.

Keith McDowell, Ph.D.
Interim Dean
Some say the college years are the best of your life, and they are for College of Engineering students at The University of Alabama. From professional organizations to sports, our students participate in various activities throughout the Capstone. Involvement with other students enriches their college lives and gives them a sense of belonging at the University.

For these students, college is more than just studying. A university education cannot be gotten from textbooks alone; you must build professional, leadership and personal skills from everyday experiences.

College of Engineering students become well-rounded members of society who enjoy successful careers because of the opportunities that began at The University of Alabama. The College has more than 20 organizations offering our students more ways to build the professional and leadership skills that make our graduates competitive.

**SWE Makes an Impact on Students and the Community**

UA’s chapter of the Society of Women Engineers (SWE) is an active group of students that focuses on inspiring women to achieve their full potential in engineering. SWE helps develop leadership skills, expand the image of the engineering profession and demonstrate the value of diversity, while providing an environment for personal and professional development.

“Being a member of SWE helped me gain the attention of recruiters and gave me specific examples of leadership and hands-on experiences to discuss during interviews,” said Heather Patterson, recent graduate in aerospace engineering and 2003–04 SWE president.

Patterson said the confidence gained through leadership experiences and networking opportunities made the transition into the working environment less intimidating.

UA’s engineering students have made their SWE chapter known through many activities, services and awards. Girl Scout Engineering Day is just one example of how this organization gives back to the Tuscaloosa community. Junior Girl Scouts from West Alabama spend a day exploring the College of Engineering. SWE members organize events for the girls, such as recycling projects, panel discussions, a technology scavenger hunt and “have lunch with an engineer.”

In October 2003, nearly 3,000 women engineers and students from across the country converged at the Birmingham Jefferson Civic Center for the Society of Women Engineers National Conference. At the conference, UA’s SWE received third place in the Outstanding Student Section competition in the medium-sized school category. Two women from UA also won awards at the conference—Heather Hendrix, a mechanical engineering graduate student, received the Outstanding College Student Horizon Award from the Partnership to Advance Science Engineering and Technology, and Ashley Erickson, a senior in mechanical engineering, was awarded a ChevronTexaco Scholarship.

At the local level, SWE awards an outstanding freshman, sophomore, junior and senior each year. An Alumni Award is also presented to a member who contributed to the organization previously as a student and now as a professional.
UA's Coordinating Council for Student Organizations hosts an awards banquet each spring to honor organizations at the Capstone. SWE has received numerous awards at this banquet, and in 2004 won three awards in the professional organization category—

- Outstanding Advisor: Dr. Beth Todd, associate professor of mechanical engineering
- Outstanding Officer: Heather Patterson, president (2003–04)
- Most Creative Program: Explore Engineering, a high-school outreach program held during the 2003 national conference

While winning awards and participating in service projects, SWE students build relationships with their classmates. For Patterson, some of her greatest memories of college are from the activities she participated in and the relationships gained by being a member of SWE.

NSBE Students Use Their Awards to Benefit Others

The National Society of Black Engineers (NSBE) at The University of Alabama seeks to increase the number of black engineers who excel academically, while positively affecting the community.

The University of Alabama recently recognized NSBE’s efforts and successes by awarding the chapter the Caritas Award, an award given to student organizations at the Capstone that demonstrate an outstanding commitment to community service. The chapter received third place in 2001 and in 2004 received second place.

After receiving the Caritas Award, students continued their caring ways by using the award money to open the first Technical Outreach Community Help Center (TORCH) in the Tuscaloosa area. The chapter funded computer software and supplies for the center. NSBE students continue to support the center by tutoring in the after-school program. The TORCH Center is part of the chapter’s initiative to bridge the technology divide.

In addition to the TORCH Center, NSBE students are visible in the community by tutoring students at Eastwood Middle School, and in 2002 they hosted a Junior Walk for Diabetes.

The University's NSBE students are also recognized at the national level in the Golden Torch Award category. Darmita Martin and Tywayne Anderson received the Distinguished Fellow Award, and Shunta Garrett received an Alcoa Scholarship. Golden Torch Awards are given to students and professionals based on their leadership and service to the community.

UA's NSBE chapter competes against other universities by participating in the National Academic Technical Bowl and the National African-American Quiz Bowl. In the 2000 Technical Bowl, UA won third place, which included a cash award of $500. At the 2001 Quiz Bowl, UA placed first, and in 2000 they placed second.

NSBE students also participate in events that help prepare them for academic, social, and professional success. Shunta Garrett, who has served as vice president and academic excellence chair for UA's NSBE chapter, said she would never have gotten the opportunity to intern with General Mills or have been encouraged to continue her education at the graduate level had it not been for NSBE.

Organizations Available to Students within the College of Engineering

**College-wide Organizations**
- Ambassadors of the College of Engineering (ACEs)
- National Society of Black Engineers
- Society of Women Engineers
- Tau Beta Pi (honor society)
- Theta Tau

**Aerospace Engineering**
- American Institute of Aeronautics and Astronautics
- Sigma Gamma Tau (honor society)

**Civil and Environmental Engineering**
- American Society of Civil Engineers
- Chi Epsilon (honor society)

**Chemical and Biological Engineering**
- American Institute of Chemical Engineers
- Omega Chi Epsilon (honor society)

**Computer Science**
- Association of Computing Machinery
- Upsilon Pi Epsilon (honor society)

**Electrical and Computer Engineering**
- Eta Kappa Nu (honor society)
- Institute of Electrical and Electronics Engineers

**Industrial Engineering**
- Alpha Pi Mu (honor society)
- Institute of Industrial Engineers

**Mechanical Engineering**
- American Society of Mechanical Engineers
- Pi Tau Sigma (honor society)
- Society of Automotive Engineers

**Metallurgical Engineering**
- American Foundrymen's Society
- ASM International (Materials Information Society)
- Minerals, Metals and Materials Society (TMS)
ASME Raises the Standard for the Southeast

A team from UA’s American Society of Mechanical Engineers (ASME) recently placed first in the East Coast Human Powered Vehicle Challenge in Gainesville, Fla. This is just one of the many ways UA ASME students are raising the standard in the Southeast. UA’s ASME chapter provides programs and opportunities for students to develop their professional skills.

In 2004, ASME revealed success both regionally and nationally. At the Region XI Student Conference, UA’s chapter won eight awards—at least one in each award category. This success took them to the international level of competition. In November, Courtney Graham will make a presentation on a land-mine retrieval robot, and Dr. Beth Todd will receive a national award as outstanding ASME advisor. At UA’s Coordinating Council for Student Organizations awards banquet, the chapter received recognition at the local level for outstanding advisor, Dr. Beth Todd; most active member, Deborah Honeycutt; and outstanding society in the professional category.

