Welcome

Introducing our new members and visitors ...

• Paul Beiser
• Dan Byers
• Elena Gonzalez
• Ken Jurjovec
• Scott Lukes
• Paul Monson
• Mary Peery
• Kurt Rentel
• Scott Sampl

Agilent Technologies
Agenda

• Department Update
• Update on Fall Action Items
• Introduction of New Career Center Liaison
• Industry Spotlight: Aviation Technology Group
• Breakout Session I: Undergraduate Curriculum
• Break
• College Update
• Breakout Session II: Graduate Curriculum
• Discuss Results of Breakout Sessions
• ABET Survey and Working Lunch
• IAB Elections
• Next Steps and Closing Thoughts
ECE Department Update

• Dr. Derek Lile Retires

• ECE Faculty Named Fellows of Prestigious Societies
  – Chandra Elected Fellow of American Meteorological Society
  – Jorge Rocca Named Fellow of American Physical Society

• Randy Bartels Named Monfort Professor

• Faculty Search Under Way
ECE Department Update

• ECE Faculty Elected to IEEE Professional Boards
  – Edwin Chong Elected to BoG for IEEE Control Systems Society
  – Carmen Menoni Elected to BoG for IEEE Lasers and Optics Society
  – Steven Reising Re-elected to AdCom for IEEE Geoscience and Remote Sensing Society

• College of Engineering New Hires
  – Audra Brickner, Director of Development
  – John Haines, Career Center Liaison
ECE Department Update

- Current enrollment:
  - Undergraduate: 258
  - Graduate: 122

- Bill Gates Touts CASA Research (Project LEAD)

- Jmar Technologies Licenses CSU X-Ray Laser

- Department Hosted First-Ever Graduate Recruiting Weekend to Attract Top Students to CSU

- New IAB member Mary Peery Received Distinguished Provost Alumni Award
ECE Department Update

Outstanding Student Accomplishments

- Graduate Student Mark Berrill Awarded the Prestigious Department of Energy Computational Science Graduate Fellowship (DOE CSGF)

- Graduate Student Vladimir Shestak Received Highly Competitive IBM Ph.D. Fellowship

- Undergraduate Abbie Tippie Chosen for NSF Graduate Fellowship

- Undergraduates Abbie Tippie and Christopher Kautz Win IEEE Senior Design Award
ECE Department Update

Upcoming department events:

Spring & Summer
• College of Engineering Alumni Awards Dinner: April 22 (Fort Collins Hilton)
• ECE Commencement and Student Reception: May 12 (Moby Arena)
• PEER Summer Camp

Fall (dates forthcoming)
• Student Advising Day
• Graduate Study in ECE Event
• Alumni and Friends Event
• IS&T Day for High School Students and Counselors
Enrollment Trends
Fall enrollment expected to grow

1. Increase in incoming freshmen
   - EE applications up 47 from last year
   - CpE applications up 21 from last year
   - EE admits up 36 (nearly double) from last year
   - CpE admits up 15 from last year
   - EE confirms up 33% from this time last year
   - CpE confirms up 20% from this time last year

2. Transfer activity from Saudi students
   - Almost 6,000 Saudis have received student visas in the past 6 months (compared with 2,166 in 2005)
   - Scholarship program sponsored by the government of Saudi Arabia has contributed to wave of new students
   - 289 Saudi students admitted to CSU
   - 86 Saudis admitted to ECE program (largest Saudi enrollment on campus)
   - 31 Saudis admitted to ECE already on campus in Intensive English Program
All time high in undergraduate degrees awarded in 2005
All time high in PhD degrees awarded in 2005
Trends in Graduate School Applicants

2004 graduate school applicants:
• 306 total applicants – 91% international
• 87 students admitted but did not attend – 90% international
• 30 admitted and attending – 63% international

2005 graduate school applicants:
• 222 total applicants – 91% international
• 52 students admitted – 90% international
• 18 admitted and attending – 39% international

2006 graduate school applicants:
• 382 total applicants – 95% international
• Admits not yet determined
Research expenditures nearly tripled from 2003-2005 – and still growing
ECE research expenditures are well distributed among all faculty.
**Action item:** Present statistics at next meeting on the ECE faculty’s work such as peer-reviewed papers and citations.

*Status:* ECE is among the top 25 departments in the nation for faculty citations and awards, ranking higher than top ECE departments such as:

- University of Southern California
- Carnegie Mellon
- Georgia Institute of Technology
- University of Wisconsin-Madison
- Ohio State University
- Rensselaer Polytechnic Institution
- Polytechnic University
- University of Washington
- Rice University
- Yale University

*Source – Change Magazine*
Most faculty citations:
- George Collins, 2,281 citations

Most citations for single work:

21 works with more than 100 citations

Other examples of highly cited work:


Comparison of IEEE Fellows at “Top-Ten” ECE Depts., CSU, & CU
Fall Action Items

**Action item:** Follow-up on the idea of adding a “Best Paper Award” to the senior design curriculum

**Status:** Thanks to the IEEE Denver section and the local IEEE Solid-State Circuits Society ECE is hosting its first-ever Best Paper Contest this spring

- a panel of 10 IAB members will judge the student papers
- the winner will be announced at the spring graduation reception on May 12
- the winning team will receive a plaque and $500 cash award

**Action item:** Consider ways to provide a broader range of continuing education opportunities for industry.

**Status:** Department offers distinguished lecture series through ISTeC; faculty available for industry site visits/research seminars (e.g., Robust Center); hiring more faculty, giving us the ability to offer more opportunities in the future
**Fall Action Items**

**Action item:** Continue encouraging industry involvement in ECE education such as giving talks to senior design class, serving as adjunct faculty, participating in student activities, collaborating on special events, etc.

**Status:** Examples of industry involvement in ECE education:

- 2 board members currently serving as adjunct faculty
- 10 board members spoke to the senior design class in Fa05/Sp06
- 15 board members participated in Fall Student Advising Day
- 2 board members spoke at Fall Graduate Study in ECE Event

**Action item:** Encourage teaching the process and language associated with Six Sigma; try to get an industry representative to give a talk on the topic.

**Status:** Dana Kirchmar scheduled to give a talk this month on Six Sigma.
Industry Spotlight

Dana Kirchmar

Aviation Technology Group
Undergraduate Curriculum

Breakout Groups:
1. Analog/RF Circuit Design
2. ASIC Design
3. Systems Engineering
4. Controls/Embedded Systems
5. Power
7. Software/Networking
Colorado State University
Knowledge to Go Places

Breakout Session II
Graduate Curriculum
Graduate Curriculum

Breakout Groups:
1. Analog/RF Circuit Design
2. ASIC Design
3. Systems Engineering
4. Controls/Embedded Systems
5. Power
7. Software/Networking
ABET Survey & Working Lunch

Dr. Marvin Criswell
IAB Elections

Tim Ash
Next Steps & Closing Thoughts

Tony Maciejewski