

The Dodecahedron



Hospitals Need Industrial Engineers? Ask Hawkins & Associates

Industrial Engineers are often asked what an Industrial Engineer does. The answer to that question is as diverse as the IE's themselves. Recent issues of the DODEC have featured stories on logistics (JBHT), retail (WMT), entrepreneurs (Mid-South Engineering, Harrison Energy Partners & Lyon Manufacturing) and those who have found success in academia (Dr. John English). We have tried to paint a broad stroke to illustrate the possibilities this versatile and relevant degree offers. The featured article in this edition demonstrates once more a different path an IE can choose to excel. The field is healthcare and the subject is our own Jim Hawkins.

Immediately following graduation in 1965, Jim was commissioned as a Second Lieutenant in the U.S. Army as a Combat Engineer and served his country in Vietnam. While there, he received a letter from St. Vincent Infirmary about interviewing for a position created by Booze-Allen Consultants as Director of Management Systems. He thought they made a mistake, because "hospitals did not need Industrial Engineers", and he threw it away. The hospital sent another letter explaining the job in more detail, and he agreed to schedule an interview when he returned home to Little Rock. He scheduled it last behind P&G, Dow, Celanese, DuPont and other Fortune 500 companies. Ultimately, he was the first IE hired by a hospital in Arkansas and one of only 30 hospitals with an IE in the country. He received training from Booz-Allen and studied operations at Mayo Clinic under their IE. Jim was a pioneer Industrial Engineer in Health Care. While at St. Vincent Infirmary he established a nurse staffing model, a "unit dose" drug distribution system, redesigned the laundry equipment flow and needed staff, reorganized the SVI administrative functions to aid in more functional organization, and involved the department

managers and staff in making their departments more efficient and effective in their work through improvement of their process flows.

Soon after accepting the position, Jim was recalled to active duty in 1968. He was sent to the Pentagon and assigned to the Surgeon General of the Army. He consulted major hospitals such as Walter Reed, Fitzsimmons, Letterman, Broke, etc., on how to improve management techniques, determine equipment requirements, staffing and budgeting. He returned to St Vincent in 1970 after his release from active duty. It was during this tour that Jim turned this lemon into lemonade and decided to form his own consulting business for physicians and clinics.

Jim established Hawkins & Associates, Inc. in August 1973 as the first Medical Management Consulting firm in Arkansas, specializing in advising healthcare



Jim and Annette Hawkins



Jim with daughter (and co-worker) Madeline

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Spring 2014

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“Be a part of the process by finding ways to use your unique skills to support the mission of the department”

From the President...

Fellow Academy Members –

We are fast approaching our annual banquet and meeting on April 4 – 5 in Northwest Arkansas. I love this event as it brings back many great memories and is a fantastic opportunity to reconnect with friends. I am also pleased to induct an exceptional group of new members into the Academy.

As mentioned in my last letter, the Board has been working hard on several new initiatives, many of which you will learn about over the course of the weekend. In particular, we committed new support to global studies by approving additional funding for scholarships. During the meeting, you will hear from some of our IE students who are working for Wal-Mart on international co-op assignments via video conference. Students who participated in short term trips will also share their experiences. The A-for-U committee (formerly SHUR) has started an industry/student mentoring circle program and is working on starting a Young IE Alumni group. The Scholarship committee is working on fresh ideas to communicate the impact your donations are having in the lives of our IE students.

The Saturday member meeting will be a more interactive event than in years past. Not only will you hear outstanding updates

from Dr. Needy, student organization officers, and global studies participants, but there will also be a series of breakout sessions. During these sessions, you will be given the opportunity to interact with other members, faculty, and students to discuss topics such as global studies, scholarships, mentoring, and high school recruiting of future IE's. We want you to be part of the process of forming new ideas and finding ways to use your unique skills to support the mission of the IE department, its students and faculty.

It has been my distinct honor to serve as President this past year. I have truly enjoyed my time in the role and am thankful for the opportunity to serve our department and alumni. See you April 4th!



Tarek Taha
BS '91 MS '93



Tarek Taha
('91, '93)
tarek_taha@jbhunt.com

P.S. Special thanks to Donna Young, who has done an exceptional job on the Dodecahedron over the last several years. Mike Ogle, you have big shoes to fill!

John and Elizabeth English Establish Endowed Scholarships in Industrial and Electrical Engineering

John English, Dean of the College of Engineering, and his wife, Elizabeth, are establishing two scholarships at the University of Arkansas with a \$100,000 gift.

The Nancy Carolyn English Endowed Scholarship in Electrical Engineering and Sara English Crismon Endowed Scholarship in Industrial Engineering are each being established with \$50,000 endowments and will allow their respective departments to attract and retain academically qualified students.

English and his wife are life members of the Arkansas Alumni Association, will be inducted into the Towers of Old Main and are members of the Heritage Society, a group for donors who have chosen to leave a legacy at the University of Arkansas through planned gifts.