ASME success did not begin in 2004. For many years the organization has been setting the bar high for the Southeast by challenging UA mechanical engineering students. In 2003, the chapter received national recognition with the Little Giant Award. This award shows outstanding achievement based on chapter effectiveness, including diversity of activities. The chapter surpassed other colleges in the nation and region, including Auburn University, Mississippi State University and the Georgia Institute of Technology.

In addition to winning awards and attending conferences, ASME students support each other throughout the college years. They participate in bimonthly cookouts and seasonal intramural sports teams such as flag football and bowling. This support fosters friendships that last a lifetime and makes students feel part of the community here at The University of Alabama.

IIE Celebrates Many Years of Success

The Institute of Industrial Engineers (IIE) at the Capstone teaches students industrial engineering practices firsthand by holding monthly meetings. They discuss a variety of topics, host guest speakers throughout the school year and take tours of local industries. Students benefit from IIE because they have the opportunity to network with industrial engineering professionals. They also improve presentation, leadership and communication skills, while receiving recognition through awards and scholarships.

“As a student, participating in the IIE chapter here at the University opened a door for me to gain more knowledge about the IE field,” said Morgan Clark, a junior in industrial engineering.

Over the past seven years, IIE has received numerous group and individual awards. UA students have consistently placed in the top three at IIE’s Student Award of Excellence national competition.

IIE Student Award of Excellence

<table>
<thead>
<tr>
<th>Year</th>
<th>Name</th>
<th>Place</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>Tonita Romero</td>
<td>2nd</td>
</tr>
<tr>
<td>2003</td>
<td>Kayla Erwin</td>
<td>3rd</td>
</tr>
<tr>
<td>2001</td>
<td>Nathan Reamey</td>
<td>1st</td>
</tr>
<tr>
<td>2001</td>
<td>Brian Grillo</td>
<td>3rd</td>
</tr>
<tr>
<td>2000</td>
<td>Matheus Madeiros</td>
<td>1st</td>
</tr>
<tr>
<td>2000</td>
<td>Brock Corder</td>
<td>3rd</td>
</tr>
<tr>
<td>1999</td>
<td>Jeremy Meade</td>
<td>1st</td>
</tr>
<tr>
<td>1998</td>
<td>Mandi Russell Cooper</td>
<td>2nd</td>
</tr>
<tr>
<td>1997</td>
<td>Tracy Williams</td>
<td>2nd</td>
</tr>
<tr>
<td>1997</td>
<td>Heather Maddox</td>
<td>1st</td>
</tr>
</tbody>
</table>

In 2003, the chapter received the Gold Award, which was the third year that it was recognized with the highest honor for improvements and progress. Only 18 out of 150 chapters worldwide received this award, and UA is the only chapter in the state to be recognized with this honor.

National Student Chapter Recognition Awards

<table>
<thead>
<tr>
<th>Year</th>
<th>Award</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>Gold Award</td>
<td>1999</td>
</tr>
<tr>
<td>2001</td>
<td>Gold Award</td>
<td>1998</td>
</tr>
<tr>
<td>2000</td>
<td>Silver Award</td>
<td>1997</td>
</tr>
</tbody>
</table>

The students attend the regional student conference annually. In 2001, The University of Alabama hosted the student conference. At the regional competition, UA students regularly place in several different
categories. In 2003, the chapter received second place in the technicalpaper and the team-challenge competitions. In 2001, they received first place in the team-challenge competition.

Individuals have also placed well in these categories. Within the technical-paper competition, Adam Russell received first place in 2002 and then had the chance to present his paper nationally. Brock Corder received first place in 2000, and Amanda Fields received first place regionally and nationally in 1998. By placing in this category, the students were automatically qualified to compete at the international level.

For the past seven years, Dr. Gary Moynihan, professor of industrial engineering, served as UA’s IIE chapter advisor. He has been instrumental in much of the chapter’s success during this time. In 2004, he received the Outstanding Faculty Advisor Award for Region Three at the national conference in Houston, Texas. Moynihan was recently elected vice president of Region Three for the IIE, an area that represents 18 student and 14 professional chapters in the Southeast. As he assumes this position, Dr. Chris Greene, assistant professor of industrial engineering, will take his place as IIE faculty advisor.

Professional organizations in the College of Engineering give students opportunities that cannot be gained from the classroom. Many organizations participate in conferences, give back to the community, and provide invaluable opportunities to network with professionals in their fields—things that can never be learned from a textbook.

These are just a few of the 200 organizations for students to choose from at the University. From professional interests to religious beliefs, social concerns to sports, leadership to honors, UA students are enriching their educations and building friendships that last a lifetime.

Other Notable Points from our Professional Societies

ASCE
The American Society of Civil Engineers (ASCE) will host the Southeast Conference at the Capstone in April 2005. More than 700 students will invade Tuscaloosa to compete in numerous events, including the concrete canoe and steel bridge competitions.

SAE
The Society of Automotive Engineers (SAE) sponsors the Crimson Racing teams and their latest endeavor was building an SAE Formula car that competed in Detroit, Mich. More than 140 national and international universities traveled to Detroit for this annual competition.

AIChe
The American Institute of Chemical Engineers recently held its regional student conference at the Georgia Institute of Technology, where two UA chemical engineering students presented research projects. Hugh Shoff, a junior, won second place for his paper entitled “Development of Novel Plasticizers to Replace Phthalates in Medical Plastics.”
Sports take up a lot of time—practice, practice, and more practice, then the games, and even travel to distant away-games. For engineering students, this requires a delicate balance of time for school and time for fun. Even though the pace may be frenetic, engineering students have found the experience to be well worth it, discovering that they have learned just as much on the field as they have off it.

**Why did you choose The University of Alabama?**
I chose The University of Alabama because from a young age I attended Alabama football games with my parents, who were both Alabama graduates. During my senior year of high school, I was contacted by the Alabama football team and invited to become a walk-on member for the fall of 2000. I had offers from other colleges, but after I toured the engineering department I decided that The University of Alabama was where I wanted to be.

**How did you get involved in football? How long have you been playing football?**
I became involved in football during my ninth-grade year. I always played sports when I was young and my mom wouldn’t let me play football until then because she said it was dangerous. I guess our compromise was my becoming a kicker. This will be my fifth year at Alabama as a place kicker, and I have earned two varsity letters.

**Describe your personal bests and achievements in football.**
My longest kicks would be in the Arkansas and Tennessee games last year, both of which were 48 yards. Most people don’t realize that making a kick isn’t always just about the kicker kicking the ball precisely. It also involves the snap, the hold, then the kick, and, finally, the protection. When all of those things are working, perfection is achieved, but if one aspect is slightly off, the kick can go bad.

**Why did you choose engineering, especially electrical engineering?**
I chose engineering as my major because I have always been interested in math, science and discovering how things work. When I was little I used to always take apart household items like remotes and VCRs. I had very good teachers in high school who led me to choosing engineering in college.

I decided on electrical engineering when I attended SITE (Student Introduction to Engineering) at the Capstone during the summer before my senior year of high school. Dr. Pete Morley, professor of electrical and computer engineering, gave a presentation on electrical engineering and I felt that it was a major I could really excel in—one that had a practical purpose I could put to use in the workforce.

**How have you balanced class work, homework, practice and games?**
Balancing class, homework, practice and games has been tough while here at the Capstone. I have stayed up many nights trying to finish a project or studying for a class. It’s been especially difficult since I started graduate school in December. I have always tried to take the stance that school comes first, before football, and to give my best to whatever I am doing. That has been a major reason that I have been able to make it at both football and school.

**What other interests do you have at UA?**
I am a member of several different organizations at the University, including Eta Kappa Nu (electrical engineering honor society) and IEEE (Institute of Electrical and Electronics Engineers, professional society). I also have been certified by the Board of Licensure for Professional Engineers and Land Surveyors as an engineering intern.

**What are your career goals?**
My career goals are not set yet, although from a young age I have always been interested in the space program. I’m leaning toward a space-related field, probably something involving NASA. Presently I plan to get my master of electrical engineering and then hopefully get my doctorate. I am working on my thesis in the field of communications and wireless networks.
**POINTS**

**On and Off the Field**

*Vernetta Greene*
Senior in Civil and Environmental Engineering
Track and Cross-Country Runner

**How did you get involved in track and cross-country? How long have you been running?**
I was very involved in high school sports. When I was a sophomore in high school, some of the track members asked me to try out and that’s when I started running.

**Describe your personal bests and achievements in running.**
I posted Alabama’s top time of the indoor season in the 800-meter dash and the mile, which were also my personal best times of 2:15.00 and 5:01.02, respectively.

**Why did you choose civil engineering?**
I chose civil engineering as my major because I can always remember building things with my dad. I attended a few high school camps that focused on science and engineering and knew that was the career choice for me.

**How have you balanced class work, homework, practice and meets?**
I have had to reschedule a few tests to work around meets. Scheduling my classes around practice hasn’t been too difficult. It is definitely something you have to balance.

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From intramural flag football teams to varsity sports for the Crimson Tide, many College of Engineering students are involved competitively at the Capstone. These engineering students participate in intercollegiate athletics at the University:

<table>
<thead>
<tr>
<th>Student</th>
<th>Sport</th>
<th>Major</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jason Elwell</td>
<td>Baseball</td>
<td>Aerospace Engineering</td>
</tr>
<tr>
<td>Akini Adkins</td>
<td>Men’s Basketball</td>
<td>Undesignated</td>
</tr>
<tr>
<td>LaKory Daniels</td>
<td>Men’s Basketball</td>
<td>Undesignated</td>
</tr>
<tr>
<td>J. P. Adams</td>
<td>Football</td>
<td>Undesignated</td>
</tr>
<tr>
<td>Brian Bostick</td>
<td>Football</td>
<td>Electrical Engineering</td>
</tr>
<tr>
<td>Chris Capps</td>
<td>Football</td>
<td>Undesignated</td>
</tr>
<tr>
<td>Justin Moon</td>
<td>Football</td>
<td>Undesignated</td>
</tr>
<tr>
<td>Josh Smith</td>
<td>Football</td>
<td>Mechanical Engineering</td>
</tr>
<tr>
<td>Libby Probst</td>
<td>Soccer</td>
<td>Civil &amp; Environmental Engineering</td>
</tr>
<tr>
<td>Chris Flamion</td>
<td>Men’s Swimming &amp; Diving</td>
<td>Computer Science</td>
</tr>
<tr>
<td>Franck Southon</td>
<td>Men’s Swimming &amp; Diving</td>
<td>Electrical Engineering and Mathematics</td>
</tr>
<tr>
<td>Shannon Flournoy</td>
<td>Women’s Track &amp; Cross-Country</td>
<td>Civil &amp; Environmental Engineering</td>
</tr>
<tr>
<td>Vernetta Greene</td>
<td>Women’s Track &amp; Cross-Country</td>
<td>Civil &amp; Environmental Engineering</td>
</tr>
</tbody>
</table>

**What other interests do you have at UA?**
Last year, I was the president of the student athletic advisory board. This position exposed me to many aspects of the University from working with the NCAA to the Student Leadership Council. It kept me very busy but I got to meet a lot of people from many clubs and organizations throughout the University.

**What are your career goals?**
I’m not sure yet, but probably a career in construction or environmental engineering. Transportation engineering also interests me, so that is another possibility.
Engineers have school spirit!

Show your pride in the College of Engineering with top-quality apparel and gifts.

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Profit generated from the sale of these items contributes to the Capstone Engineering Society, which provides scholarship funds to UA’s College of Engineering.

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FIVE HONORED AS UA DISTINGUISHED ENGINEERING FELLOWS

A select group of five alumni of the University of Alabama College of Engineering were honored in March as Distinguished Engineering Fellows. Recognition as a Fellow is the highest commendation given to graduates and other supporters who have strengthened the reputation of the College through their efforts and achievements.

Marce Fuller, B.S.E.E. ’83
Marce Fuller is the president, chief executive officer and director of Mirant, a Fortune 500 company. Under her guidance, Mirant emerged as a global energy company with an extensive portfolio of power assets. Fuller’s commitment to conducting business with honesty and integrity is reflected in the company’s values, known as “The Mirant Mindset.” Because of her dedication and hard work, Fuller ranked fifth in Fortune magazine’s annual list of the 50 Most Powerful Women in Business in 2001. She ranked 37th in 2002, and was listed among Fortune’s People to Watch. She is a member of the College of Engineering Leadership Board.

Mohammad A. Karim, M.S. Physics ’78, M.S.E.E. ’79, Ph.D. ’82
Dr. Mohammad A. Karim, vice president of research at Old Dominion University, has more than 13 years of extensive leadership experience in academic units that have major research components. As dean of engineering at the City College of New York, he led the development of a multi-campus, flagship initiative in photonics research that involved six universities. Karim also steered the formation of two new research entities known as the CUNY Institute of Urban Systems and the Center for Information, Telecommunications and Networking, as well as creating a new Department of Biomedical Engineering. Throughout his academic career, Karim has written nine books, edited 12 journal special issues, and authored more than 130 conference and over 170 journal publications.

G. William Quinby, PE, B.S.Min.E. ’69, M.S.Min.E. ’70
G. William Quinby, PE, has delivered major projects in the Middle East, Far East and America. After earning bachelor’s and master’s degrees from the Capstone, Quinby began an Army career in the 27th Airborne Engineer Battalion, in which he served in project engineer assignments for a U.S. Coast Guard station on Lampedusa Island, Italy, and later at the Saudi Military Academy, Riyadh, Saudi Arabia. Quinby concluded his Army career as district engineer of the U.S. Army Corps of Engineers’ Philadelphia District, responsible for military construction, navigation and flood control in the Delaware River basin, and Superfund remediation in Pennsylvania, Delaware and New Jersey. Quinby then entered civilian practice and he currently serves as the national director of contract management for Kellogg Brown & Root, Houston, Texas.