Scholarship News



**Bob Etien, BS '66
Scholarship Chair**

As your Scholarship Committee continues to search for ways to increase the impact we have on the lives of U of A IE students and their families, we seem to always come back to the size of our Endowed Scholarship Funds. It is a no brainer that the more funds we have the more

we can help deserving students. However the real question in my mind is how do we continue to grow the Endowments without always asking the same members to give more and more?

The good news is we have 84 of 165 active members who are currently John Imhoff Fellows, 24 of whom have Permanent Named Scholarships awarded annually (check the AAIE web site for a full listing of John Imhoff Fellows and Permanent Named Scholarships). This group has been and will remain extremely important to our growth. In addition 112 of 165 or 70% of active members have made scholarship donations at least once. However a snapshot of the last four years shows that on average 38 members make scholarship donations above their dues in varying amounts from \$50 to \$10,000 in any given year. Think what we as an Academy could accomplish if we keep this group together and find a way to get the remaining 125 to contribute annually (at any amount).

My vision for the future is to arrive at the point where every AAIE member is a scholarship donor every year (100% Member Participation!).

If we look at the short history of our Endowments, 24 members with Named Scholarships have donated over \$400,000 of the \$1,100,000 in Financial Needs and

Academic Scholarship Funds. So how did we accumulate the balance? Corporate Matching Gifts have been significant, and the AAIE investment portfolio managed by the U of A Foundation has appreciated impressively in recent years. This means donations from members, the majority of whose donations are \$100 to \$200 account for approximately \$200,000. All donations make a difference and over time they make a "BIG" difference. So once again the Vision is simple: 100% Member Participation – Every member contributing to scholarships each and every year.

The Challenge

If you are a regular donor – Please continue. You are the life blood of the Endowments.

If you are not a regular donor – Please commit to becoming one at any level. Become a bigger part of the future.

If you have not yet reached John Imhoff Fellow level (\$1,000 lifetime giving), please develop a plan to become one (e.g. \$100 per yr. for next 10 years).

If you are a JI Fellow but not yet at Named Scholarship level (\$10,000) – Please commit to reaching the level with time.

As mentioned earlier we have 83 JI Fellows, 26 with Named Scholarships, and I am aware of only a small handful who reached recognition levels the first year of membership. This normally takes time. Let's make this is a journey not a destination.

I can think of no better legacy at the U of A than a lifetime of contributing to the AAIE Endowed Scholarship Funds.

Scholarship Committee

Sam Chaffin	Todd Cowell
Dewey Freeman	Ron Morris
Bob McKuin	Bob Etien
Tim McKinzie	

“My vision is to arrive at the point where every AAIE member is a scholarship donor every year”

To make a contribution:

**Please make check payable to:
University of
Arkansas Foundation
and mail to:**

AAIE
Dept of
Industrial Engineering
4207 Bell
Engineering Center
University of Arkansas
Fayetteville, AR 72701



*“The U of A
Student
Chapter of IIE
hosted a very
successful 2014
South Central
Regional
Conference.”*

From the Department...

Dear Academy Members,

As the AAIE banquet draws near, we are getting ready to complete another academic year. As many of you may be aware, I have some very sad news to report since my last writing. **Dr. Ernie Fant**, associate professor of industrial engineering, died Thursday, November 7, 2013 at his home in Fayetteville. Ernie had taught in the IE department since 1988, and was honored by students with the *Mother Goose Award* for exceptional storytelling in 2004, 2005, 2006 and 2011. He taught several popular electives including courses in renewable energy, robotics and machine vision. In addition, he taught a popular photovoltaic array seminar, leading students and community members through the process of setting up solar arrays and connecting them to the electrical grid. The department continues to realize the loss of a great friend and colleague.

Now, getting on with some happier news, I am pleased to report that **Dean John English and his wife Elizabeth** have established two scholarships at the UA with a \$100,000 gift to the departments of Industrial and Electrical Engineering. The Sara English Crismon Endowed Scholarship in Industrial Engineering is being established with a \$50,000 endowment and marks an important contribution to our department. We are grateful for the generosity of John and Elizabeth!

The faculty and staff continue to make great contributions. **Dr. Manuel Rossetti** was elected *Fellow of the Teaching Academy* signifying his outstanding performance as a teacher at the University of Arkansas. In addition, **Dr. John White and I** recently co-authored a new engineering textbook entitled *Fundamentals of Engineering Economic Analysis*, published by John Wiley & Sons. This book is designed for use in courses teaching engineering economic analysis.

This book features learning objectives, key terms, real-world vignettes with discussion questions, enhanced summary sections, and over 800 end-of-chapter problems. The online companion tool, WileyPLUS, provides video lessons, video solutions, algorithmic problems and tutorials.



Dr. Kim Needy

And finally staff member, **Mrs. Sandy Sehon** was promoted to a Fiscal Support Supervisor!

The University of Arkansas Student Chapter of IIE hosted the 2014 South Central Regional Conference on January 30 – February 1. Approximately 90 students, faculty and speakers coming from 10 different universities including Arkansas, Kansas State, Wichita State, Texas Tech, Missouri, Oklahoma, Oklahoma State, Houston, Lamar and the University of Texas Arlington participated. We were grateful for technical presentations made by **Mr. Eric Ervin** and **Mr. Jeff Young** from J.B. Hunt, **Dr. Greg Parnell** from the University of Arkansas, **Mr. Kevin Oden** from cycleWood Solutions, and **Mr. Kyle Kimpel** from Walmart. **Ms. Kelsey Lamb**, MSIE Student, took second place in the student technical paper competition. Attendees were treated to a private viewing and awards banquet at Crystal Bridges with a keynote delivered by **Chancellor Emeritus John White**. This event is primarily organized and run by the IIE student leaders. I want to recognize the significant efforts of chapter advisors **Dr. Chase Rainwater** and **Mrs. Sandy Sehon** who worked closely with student conference co-chairs **Ms. Bentley Fitchue** and **Mr. Harsha Malshe** who

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executed a first-rate program. I am also especially grateful to the generous support from the following sponsors: **AAIE**, University of Arkansas, Wal-Mart, Dassault Falcon Jet, Harrison Energy, P.A.M. Transport and ABF. Approximately \$20,000 in contributions were raised to help reduce the cost for students to attend the conference.

You won't want to miss this year's College of Engineering Banquet to be held on Saturday, April 5 to see our alumni receive special recognition. **Mr. Bob Davidson** (B.S.I.E. 1970, AAIE 1991) will be inducted into the *College of Engineering Hall of Fame*. **Mr. Dana Sedgass** (B.S.I.E.

1977, AAIE 2002) will receive the *College of Engineering Distinguished Alumni Award* and **Mr. Drew Harrison** (B.S.I.E. 2000) will receive the *College of Engineering Early Career Alumni Award*. I am so proud of our outstanding alumni!

I am certain that you will agree, that the department is doing great things, and I can promise you that we plan to continue on this trajectory. As an AAIE member you should know that we are grateful for the many things that you do to make our department successful. We simply couldn't have done it all without you!

Warmly,
Kim Needy

A Message From the Dean...

Dear Academy Members,

I'd like to thank Professor Ogle for inviting me to write a note for the Dodecahedron. The "DODEC" is a great way to communicate the Academy's engagement with the department. You are a great group, and I am so grateful to you for the generous support you provide in the form of time, talents and resources! I am very proud to be a member of AAIE.

As I have told many of you, Elizabeth and I are so pleased to be home in NWA. I am honored and humbled to serve in the capacity as Dean of Engineering at the U of A! We are pinching ourselves to make sure this has really happened. I have been in the job since July 1, 2013, and I can attest to the fact that it is an amazing thing to serve as dean of our alma mater.

I have just returned from an annual meeting of engineering deans from across the country in Washington, D.C. The meeting is sponsored by the American Association of Engineering Educators (ASEE), and it is called the Public Policy Colloquium (PPC). We spent the first day being briefed by federal leaders on the priorities in the federal government and

associated budget outlooks. As you can guess, we, as a group, are keenly interested in the budgets of the National Science Foundation, Department of Energy, Department of Defense and National Institutes of Health. Many of our college research enterprises are supported by these agencies, and they provide much of the necessary support to advance technology. According to what we were told in the briefing, the budgets supporting engineering research in the NSF and DOE will be flat, and the DOD and NIH will likely be reduced.

During the second and last day of the PPC, the engineering deans from each state worked together and held meetings with each of our congressional offices. We



Dr. John English

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“Engineering Deans from across the country are emphasizing the value of research to the Federal government”

“Help meet the objective of providing 25% of all UofA IE students with global studies experience”

Global Studies



Gene Staggs
BS '71 MS '72

Get Involved to Help Students Get Global Experience

The AAIE Global Studies Committee supports the IE Department in the development of partnerships with companies with global operations who need IEs to help them achieve success in their global operations.

- Meet with IE Design course professor and develop a plan for recruiting companies for global design projects.

Classroom presentations/discussions

- Assist professors in the recruitment of senior level executives to discuss the opportunities in global operations.
- Contact and ask AAIE members working for global companies to assist in recruiting their company executives to speak with students about global opportunities.

Global studies scholarships through donations to the Imhoff Global Studies Endowment

- Inform all companies contacted about partnering with the IE Department and AAIE of the Imhoff Global Studies Endowment and ask for their contribution to this endowment.

We already have one company participating in this partnership. Ami Spivey, AAIE Board Member and VP of International Business Processes at Sam's Club has sponsored a coop student who working in Mexico City this year (see related story).

Ami is taking over as the new Chair of the Global Studies Committee. Please provide her and the committee with your generous ongoing support.

Please contact Ami, one of our committee members or Ed Pohl in the IE Department if your company would like to learn more about becoming a global studies partner.

The UofA and the IE department have set an objective for at least 25% of all graduating students to have some global studies experience. Our committee along with the IE Department is looking for AAIE members' companies and other companies with global operations to assist in meeting this objective.