Alfred J. Saliba, B.S.C.E. ’53
After graduating from the University, Alfred J. Saliba joined the U.S. Air Force. While stationed at Haneda Air Force Base (Tokyo International Airport), he was the chief engineer responsible for all new construction and renovations at the airport. For his service to the Air Force, he received the U.N. Service Medal, the Korean Service Medal and the National Defense Service Medal. Saliba then created several successful businesses, including Alfred Saliba Homes Inc., Coldwell Banker Alfred Saliba Realty Corp., Alfred Saliba Development Corp. and Houston Properties Inc. In 1989, Saliba was elected mayor for the city of Dothan, Ala. For eight years, he brought to Dothan a commitment to fiscal responsibility and the experience to manage annual budgets in excess of $130 million.

Edward F. Tatum, B.S.Ch.E. ’73, M.B.A. ’76
Edward F. Tatum currently serves as director of corporate development for Albemarle Corp., a Fortune 500 company, where he is a senior manager with a proven track record of closing deals, growing profit and sales, introducing new products and developing strategic alliances. As director of corporate development, Tatum led a project due diligence team on acquisition of a United Kingdom-based $65 million phosphorus flame retardant business from Rhodia. He has led other project teams, including the team that acquired a $25 million lube antioxidant business from Ethyl Corp., and he conceived, negotiated and completed the formation of Stannica, a joint venture with Atofina to produce and sell tin intermediates. In addition to his leadership skills, Tatum excels at research and has received two U.S. patents on novel compounds for advanced polymer applications.
BIG THANKS . . .

. . . to our recent partners in UA’s College of Engineering family. We appreciate their support of our students and programs.

American Cast Iron Pipe Co. for continuing support of the Council of Partners in the Multicultural Engineering Program

American Society of Heating, Refrigeration and Air-Conditioning Engineers for support of mechanical engineering

BellSouth for continuing support of the Council of Partners in the Multicultural Engineering Program

The Boeing Co. for continuing support of the Multicultural Engineering Program and general engineering scholarships

Brasfield & Gorrie/Birmingham Construction Industry Authority for continuing support of a civil/construction engineering scholarship

Family of Paul L. Burnett for continuing support of metallurgical and materials engineering

DCES Education Services for continuing support of the Multicultural Engineering Program

Erskine Grier Donald III for support of aerospace engineering and mechanics scholarships

Thomas E. Doster III for increasing an endowed industrial engineering scholarship

Mildred Ray Hire Fleming for continuing support of a mechanical engineering design clinic laboratory

James C. Lewis for continuing support of the James C. Lewis Laboratory Equipment Fund

McAbee Construction Inc. for support of mechanical engineering

Buell V. Moore for increasing an endowed engineering scholarship

Tim Pickens for support of mechanical engineering

Joseph Hunt Robinson Jr. for establishing an endowed support fund in metallurgical and materials engineering

SASHTO for support of civil engineering scholarships

Dr. William Sutton for support of mechanical engineering

Dr. Beth Todd, in honor of Daniel and Ellen Todd, for continuing support of a mechanical engineering scholarship

Chester C. Carroll (B.S.E.E. ’61, M.S.E.E. ’62, Ph.D. ’65)

ENGINEERING HALL OF FAME INDUCTS CARROLL

The State of Alabama Engineering Hall of Fame inducted Chester C. Carroll (B.S.E.E. ’61, M.S.E.E. ’62, Ph.D. ’65) during a ceremony on Feb. 21, 2004. The State of Alabama Engineering Hall of Fame was founded to honor, preserve and perpetuate the outstanding accomplishments and contributions of individuals, projects, corporations and institutions that have brought and continue to bring significant recognition to the state.

Carroll, president of Lyman Ward Military Academy, began his electrical engineering career as an Auburn University professor in 1965. During his 17-year tenure at Auburn, Carroll served as vice president of research and dean of engineering. In 1986, he returned to his alma mater, The University of Alabama, to teach as a Cadworth Professor. Since retiring from UA in 1993, he has most recently served as inaugural holder of the Drummond Endowed Chair of Computer Architecture.

After his tenure at the Capstone, he assumed such posts as director of the resident scientist program at Wright-Patterson Air Force Base, chair of the USAF Aero-propulsion Laboratory’s high-power advisory group, and senior research scientist at the Army Aviation and Missile Command at Redstone Arsenal.

Carroll was elected a Distinguished Engineering Fellow by UA in 1987, and was later elected a Fellow of the IEEE in 1990. Carroll is also the holder of numerous patents on embedded architecture and highly parallel-embedded architecture using coefficient polynomial arithmetic.
ROSS NAMED OUTSTANDING ALUMNI VOLUNTEER
In 1995, the College of Engineering began a tradition of recognizing alumni who have put forth exceptional effort to promote and support the College with the Outstanding Alumni Volunteer award. This year’s honoree is Warren Ross.

Ross, an aerospace engineering graduate, has exhibited dedication to the College of Engineering as well as to the engineering profession and his community. He is a Distinguished Engineering Fellow of the College and a member of the College’s Leadership Board. Ross is also the leader of the aerospace engineering and mechanics department’s alumni advisory board. In addition, he has volunteered his time recruiting top-notch high-school students to attend the College of Engineering.

Ross was honored as this year’s Outstanding Alumni Volunteer at the College’s Distinguished Engineering Fellows banquet in March.

UA REORGANIZES CAREER SERVICES
For many years, the College of Engineering has had its own career services office to assist students and employers with career counseling and placement needs. In Summer 2004, the Engineering Career Services office was merged with the University Career Center. Employers, students or alumni who need the services of the Career Center should contact the University Career Center at (205) 348-5848 or visit http://www.career.ua.edu for assistance. Services to alumni will continue unchanged, so if you need career assistance, please call the office and inquire about the registration process.

Students say THANKS . . .

With rising tuition costs, some students would not be able to attend the Capstone without the generous support of our alumni and friends who have endowed scholarships. The following are newly endowed scholarships, for which the College and our students say, “THANKS!”

The late Vincent P. Caruso for an endowed industrial engineering scholarship

Robert H. and Lee Shepherd Haubein for an endowed engineering scholarship

Dr. Thomas Hoskins Sadler, in honor of Dr. Leonard Y. Sadler III, for an endowed chemical engineering scholarship

Southern Company, in honor of H. Allen Franklin, for an endowed electrical engineering scholarship

STATE FUNDING ELIMINATED FOR SUCCESSFUL OIL-RECYCLING PROGRAM, PROJECT R.O.S.E.
Project R.O.S.E. (Recycled Oil Saves Energy), one of this nation’s oldest oil-reycling programs, was recently notified that its state funding was being eliminated after Sept. 30. Strategic changes in direction for the Alabama Department of Economic and Community Affairs’ (ADECA) Science, Technology and Energy Division were cited as the reason for the cutback.