Global Studies supports the IE Department in the engagement of companies in the education of students in preparation for them for career opportunities working in companies' global operations. The following is an outline of the way companies can participate in a partnership for global studies:

Intern/Co-op opportunities

- Develop lists of global companies for potential student assignments.
- Meet with IE Department Co-op coordinators and develop plans for recruiting companies and students for opportunities with foreign operations.

Senior design projects

- Develop a list of potential global companies who might provide senior design projects for students.

Thanks for your support, Gene

Global Studies: A View from the World of a Student

Hometown: Panama, Panama
Major: Industrial Engineering
Years with Walmart: 6 weeks
Office location: Wal-Mart Home Office, Mexico City, Mexico

Provide an overview of your coop experience:

Participating in this international coop opportunity with Wal-Mart has been an amazing experience so far. The initial three weeks of transition took place in the Bentonville Home Office, as part of the onboarding experience. I had the opportunity to experience the Wal-Mart culture and meet many other associates working on different areas of the company.

On January 31, Clair Finke and I arrived to Mexico and were warmly welcomed by two members of the Mexico team –Luis and Diego. We were also warmly received by the entire Mexico Productivity Team, on our first day at the Home Office, and during that first week we had the opportunity to meet most of the team members personally.

I will be working a project related to the customization and implementation a Regression Analysis Tool used to identify very efficient and inefficient Wal-Mart stores in Mexico, according to different

work load drivers that are unique for each format, for a store called Suburbia. Because of this, from January 10th to January 13th, I attended a training program in Suburbia, where I learned about their store processes of this apparel store.



Daysi Areli Guerra Garcia

From January 17th to January 20th, I had the opportunity to attend the Wal-Mart Year Beginning Meeting 2014. There I learned about how all the formats performed during 2013, and about their new goals and projects for 2014.

What do you hope to learn?

From this experience, I wish to learn how a company such as Wal-Mart does business by working in teams and focusing on continuous improvement in order to always meet customer expectations. I also wish to understand how wage planning is performed for Wal-Mart and Sam's Club; the difference between the key performance indicators used and what

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"My project helps identify efficient and inefficient stores in Mexico"

In Remembrance...

Dr. Jeff Kennington grew up in Malvern, AR, then received his BSIE from the University of Arkansas in 1968. He passed away on November 26th at his Dallas home. While he was an undergraduate at UA, he dreamed of becoming a professor. He had a wonderful career for 40 years as a professor at SMU and was named a University Distinguished Professor at SMU in 2010. In the obituary in *The Dallas Morning News*, his wife, Carolyn Kennington was quoted, "He liked being with the students, he liked doing research

... he just enjoyed the whole ride." She also mentioned that he found it especially rewarding to have advised 29 students as they worked toward doctoral degrees.

Memorials may be made to the Jeff Kennington Tribute Fund, SMU Lyle School of Engineering, P.O. Box 750339, Dallas, Texas 75275-0339.



A4U: Will You Be My Mentor?



Angela Kuli, BS '92

“The data that moved us to action was that 80% of the students said they would like an industry mentor.”

Last year, 100 INEG Sophomores were surveyed regarding their desire for a mentor. Of the 100 surveyed, 50% indicated they would like a peer-to-peer mentor program, most likely following on with the peer mentoring program that is part of the Freshmen Engineering Program. The data that moved us to action was that 80% indicated they would like an industry mentor. With that data in hand, Dr. Tish Pohl reached out to me last summer to start the discussion of what would an industry mentor program require and how could the Academy help support the effort.

The department and the A4U committee started a pilot program this semester offering the Senior Design class students a chance to be a part of a mentor circle. We have 3 mentor circles each made up of 3 industry mentors and 3-4 students. The first meetings have been held and initial feedback is fantastic!! We will be collecting data from this semester's pilot program to determine next steps.

If you are interested in volunteering as a mentor for a group of students, please let us know at uofa.aaie@gmail.com. It is important to note that you do not have to be in NWA to mentor. Our technology will allow us to mentor over teleconference or videoconference. Many thanks!!

Angela Kuli
A4U Committee Chair
A4U: Academy Focused on Recruitment,
Retention, and Readiness of
Undergraduates

Center for Innovation in Healthcare Logistics and the IE Department Recognized by Allied Health World

The Bureau of Labor Statistics reports that, thanks in part to an aging U.S. population, all three of the fastest-growing careers in the country between 2010 and 2020 will come from the health care sector. Healthcare innovation and the future of the medical profession are hot topics nationwide.

Recently AlliedHealthWorld.com, a corporation that operates a vertical marketing and media online business in the United States and internationally, recognized "10 Schools Driving Healthcare Innovation" for generations to come.

Among the ten, the University of Arkansas was listed, represented by the Center for Innovation in Healthcare Logistics (CIHL). The Center (CIHL) is an industry-university partnership based at the UofA that leads a nationwide effort to identify and foster system-wide adoption of ground-breaking healthcare supply chain and logistics innovations.

Students have the opportunity to work directly with College of Engineering faculty on research projects that attempt to improve the realm of healthcare supply chain and logistics. Research projects focused on determining ideal forms of medication packaging and performing a thorough accounting of supply chain cost and quality drawbacks can lead to innovations that overcome roadblocks to quality care and foster an industry environment conducive to further progress. By collaborating with interested corporations and government agencies as well as healthcare providers, students can learn to bring a well-balanced perspective to their projects.

"I am pleased that CIHL is being recognized as a national leader in healthcare innovation. This accomplishment brings great recognition to our talented faculty, staff and students within the IE Department", said Dr. Kim Needy, IE Department Head.

These Are Not the Freshmen You Were in 19XX: A Look at the Freshman Engineering Experience



Dr. Richard Cassady

The Freshman Engineering Program (FEP) at the University of Arkansas is now in its seventh year of existence. Since the program concept was approved by the College of Engineering (COE) faculty in November, 2006, Richard Cassady, Professor of

Industrial Engineering has served as the program director. In the fall semester of 2007, the FEP team of faculty, staff, and student employees included only Professor Cassady, one instructor, two staff members, seven graduate teaching assistants (GTA), and approximately fifteen peer mentors. Today, the team includes Professor Cassady, four instructors, three staff members, ten GTAs, and approximately sixty peer mentors. This growth is due to the dramatic increases in enrollment experienced by the COE during the past seven years (see Figure 1).

FEP is comprised of two interconnected sub-programs, the Academic Program and the Student Services Program. The Freshman Engineering Academic Program is a two-semester program that includes:

- two engineering courses (Introduction to Engineering I and II),
- two mathematics courses (depending on the student’s math placement),
- science courses as appropriate based on the student’s math placement,
- two English courses (Composition I and II), and
- at least one university core elective in the humanities, fine arts, or social sciences.

Math placement is the most important factor in establishing the curricular requirements of a FEP student. Only 35% of FEP students begin their COE experience in Calculus I – 15% begin in Calculus II or Calculus III (typically because of Advanced Placement credit), 35% begin in Precalculus Mathematics, and 15% begin in College Algebra.

(Continued on page 10)

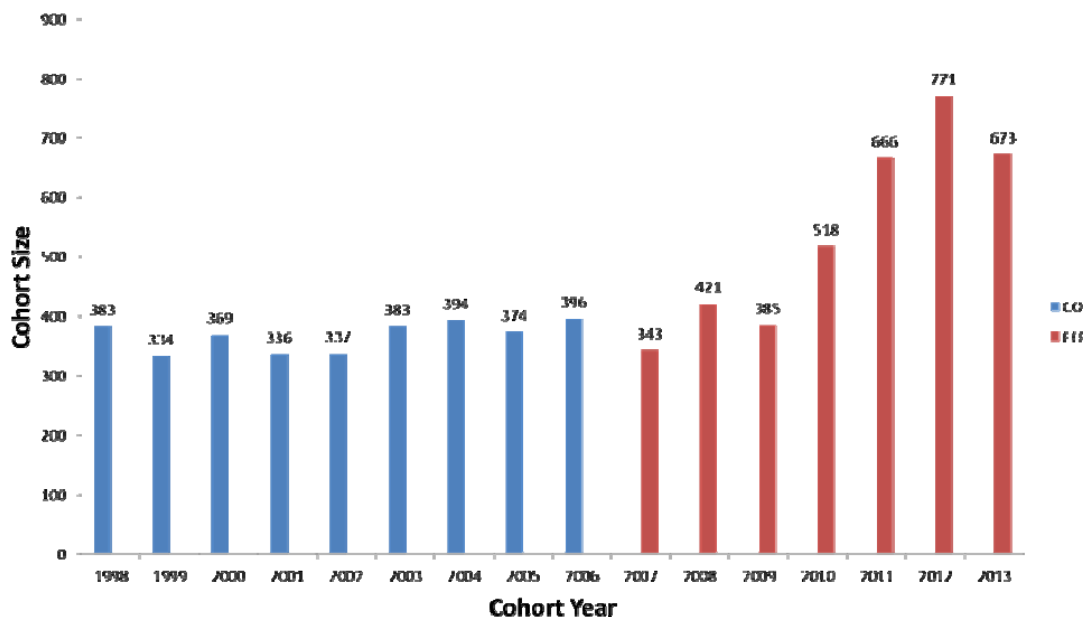


Figure 1. The first three FEP cohorts (2007-2009) matched the typical size of a COE freshman class during the nine years (1998-2006) prior to FEP. The past four cohorts (2010-2013) have been much larger.

The Freshman Engineering Experience is now in its seventh year

...Not the Freshmen You Were

(Continued from page 9)

The engineering courses taught as part of or in conjunction with the Freshman Engineering Academic Program include not only the two-semester Introduction to Engineering course sequence, but also a two-semester undergraduate research experience for a select group of Honors College.