During the last two decades, Project R.O.S.E. effected, on average, the collection of nearly four million gallons per year from do-it yourself motor oil changes in Alabama. For more than 27 years, Project R.O.S.E. has educated the citizens of Alabama on the value of recycling used oil.

Last year, Project R.O.S.E. celebrated the establishment of a used oil collection site in each of Alabama’s 67 counties. In 2003, the program’s staff reached nearly a half million Alabama citizens by participating as exhibitors or speakers at conferences, conducting workshops in schools and for Girl Scouts’ groups, giving radio and television interviews, and attending a host of other community environmental programs.

Project R.O.S.E. has been headquartered at UA’s chemical and biological engineering department since 1977. For more information about Project R.O.S.E., contact Dr. Gary April at gcapril@coe.eng.ua.edu.
UA ENGINEERING STUDENTS WIN FIRST PLACE AT HUMAN POWERED VEHICLE CHALLENGE

A University of Alabama mechanical engineering student team won first place at the East Coast Human Powered Vehicle Challenge, a regional competition sponsored by the American Society of Mechanical Engineers. The five-student team won first place in both a design competition and overall first place in the Utility Vehicle Event. In the Human Powered Vehicle Challenge, college teams build aerodynamic, highly engineered vehicles in competition with other universities. Rules specified the vehicles should be suitable for everyday transportation, such as commuting to work or school or for shopping trips. Each vehicle was required to have a stopping distance of less than 20 feet from a speed of 15 m.p.h. and a 25-foot turning radius.

COE STAFF MEMBER RECEIVES NATIONAL AWARD

Gregory Singleton, director of engineering student services, received the 2004 Motorola MEP Legacy Builder’s Award. Recipients of this annual award are recognized by Motorola for their contribution toward increasing the talent pool of men and women in engineering and technology. The award, given to two recipients each year, was presented at the 30th annual National Society of Black Engineers’ National Convention.

M‘INERNY NAMED NEW AEROSPACE ENGINEERING AND MECHANICS DEPARTMENT HEAD

The College of Engineering recently named Dr. Sally Anne M‘Inerny as head of the Department of Aerospace Engineering and Mechanics. M‘Inerny is the first female department head in the history of UA’s College of Engineering.

M‘Inerny received her bachelor’s degree in mechanical engineering from California State University, Long Beach, in 1979. After working in industry for several years, she earned her master’s degree and doctorate at the University of California, Los Angeles, in 1984 and 1987, respectively. Her studies emphasize aerodynamics and vibrations, and instrumentation and signal processing for diagnostics and prognostics of rotating machinery.

M‘Inerny has been a faculty member at the Capstone since 1993, most recently serving as an associate professor of aerospace engineering and mechanics. Her previous experience includes serving as a faculty member at California State University, Long Beach, and summer faculty research positions with Warner Robins Air Logistics Center in Warner Robins, Ga., and Mercedes-Benz International in Stuttgart, Germany. She has maintained an ongoing working relationship with The Aerospace Corporation in El Segundo, Calif., where she worked for several years.

M‘Inerny has authored or coauthored more than 38 articles published in refereed journals and conference proceedings, and she has presented findings at numerous national conferences. M‘Inerny is also a registered professional engineer.

IE PROFESSOR ELECTED AS REGIONAL VICE PRESIDENT OF IIE

Dr. Gary Moynihan, professor of industrial engineering, was recently elected as vice president for Region Three of the Institute of Industrial Engineers (IIE). Moynihan was elected to serve a single two-year term, and was chosen by direct vote within IIE’s Region Three, which encompasses 18 student and 14 professional chapters in Alabama, Florida, Georgia, Louisiana, Mississippi and Puerto Rico.

As faculty advisor to UA’s student chapter of IIE, Moynihan has contributed to the chapter’s recent awards, including the 2003 Gold Award in IIE’s National Chapter Recognition Program, which was the third year they received this award. Also, numerous individual members have placed in the top three at IIE’s Student Award of Excellence national competitions during the last five years.
COE STUDENT SELECTED AS USA TODAY ACADEMIC ALL-AMERICAN

Rob Davis, graduate student in aerospace engineering, was named to this year’s USA Today All-USA College Academic Team. During his undergraduate time at the Capstone, Davis was very involved in the honors programs and received many awards and honors, including the following: National Collegiate Honors Council Portz Scholar, 2003, one of three scholars awarded annually and the first recipient in UA history; Blount Presidential Scholar, 1999, one of the University’s most prestigious academic scholarships; and first place in the Annual University of Alabama System Honors Research Day, 2002 and 2003. Davis has been the principal author of four papers researching the performance of projectiles for the U.S. Air Force based on work done at UA with Dr. Stanley Jones, Cudworth Professor of Aerospace Engineering and Mechanics.

BIOLOGICAL STUDIES ADDED TO CHEMICAL ENGINEERING PROGRAM

The College of Engineering’s Department of Chemical Engineering will add a biological emphasis to its bachelor’s degree program beginning immediately. This shift in program emphasis also is reflected in the department’s name change to chemical and biological engineering. The new curriculum adds a number of required and elective courses students can take through the biological sciences department. These additional courses are designed to prepare chemical engineering graduates better for careers in medicine, dentistry and biotechnology fields, such as foods, pharmaceuticals, green manufacturing and environmental engineering.

CES OUTSTANDING SENIOR AWARD

A $500 cash stipend and plaque were presented to Ashley Erickson, a senior in mechanical engineering, as the 2004 Capstone Engineering Society Outstanding Senior. She is the recipient of a ChevronTexaco Scholarship through the Society of Women Engineers, a NASA Space Grant, the Madeline Keaton Cuniff Endowed Aviation Scholarship and the James C. Lewis Scholarship, and is an ASME Foundation Scholar. Erickson’s academic honors include the Dean’s List, Pi Tau Sigma Mechanical Engineering Honor Society, Omicron Delta Kappa Senior Honorary, Blue Key Senior Honorary, National Society of Collegiate Scholars, Golden Key Honour Society and Gamma Beta Phi Honor Society. Erickson was also selected to represent the College as an Ambassador of the College of Engineering (ACE).

COE ANNOUNCES T. MORRIS HACKNEY FACULTY LEADERSHIP AWARD WINNER

Dr. John Wiest, associate professor of chemical and biological engineering, received the 2004 T. Morris Hackney Endowed Faculty Leadership Award. The award honors a faculty member who exemplifies the leadership qualities that advance and add to the stature of the College of Engineering.

Wiest has served the College for nearly 10 years. He has authored more than 40 publications and articles throughout his career, and he has been actively involved in several professional organizations.

Wiest’s engineering research deals with transport phenomena in polymeric and structurally complex systems with emphasis on molecular theories. He is an interdisciplinary researcher with ongoing projects through the Center for Materials for Information Technology (MINT) and the Alabama DOE/EPSCoR program.