The Freshman Engineering Student Services Program provides proactive support to FEP students through orientation, academic advising, peer mentoring, professional development workshops, tutoring, and extracurricular activities. This program is housed in the Freshman Engineering Center, 5500 sq ft space on the third floor of John A. White, Jr., Engineering Hall.

Most of what happens in FEP is integrated into the Introduction to

Engineering course sequence. These courses include engineering problem-solving skills as well as team-based projects in one of four multi-disciplinary topics: biomedical, computing, robotics, structures. In addition, these courses include departmental information sessions and professional development workshops. The professional development workshops include resume building, interview skills, diversity, and job search strategies.

Every FEP student also participates in a mock interview. Introduction to Engineering also requires mandatory participation in the peer mentoring program. In weekly, one-one-one meetings, peer mentors discuss topics aimed at increasing the academic success and personal wellness of their mentees.

FEP was created to increase retention of first-year engineering students to their

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“Clear improvements have been seen in retention and graduation rates”

Cohort Year(s)	2 nd Year Retention Rate	4 th Year Graduation Rate	6 th Year Graduation Rate
1998-2006 COE	61%	17%	38%
2007 FEP	62%	29%	42%
2008 FEP	69%	29%	
2009 FEP	71%	26%	
2010 FEP	71%		
2011 FEP	69%		
2012 FEP	70%		

Table 1. Implementation of FEP has resulted in an increase of approximately 10% in second-year retention of engineering students. The impact on four-year and six-year graduation rates appears to be similar .

...Not the Freshmen You Were (continued from page 10)

second year. The belief was that increasing second-year retention among engineering students would lead to higher four-year and six-year graduation rates for the COE.

Improvements in second-year retention resulting from implementation of FEP are clear, and the implications for graduation rates are promising (see Table 1).

One other benefit of FEP is that first-year engineering students now have until early March to choose their major. The Department of Industrial Engineering has benefited from this change, since many first-year engineering students know very little about industrial engineering. In a typical year, approximately 14% of FEP students choose industrial engineering as their major.



Freshman Engineering Program Peer Mentors

Approximately 14% of FEP students choose IE as their major

Where Are Your Fellow AAIE Members?



Arkansas	112	Missouri	6	Tennessee	4
Arizona	1	Mississippi	1	Texas	28
California	1	North Carolina	4	Virginia	5
Florida	3	Nebraska	2	Washington	1
Georgia	4	New Hampshire	1	Wisconsin	2
Indiana	1	Ohio	1		
Kentucky	1	Oklahoma	3	Bolivia	1
Louisiana	3	Pennsylvania	1	Mexico	1
Michigan	2	South Carolina	1		

...Hawkins & Associates (continued from page 1)

providers. Since its beginning, Hawkins & Associates, Inc. has set up more than 250 physician practices and provides management services to more than 80 clinics located in Arkansas, Texas, Mississippi, Louisiana, Virginia, North Carolina and Nevada.

In 1984, after several years into his chosen field he co-wrote a book entitled, "An Introduction to Practice Management". He provides his service exclusively to physicians, clinics and hospitals. Services include: physician practice management expertise including practice start-ups, optimize office flow design, internal systems and procedures, expansions, mergers, satellite clinics, HR procedures, and practice organizational effectiveness through evaluations. In addition, he offers management advice on computer systems, practice management software, accounting software, accounts receivable management, physician compensation methods, physician practice contracts, strategic planning, managed care contract negotiations, marketing and patient relations. His daughter, Madeline, works with him in his practice.

While he was consulting with physicians, clinics and hospitals, Jim served in the US Army Reserves in Arkansas, Texas and Oklahoma in various positions as Company Commander, Battalion Commander, Deputy Brigade Commander, Chief of Staff of the 75th Division and Assistant Division Commander of the 95th Division. While in the divisions, his units won first place in almost all categories. He graduated from the US Army War College and US Army Command and General Staff College. He retired with the rank of Colonel. He received the Legion of Merit, Joint Service Commendation, along with 10 other decorations and two Presidential Unit Citation Badges.

Jim was one of 12 charter members inducted into the Arkansas Academy of Industrial Engineering in 1986. He remains very active in the Academy, serving in various roles including

secretary, treasurer, membership chairman, publicity chairman and president. He was the first and founding editor of The Dodecahedron. He was also very instrumental in working with students to start a program called SHUR (Students Helping Undergraduates Retention) whose mission it was to have upperclassmen tutor and mentor freshmen. The retention rates increased considerably, and the tutoring program was folded into a University wide program to help freshmen and sophomores. The mock interview program was also his brainchild. Jim was awarded the Distinguished Alumni Award of the College of Engineering in 2009.

Jim's vision is to see a collaboration between Industrial Engineering and healthcare management. The rising cost of healthcare and the problems associated with this system as it has evolved demonstrates the need for that kind of creative and innovative solutions IE's bring to the table.

Another interesting fact about Jim is that he attended public schools in Little Rock and was a member of the "lost class of 1959" at Central High School. He enrolled in Harding Academy in Searcy, AR as a high school senior, lived in a dormitory, and graduated.