Wiest has been involved in enhancing the quality of education offered at the Capstone by serving on numerous committees, from being the College’s representative on the University’s Graduate Council to working on the MINT executive committee.

In addition to his teaching and research duties, Wiest coordinates the chemical engineering graduate program. He successfully recruits top-quality students and works with them from the application process to teaching assistant assignments and thesis and dissertation committee details.

This award was created as a tribute to T. Morris Hackney for his leadership of the Citation Corp. As president of Citation, Hackney supported The University of Alabama with a $1 million endowment to provide student scholarships and fund renovations of UAs foundry. This award is made possible by contributions from Mr. John H. Josey and his son, Mr. Howard Josey.

Wiest was recognized as the Hackney Award winner at the College’s Distinguished Engineering Fellows banquet in March.
KARR APPOINTED AS ASSOCIATE DEAN FOR RESEARCH AND GRADUATE STUDIES

Dr. Charles L. Karr, professor and head of aerospace engineering and mechanics, has been named associate dean for research and graduate studies for the College. In this position, Karr will be responsible for working with research funding agencies, assisting engineering faculty with research proposals and budgets, and coordinating the engineering graduate programs.

Karr is a graduate of UA, completing his bachelor of science in mechanical engineering in 1984 and his master’s and doctorate in engineering mechanics in 1987 and 1989, respectively. After receiving his doctorate, he spent seven years working as a research engineer with the U.S. Bureau of Mines, Tuscaloosa Research Center.

While working at the Bureau, Karr maintained a relationship with UA by serving as a part-time instructor in both the engineering mechanics and aerospace engineering departments. He joined the faculty full time in 1995 as an assistant professor and was promoted to associate professor and then professor.

Considered a leading expert in the area of intelligent systems, Karr is the author of three books and 19 book chapters, and he has published 34 refereed journal articles and more than 90 conference papers. He has become widely known for his pioneering work in combining genetic algorithms and fuzzy logic, and he has successfully applied these techniques in the aerospace, mineral processing, manufacturing, and steel industries. In addition, he holds two international patents in the area of intelligent systems for locating the source of radio signals.

KNIGHT IS NEW CAPSTONE ENGINEERING SOCIETY DIRECTOR

The College of Engineering recently named Angela Knight as the Capstone Engineering Society director.

Knight comes to the CES office from UA’s Engineering Career Services, where she served as placement officer and director for five years. In her new position, Knight will serve as a link between the College’s students, alumni and friends, and work with the CES board of directors in developing increased financial support.

“The Capstone Engineering Society is such a vital part of the College of Engineering. I’m really looking forward to working with our alumni to plan activities across the state and throughout the nation,” Knight said.

THREE RETIRE FROM UA’S COLLEGE OF ENGINEERING

The College of Engineering recently celebrated the retirement of three longtime faculty members. Thanks for many years of service and dedication! You will be greatly missed by faculty, staff and students.

Dr. Robert Griffin
Dr. Robert Griffin retired from UA’s College of Engineering July 1, 2004. Griffin joined the College of Engineering in 1990 as the James R. Cudworth Professor of Environmental Engineering in chemical engineering and director of the Environmental Institute. He has served as the director of Alabama’s EPA/EPSCoR Program and director of the Southeast Regional Center for the National Institute for Global Environmental Change since 1991. From 1994 to 1996, Griffin served as interim dean for the College. In 1996, he was appointed associate dean for research and graduate studies. From 1996 to 2000, Griffin served as co-director for the State of Alabama EPSCoR Program and was appointed executive director of Alabama’s EPSCoR Program in 2000.

Dr. Der-San Chen
Dr. Der-San Chen served as a faculty member of the College for 34 years, first as a member of the computer science and operations research department and then as a member of the Department of Industrial Engineering. Chen is a well-known researcher in the field of operations research where his work in optimization theory and techniques is recognized internationally. During his tenure, he served the department as advisor to UA’s chapters of the Institute of Industrial Engineers and Alpha Pi Mu (the industrial engineering honor society). Recently, he was designated as the Outstanding Faculty Member of the IE department by its students. His many contributions to the engineering profession and The University of Alabama are recognized by his peers, both internationally and locally, but more importantly, his dedication and contributions are recognized by his students as a renowned educator.

Dr. Hui-Chuan “Hannah” Chen
Dr. Hui-Chuan “Hannah” Chen served as a faculty member of the College for 34 years and played a significant role in the growth and development of the computer science program. As one of its founding faculty members, she was instrumental in establishing direction and vision for the program. She actively participated in hiring faculty members, managed the computer science graduate program for many years, graduated UA’s first computer science doctoral student, and helped mentor and advise students and faculty.
WHY JOIN CES?

- Increase the prestige and value of your engineering or computer science degree.
- Help us achieve higher rankings through increased alumni participation.
- Provide much-needed financial support for our students and the College.
- Stay in touch with friends.
- Receive updates and information about the College.
- Receive the Capstone Engineer.
- Receive invitations to pre-football game events.

Call Angelia Knight at 1-800-333-8156, e-mail aknight@coe.eng.ua.edu, or visit the website at www.eng.ua.edu.
ALUMS GATHER IN NATION’S CAPITAL
About 20 UA engineering alumni gathered in Washington, D.C., for a CES dinner meeting on March 16 at Ramparts Restaurant. John Covington, John Daniels and Sammy Seals assisted with planning the event.

MONTGOMERY ENGINEERING ALUMS MEET AT CAPITAL CITY CLUB
Montgomery-area engineering alumni gathered at the Capital City Club in Montgomery on Feb. 12. The dinner was hosted by the Capstone Engineering Society and attracted a wide range of graduates and friends of the College. H. Kenneth White Sr., past national chair for CES, assisted with planning the Montgomery event.

GREATER BIRMINGHAM-AREA CES CHAPTER MEET AT CAHABA PUMPING STATION
Birmingham-area engineers met at the Cahaba Pumping Station on March 25. About 20 alumni met for breakfast and listened to facilities updates from Thad Turnipseed, director of facilities for the University.

PI TAU SIGMA HOSTS ALUMNI REUNION
UA’s chapter of Pi Tau Sigma, the national mechanical engineering honor society, held an alumni reunion on March 20. About 50 Pi Tau Sigma alumni attended, including several from the first Pi Tau Sigma inductee class of 1948. Tours of Hardaway Hall and the new Student Engineering Projects Building were given by mechanical engineering students, and then the alumni joined mechanical engineering faculty and students for a banquet.

GOLFERS BATTLE THE WEATHER TO RAISE FUNDS FOR CES
The Greater Birmingham Area Chapter of the Capstone Engineering Society held its fourth annual CES Golf Tournament on April 13 at the Bent Brook Golf Course in Bessemer. Even though the weather was not ideal for golfing, alumni and friends played through and raised almost $11,300 (net proceeds) that will benefit CES initiatives, including scholarships for outstanding engineering students. This year’s tournament was the most successful in the amount of money raised and in the number of players.

THANKS TO THIS YEAR’S SPONSORS!
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Spectrum Environmental Services Inc.
Thompson CAT
US Infrastructure
Volkert and Associates Inc.
Vulcan Painters Inc.
Whitaker & Rawson
1957
Robert N. Braswell, Ph.D., B.S.I.E. ’57, M.S.I.E. ’59, has been inducted as a fellow into the American Society of Engineering Education. He was selected as a Distinguished Engineering Fellow in 1998.

1963
Paul R. Davis, Ph.D., B.S.E.E. ’63, was appointed to account executive of SM&A where he will be responsible for building the company’s client relationships and ensuring the quality of services provided by SM&A.

1968
Lee H. Richey, B.S.M.E. ’68, M.S.M.E. ’69, has been named vice president of the Kennesaw State University Foundation team. Richey is responsible for supervising the foundation’s construction projects of on-campus and off-campus properties.

1970
Gregg L. Vaughn, B.S.E.E. ’70, M.S.E.E. ’72, Ph.D. ’74, was selected as the 2003 Engineer of the Year by the Engineering Council of Birmingham. He currently serves as head of the electrical and computer engineering department at The University of Alabama at Birmingham.

1972
Van L. Richey, B.S.C.B.A. ’72, M.B.A. ’76, was awarded the 2003 Engineering Leadership Award by the Engineering Council of Birmingham. Richey, president and CEO of American Cast Iron Pipe Co., serves as a member of the College’s Leadership Board.

1975
Garry M. Lyles, B.S.M.E. ’75, was selected as deputy director of Project Constellation for NASA. He is responsible for the development of all exploration transportation and support systems needed to travel into space.

1978
Mohammad Karim, M.S. in physics ’78, M.S.E.E. ’79, Ph.D. ’82, accepted a position as vice president of research at Old Dominion University in Norfolk, Va. Karim was named a Distinguished Engineering Fellow in 2004.

1980
Col. R. David McNeil, B.S.E.E. ’80, was awarded the Bronze Star medal after completing one year of service in Operation Iraqi Freedom, and has been assigned as commander of Fort Dix in New Jersey.

1985
Paul W. Lammers, B.S.Ch.E. ’85, accepted a position as manager of engineering and project management with Amgen in Seattle, Wash. Lammers is a member-at-large on the Capstone Engineering Society Board of Directors.

Jose Joaquin Matienzo, B.S.A.E. ’85, has been selected for the 2004–2005 NASA Fellowship Program. He will participate in the Executive Development Institute at the University of North Carolina in Chapel Hill. Matienzo is currently the manager of launch services support project at NASA’s Marshall Space Flight Center in Huntsville.

1987
Eric Burks, B.S.I.E. ’87, was selected as vice president of business services for the Birmingham Regional Chamber of Commerce. He was instrumental in not only the Mercedes-Benz U.S. International expansion in Vance and but also bringing the Hyundai plant to Montgomery.

Sandra C. Coleman, M.S.I.E. ’87, was named as the manager of the Space Shuttle external tank project office at the NASA Marshall Space Flight Center in Huntsville.

Michael Kynard, B.S.E.E. ’87, was named deputy manager for the Space Shuttle engine project in NASA’s Space Shuttle propulsion office at Marshall Space Flight Center in Huntsville.

1996
Suzanne Moore, B.S.C.E. ’96, accepted a position as reservoir engineer with Energen Resources.

Michael Roach, B.S.C.E. ’96, was awarded the Young Engineer of the Year Award by both the American Society of Civil Engineers (Palm Beach, Fla., Chapter) and the Florida Engineering Society–Palm Beach Chapter.

1997
Michael Johns, B.S.M.E. ’97, was recently appointed vice president of the environment, energy and engineering division of the Southern Research Institute in Birmingham.

1998
Kenneth M. Criswell, B.S.M.E. ’98, received a promotion with the U.S. Army Corps of Engineers and will be moving to Huntsville.

2003
Warren T. Keith, B.S.M.E. ’03, received an honorable mention in the National Science Foundation Graduate Fellowship competition. He is currently pursuing a master’s degree in mechanical and aerospace engineering at the University of Virginia.
JOSEPH EDWARD BOWLES
Joseph Edward Bowles died on July 13, 2003. In 1958, he received his bachelor’s degree in civil engineering from the Capstone followed by a master of science in civil engineering from the Georgia Institute of Technology in 1961. Bowles taught civil engineering at colleges in Georgia, Wisconsin and Illinois, and he was the author of several textbooks. Bowles was also an American Society of Civil Engineers Fellow.

HOWARD BURNS
Howard Burns died on May 15, 2004. In 1946 Burns received a bachelor of science in electrical engineering and started an electrical engineering business with a friend. He decided to return to school and received a law degree, then moved to Huntsville and accepted a job with the Army Ballistic Missile Command, where he worked with Wernher von Braun’s team. He rose through the ranks and moved to NASA’s Marshall Space Flight Center, working on the Saturn V project. Upon retirement in 1980, Burns began to use his law degree with his appointment as a district judge in Athens, Ala.

VINCENT P. CARUSO
Vincent P. Caruso died on June 14, 2004. He graduated from the University in 1951 with a bachelor’s degree in industrial engineering and began his career with Standard Casket Manufacturing in Birmingham. He went on to spend 35 years with NASA and the Boeing Co., focusing on space-vehicle manufacturing, assembly, and test and launch operations. Projects he worked on included Saturn, Apollo, Sky Lab and the Space Shuttle programs.

He retired from NASA in 1987 and from Boeing in 1992. Along the way he received many top awards for his work. Among his honors is the Silver Snoopy Award given annually by NASA to the top one percent of their workforce. He also won NASA’s Exceptional Service Medal and was recognized in the 105th Congressional Record for outstanding professional and civic service.

Caruso was named by the College as a Distinguished Engineering Fellow in 2001, and he was given the honor of the College’s Outstanding Alumni Volunteer in 2003. He served on the board of the Capstone Engineering Society, and he has provided perpetual financial support by endowing a scholarship for the College.

WILLIAM J. FRITTON
William J. Fritton died on Feb. 2, 2004. After receiving his bachelor’s degree in 1941, Fritton became the first industrial engineer hired by American Brass. Three years later he was named a supervising field engineer for Curtiss-Wright Corp. before joining the war production effort with the Van der Horst Corp. of America at the request of the War Manpower Commission in 1944. Fritton also served as executive vice president and director of the U.S. Rubber Reclaiming Co. and vice president of Hysol and Dexter Corp. After retiring from corporate work in 1977, Fritton became a full-time member of the management engineering faculty at Erie Community College in Buffalo, N.Y.

Fritton was named a Distinguished Engineering Fellow in 1988, and he established an endowed scholarship in industrial engineering in 1996.

NANCY ORR HAMNER
Nancy Orr Hamner died on Jan. 9, 2004, after a courageous eight-year battle with cancer. Hamner served as the administrative secretary for the chemical and biological engineering department.