Jim and Annette Jackson Hawkins have been married for 52 years and have two daughters, Meredith (deceased), and Madeline, son-in-law, Oscar Cox, and one grandson, Dalton. All are living in Little Rock.



"My vision is to see greater collaboration between IE and healthcare management"

...Global Studies: View from a Student (continued from page 7)

variables influence them. Lastly, I want to improve my skills in influencing and communicating to business leaders.

What dates will you be in this position?

I will be in the Wal-Mart Home Office in Mexico City until July 27th, and then work at the Bentonville Home Office until August 8th.

Describe a typical work day – what do you do?

When I get to the office, the first thing I do is get a cup of coffee at the Wal-Mart cafeteria on the fourth floor. Then, I get together with the team to analyze the output of the Regression Analysis Tool, in order to meet up with the different store format leaders and present the proposals to them.

What are you working on now?

I am working on a project related to the customization and implementation of a Regression Analysis Tool for one of Wal-Mart's formats in Mexico, called Suburbia. It is a completely different format to any of all the Wal-Mart formats in Mexico City –it is an apparel store that targets a different type of customer.

What motivates you to get up every morning?

My wish to learn more about Mexico's culture and customs, and every single day represents a completely new experience filled with fun and adventure. I enjoy simple things like watching pedestrians walk on the streets to meet their daily affairs while on my way to the Wal-Mart Home Office, and listening to the mix of sounds created by the different radio stations coming from vehicles advancing at

the same pace of traffic when I take a taxi.

Every day I learn a little more about how Wal-Mart does business. Also, I am part of an amazing team of associates that always share their knowledge with me and make me feel part of the team. At Wal-Mart Mexico, I have been given the freedom and responsibility to make real decisions with real impact, which represents an opportunity to contribute in a positive way.

What is the one personal or professional achievement that makes you most proud?

The one personal achievement that makes me most proud is having won a scholarship from the Panamanian government to study in the United States.

If you were stranded on an island, which movie DVD, music CD or book would you want to have?

Movie? I cannot make up my mind. Regarding books, I would probably take the "Life is a Dream" by Pedro Calderon de la Barca, "Life of Pi" by Yann Martel, "The Great Gatsby" by Scott Fitzgerald and the Bible.

What is your favorite Mexican dish?

So far, my favorite Mexican dishes are "Chile Relleno", and street sold "Chilaquiles". I have tried several street food dishes, and they are all really good. I highly recommend the street Chilaquiles (but not for weak stomachs).

What is the one thing that people would be most surprised to learn about you?

I survived a car accident at age fifteen, and I can write backwards!

"I am part of an amazing team of associates that share their knowledge and make me feel part of the team."

International Studies vs. Global Studies, What Is the Difference?

(from http://en.wikipedia.org/wiki/Global_studies)

International studies generally looks at exchanges between states, multilateral or bilateral agreements, diplomacy and how issues are handled between two or more states.

Global studies, in contrast, focuses on globally shared issues like the preservation of culture and environment, movements of people and the effects of globalization (i.e. issues that are communally relevant worldwide).

Unlike traditional international studies, global studies often examines phenomena that are supranational (such as global climate change, pandemic disease, transnational economic formations) and subnational (such as the local and regional impacts of deindustrialization that arise due to the shifting landscape of global capitalism).

Membership Committee



Ken Gaines BS '92

AAIE has approved ten nominees for induction this year, plus we will induct two nominees approved last year that could not attend in 2013. This is an accomplished and enthusiastic group of UofA graduates who will contribute a great deal to our

organization and the department! The diversity of work being done by these professionals is exciting and continues to show the quality of engineering ability the IE department is turning out. Please find time to meet and welcome each of our new members at the annual meeting this year. I'm sure you will be enriched by their breadth of experiences. You can look forward to meeting the following new members at the annual banquet:

Brian Billingsley (BSIE 1997) – Brian is originally from Norman, OK and is currently working in Springdale as the president for Hebco, Inc., a national defense contractor that provides technical and engineering services to the Department of Defense. Brian is now a co-owner of the company that started in 1983 and is a licensed PE in Arkansas.

Jay Captain (BSIE 1992) – Jay is an army brat and has lived all over the US! He currently lives in Tulsa, OK where he works for Whirlpool Corporation as a Staff Engineer over Quality. Jay is a registered PE and retired from the US Army with the rank of Captain (staying true to his namesake!).

Gina Lungaro Cunningham (BSIE 1995) – Gina was born and raised in Lake Charles, LA. She has worked in Texas since graduating from the UofA and spent a great deal of her career with Raytheon Company in various positions and divisions. Currently, she holds the position

of Program Manager – Multi-Function RF System in McKinney, TX. She holds an MS in Engineering Management from SMU and has served in different capacities for APICS during her career.