During her nine years of dedicated, hard work at the University, Hamner assisted in the management of the Alabama DOE/EPSCoR program and Project R.O.S.E. (Recycled Oil Saves Energy). She also received the McKinley Award for her contributions to the University.

WARREN L. HORNE
Warren L. Horne died on June 2, 2004. He received a bachelor’s degree in mechanical engineering from the University in 1939. He worked with the U.S. Army Corps of Engineers on the Panama Canal and, when World War II began, he joined the U.S. Navy as a lieutenant. In 1953, he moved to Tullahoma, Tenn., and worked at Arnold Engineering Development Center. Horne concluded his career at Micro Craft Inc., from which he retired as chief engineer in 1980.

CHARLES H. NEWSOM
Charles H. Newsom died on Sept. 12, 2003. Newsom received a bachelor’s degree in mechanical engineering in 1952. He became one of the five founding members of one of the Southeast’s most influential steel fabricators, Alabama Electrical Steel Co. Inc. (AESCo Supply Co.) in Montgomery. He served as the president of AESCo and worked through the 1990s even after the company was sold to Trinity Industries of Dallas, Texas.

HUGH M. SIMS JR.
Hugh M. Sims Jr. died on March 22, 2004. Sims received a degree in metallurgical and materials engineering in 1957 and was named a Distinguished Engineering Fellow in 1988. Sims devoted his career to the foundry industry. He was vice president of marketing for Vulcan Engineering and served as president and founding partner of Birmingham Alloys Inc. In 1964, he founded Simsco Industries with foundries in Columbus, Selma, Demopolis and Centreville.

Sims was national president of the American Foundrymen’s Society, founder and president of Alabama Cast Metals Association, and national president of the Foundry Education Foundation.
you know Coach Bryant’s stats just like you know pi to the 100th decimal.

you average the gymnastics scores before the computer finishes.

you set your watch by Denny Chimes.

you measure land in relation to the size of the Quad.

you know where MIB is.

you calculate the height, arc and length of time the ball was in the air after every free throw in Coleman Coliseum.

you know how to cast an iron elephant.

your closest food source for four years was the Ferg.

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you help shape the future of UA Engineering by supporting your College financially.

There are many ways to help—become a member of the Capstone Engineering Society, or donate gifts of cash, appreciated property or equipment for labs.

Take pride in the knowledge that your contributions make UA’s College of Engineering stand out in the eyes of the nation. For more information, call us at 1-800-333-8156.
Alumni Return to the Capstone to Help Teach Engineering Classes

By Anna Fowler

Recently, some College of Engineering classes have been taught not by the usual professors but by professionals who work in the field of engineering. A few UA engineering alumni have volunteered their time to be more than guest lecturers. These professionals are incorporating everyday engineering problems and situations into the classroom. Students can then experience the professional world, and practitioners can give back to the place where their dreams of becoming engineering professionals began.

Beginning with the Spring 2004 semester, Drs. Ken Fridley and Duk-Won Park, both professors of civil and environmental engineering, teamed with LBYD Inc. Civil & Structural Engineers to bring real-world experiences to the senior design class in civil engineering. LBYD, located in Birmingham, is the largest structural engineering firm in Alabama and one of the largest in the Southeast. Jim Delahay (B.S.C.E. ’80, M.S.C.E. ’87), president and CEO; Glenn Bishop (B.S.C.E. ’64, M.S.C.E. ’66), senior principal; and Richard Nail (B.S.C.E. ’94), principal, conducted the class by issuing design and layout projects similar to what LBYD and other civil engineering businesses would produce on a daily basis.

LBYD decided to teach the senior design class for three consecutive semesters—each semester to include different concentrations in civil engineering. The Spring 2004 semester consisted of site design and land planning. The class was divided into teams, and each team was given the same two sites in Birmingham on which to build a Walgreens store. Specific criteria were given for each site, such as average traffic in that area, average rainfall, available space for the building and parking regulations. Each team outlined two options in a presentation and computer drawings, and recommended to LBYD and Drs. Fridley and Park which site would offer the best location. Each group then produced a complete set of drawings of the site layout and design for final evaluation at the end of the semester.

“We were very impressed with how professionally the teams made their presentations,” Nail said. “Each team had very creative ideas and sound knowledge as the basis of their decisions.”

LBYD chose to participate in the three-semester teaching experience to help students apply what they have learned in the classroom to day-to-day projects. In addition, LBYD interacts directly with students who will soon enter the civil engineering workforce. Nail said the most important thing LBYD wants to gain from teaching the classes is to get to know some of the brightest students—an asset vital for LBYD’s long-range growth. “LBYD can’t produce the best product without hiring the best civil engineering students, and we wanted to take it one step further by enhancing those students’ education with real-world experiences,” Nail explained.

As for the competitive workforce, this class made the students deal with the pressures of a real-world competition to produce the best project. Each team was instructed to keep all aspects of their group’s project a secret, just as a competitive business proposal would be.

Matt Caddis, a May 2004 graduate, said he liked the competitive atmosphere in the class. “It made us want to do better because we wanted our group to win. We realized that in the real world everything is a competition,” Caddis said.

Other students in the senior design class also described the experience with LBYD as a way to push their civil engineering experience above other graduates’ to launch a career.

“We can take what we have accomplished in this class to interviews and show that we have hands-on experience with real-world projects, whereas other students might only have textbook knowledge of the subject,” said Jonathan Grammer, another May 2004 graduate.

LBYD will continue to help teach the senior design class in the Fall 2004 and Spring 2005 semesters. LBYD is not alone in helping with engineering classes; many alumni volunteer their time to present seminars and lectures on numerous topics in each of the College of Engineering’s departments.
THANKS!

Typically, the fall issue of the Capstone Engineer recognizes individuals and corporations that contributed gifts during the previous year to the College of Engineering. Due to the University updating its database system, we are not able to include a Donor Honor Roll in this issue.

Alumni and corporate support are critically important to the programs at the College of Engineering. In 2003, alumni, friends and corporations contributed $1.6 million to the College through gifts, CES memberships and property. Another $3.9 million gift-in-kind was received in the form of software. The College received a total of $5.5 million in private support in 2003. Without this generous support, we would not have been able to award student scholarships totaling more than $570,000 nor enhance research through laboratory renovations and equipment purchases.
Capstone Engineering Society Tailgate Parties

Engineering alumni and friends are invited to join the Capstone Engineering Society for the 2004 football season. Join us on the Quad for the following games:

HOMECOMING
Alabama vs. Southern Miss
Oct. 16 (beginning at 10:00 a.m.)

Alabama vs. Mississippi State
Nov. 6 (two hours prior to kickoff)

Alabama vs. Auburn
Nov. 20 (two hours prior to kickoff)

Call 1-800-333-8156 or e-mail csanders@coe.eng.ua.edu for reservations.

ROLL TIDE!

Capstone Engineering Society
College of Engineering
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