Kelvin Dedner (BSIE 1995) – Kelvin is from Nashville, AR and has worked for Wal-Mart Corporation his entire career. He has diligently risen through the Distribution ranks to his current position as Divisional Vice President of Supply Chain for the MS River Delta Region. Kelvin makes his home in Mandeville, LA.

Dr. Earnest W. Fant (BSIE 1963) – We were saddened by the news of Dr. Fant's passing and many benefited from his knowledge and wisdom. Dr. Fant is being inducted as an honorary member this year. Born in Ft. Smith, AR, he worked for several years before pursuing a teaching career first at Texas Tech, then coming home to work for the University of Arkansas. Our blessings go out to his wife, Georgie, and his children Laura and John.

Derek Gibson (BSIE 1999) – Derek is from NW Arkansas and enjoys being back home after a short stint out of state. After working in various engineering positions, Derek applied his IE skills to a different kind of work at Legacy National Bank where he is the Sr. Vice President of Private Banking/Commercial Loans. He has earned an MSIE from Georgia Institute of Technology and graduated from the Southwest Graduate School of Banking at SMU. He is very involved in and around the community in Springdale, AR.

Charles King (BSIE 1988, MSIE 1990) – Charles was born and raised in Little Rock, AR. In addition to his degrees in IE, he has a degree in mathematics and has worked at a number of high profile companies, including Sprint Nextel, Centurylink, and Dish Network. Charles is currently employed by Kansas City Power and Light as the Vice President, Information Technology (CIO).

"These inductees have a great diversity of experience and talents"

Membership...

Kevin McManus (BSIE 1980) – Kevin is from Crossett, AR and now lives in Oregon where he owns his own consulting company, Great Systems. Kevin has a strong IE background, having worked for several companies in an engineering capacity, writing a monthly article in IE magazine, and being a National Baldrige Examiner. Kevin will be unable to be with us this year at the banquet, but will be inducted in 2014.

Michael Paladino (BSIE 1999) – Michael is from Conway, AR and has been a Razorback fan all of his life. He graduated Cum Laude from the UofA and went to work for JB Hunt Transport. Steadily climbing the corporate ladder there, Michael has held a number of positions with increasing responsibility including his present position of Director – Intermodal Carrier Relations.

Raghav Sharma (BSIE 1993) – Raghav grew up in India and went to school in Guyana before coming to Arkansas. He has experience opening multiple offices worldwide and is currently employed by Object Technology Solutions where he is Executive Vice President – Global Sales, Marketing, and Alliances. Raghav has earned an MBA from The Wharton School and his home is in Redwood Shores, CA .

Kevin Shelhamer (BSIE 1992) – Kevin was born and raised in Arkansas but has worked mostly outside the state since graduating. He has used his IE training to work in a number of companies in non-traditional engineering roles primarily in the field of marketing and sales. He currently lives in Chicago, IL where he is the Executive VP of Shopper Marketing for Geometry Global.

Chris Turner (BSIE 1997) – Chris grew up in DeWitt, AR and is a huge Razorback fan. After working as a consultant for a few years at Accenture, he is now a Principal and Partner at McKinsey & Company in Dallas, TX, a global management consulting company founded by a UofA law graduate.

Please join me in welcoming these new members into the Academy! They bring a wealth of talent and will strengthen our goal of supporting the IE Department. Thanks to everyone for their support while I was Membership Chair.. Brian Noland will be stepping into the role next year. Give him the same support and encouragement you showed me by helping with membership.

Ken Gaines, Membership Chair

A Message from the Dean...

(Continued from page 5)

thanked them for supporting engineering research and encouraged them to continue to do so in the future. I worked with the engineering deans from UALR and Arkansas State to develop a working document that discussed the impact some of the research endeavors that are made possible through federal support. My fellow deans and I believe this may be first time in history where the three Arkansas engineering colleges provided a unified front in D.C. It is our hope that our message was clearly heard: "Please support programs that advance our engineering venues of research. It is key for the advancement of our nation." I am

so encouraged by the great working relationship evolving with UALR and Arkansas State. In summary, I ask that you, too, be our voice of support for investments in engineering research. As you have the opportunity to communicate with our federal leaders, remind them that investments in our engineering infrastructures are investments in tomorrow!

Thank you for your unwavering support of INEG and the college,

John English, Dean, College Of Engineering

Go Hogs!

"Find the time to meet and welcome the 2014 inductees at the annual banquet"



We're on the web www.ineg.uark.edu/aaie

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The Arkansas Academy of Industrial Engineering (AAIE) was established in 1986 to recognize the achievements of University of Arkansas Industrial Engineering graduates and to provide continuing guidance and support to the Department of Industrial Engineering.

The Academy also provides its members with the opportunity to nurture and support the organization that played an important role in their professional growth and development.

THE DODECAHEDRON is a publication of the Arkansas Academy of Industrial Engineering, and the views expressed are those of the AAIE only and do not reflect the official view of the University of Arkansas, the College of Engineering, or the Department of Industrial Engineering. THE DODECAHEDRON is published semiannually and is intended for the membership of the Arkansas Academy of Industrial Engineering.

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