Welcome

New members and guests:
• Scott Evans, Arrow
• Sarah Hay-Arthur, Woodward
• Dennis Wallisch, Anheuser-Busch
• Brett Wangen, Western Electricity Coordinating Council
• Hongming Zhang, Western Electricity Coordinating Council
Agenda

• Department Update
• Industry Spotlight
• Break, Begin Working Lunch
• Senior Design Presentations
• Research Spotlight
• Expanding Local Chip Design Sector
• CSU Distance Education Program
• Breakout Session: ECE Distance Education
• Discuss Results of Breakout Session
• Election
• IAB Social (Odell Brewing)
Recognition of Service

• IAB members with 10 years of service (or more):
  – Tim Ash
  – Jason Fegley
Faculty News

• Two new faculty in lasers, optics, and applications
  – Sandra Biedron
  – Stephen Milton

• Marconi and Bartels Named Fellows of the Optical Society of America
• Prof. Jorge Rocca Receives Arthur L. Schawlow Prize in Laser Science

• Bartels Receives Highly Competitive $1M Keck Foundation Grant
  
  – Project in collaboration with the School of Biomed to create a new microscope that could give a new window into the fundamental level of molecular communication in biology
• Reising Wins $3.2M Grant to Develop Airborne Radiometer in Advance of Future NASA Earth Mission

• CASA Engineering Research Center featured in *New York Times* for its system to speed up forecasting tornadoes
  
  – Chandra was quoted, “Because we have a network of radars, it’s like many pairs of eyes.”
• Prof. Siegel Secures NSF Grant for High-Performance Computer

• Prof. Chong Receives Distinguished Member Award for IEEE Control Systems Society
Student News

• Graduate Student Rongjin Yan Honored by Chinese Government

• ECE Senior Ryan Friese Received Top Scholar-Athlete Award

• Best Paper Contest Underway
  – Thanks for your continued support!
ECE Students Share Passion for Engineering with Local High School Students

– Duwe and Selby sponsored by NSF GK-12 grant

Duwe in physics classroom at Fossil Ridge High School

Selby is working with Liberty Common High School
• Agilent donates new equipment for digital circuits laboratory
  – Special thanks to IAB member Dan Ferguson!
COE Research Expenditures

2010-2011 Projection

- AS 24%
- CIRA 27%
- College of Engineering 46%
- ECE 22%
- ME 8%
- CEE 14%
- CBE 5%
ECE Research Expenditures

Projection
National Enrollment Trends

- Biomedical Engineering
- Electrical & Computer Engineering
- Mechanical Engineering
- Chemical Engineering
- Engineering Science
- Civil Engineering
- Environmental Engineering
- Total Engineering
ECE Spring Enrollment

*Systems Engineering Enrollment (Distance):
M.E. – 31
Ph.D. – 1
Undergraduate Degrees Awarded

- BSCpE
- BSEE

Calendar Year

Number

- 2006
- 2007
- 2008
- 2009
- 2010
Enrollment Trends by Class
Freshmen Enrollment
## Admissions Outlook

<table>
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<th>4/21/10</th>
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<tr>
<td>CpE Admits</td>
<td>57</td>
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<tr>
<td>EE Admits</td>
<td>42</td>
<td>44 (+ 3 Biomed)</td>
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<tr>
<td>Total</td>
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% of International Degrees Awarded

Calendar Year

- ME-Systems
- MS
- Ph.D.
- Total

- 2006:
  - ME-Systems: 0%
  - MS: 50%
  - Ph.D.: 50%
  - Total: 100%

- 2007:
  - ME-Systems: 10%
  - MS: 50%
  - Ph.D.: 40%
  - Total: 100%

- 2008:
  - ME-Systems: 20%
  - MS: 50%
  - Ph.D.: 30%
  - Total: 100%

- 2009:
  - ME-Systems: 30%
  - MS: 30%
  - Ph.D.: 40%
  - Total: 100%

- 2010:
  - ME-Systems: 40%
  - MS: 40%
  - Ph.D.: 20%
  - Total: 100%
Are Electrical Engineers Happy?

- EE Times Poll: 13% of engineers completely content with job
- Gallup Poll: 48% of Americans completely satisfied with job
- Engineers nearly 4X less likely than average American to be completely satisfied with job

“I would advise anyone entering college to definitely NOT study to become an Electrical or Computer Engineer... I sacrificed too much of my personal life for my profession and I now very much regret it. You lose valuable experiences with your family and your employer doesn't appreciate any sacrifice you make for your job or the company.”

– an online post in response to the article
Bigger Paychecks for ECE Grads

• Average starting salaries for new graduates (since 2008)
  – Engineering as a whole: $59,435 (down 0.3%)
  – Civil Engineering: $48,885 (down 7.1%)
  – Mechanical Engineering: $60,598 (up 3.8%)
  – Electrical Engineering: $61,690 (up 4.4%)

Source: CNNMoney.com – Feb 2011
Fall Action Items

• **Action item:** Continue working with Math department to get mathematics courses for engineering students taught by regular faculty (not TAs).

  – **Status:** ECE submitted a formal memo to the Math department, suggesting that for each course in the calculus sequence they offer one large lecture section (about 60) exclusively for ECE students taught by one of their gifted professors. The Department Head was extremely receptive, but the idea hasn’t yet been implemented. We will report back next semester.
• **Action item:** Leverage existing strengths in systems engineering to build new partnerships.
  
  – **Status:** Drawing on successes of systems engineering to develop a new distance education program. Curriculum will be compatible with systems distance program.

• **Action item:** Host seminar series and use as a marketing tool to increase industry interest and awareness of ECE’s research work.
  
  – **Status:** ISTeC seminars publicized to IAB. CREW series launched.
• **Action item:** More student involvement with industry, e.g., field trips, senior design sponsorship, internships for freshmen and sophomores.
  – **Status:** All internship opportunities shared with underclassmen. IEEE Design Competition enlisted industry support for student projects at all levels.

• **Action item:** Work to expand and improve internship program.
  – **Status:** Wolf Robotics has been effective in establishing a successful internship program. Contact Andrea if interested in improving your company’s program.
• **Action item:** Make IAB contact information available to all members to help build personal connections and networks.
  
  – **Status:** Added LinkedIn profiles to IAB web page. Most members are connected via LinkedIn group.

• **Action item:** Offer ECE lab tours for interested board members at a future meeting.
  
  – **Status:** Agenda full for spring. Are board members interested in doing this in the fall?
• Previous action item/Tiger Team initiative: Refurbish ECE student lounge to improve morale.
  – Status: Proposal approved by University Facility Fee Advisory Board. Impressive student involvement in securing funds.
Industry Spotlight: Vaisala

Chuck Quire
Break, Working Lunch
Senior Design Presentations
Research Spotlight
Professor Sudeep Pasricha
Expanding Local Chip Design Sector
Mike Freeman, CFO, Fort Collins Economic Development
CSU Distance Education Program

Carl Melle, Director
Breakout Session
Facilitators: Michael Coddington, Jim Greener
Considerations

• Industry survey

• Advertising suggestions

Please provide:

1. Contact info. for your company’s internal communications office (PR, company newsletters, etc.)
2. A list of your professional organizations
3. Contact info. for your company’s HR or professional development office
Discuss Results of Breakout Session

Facilitators: Michael Coddington, Jim Greener
Election
Facilitator: Michael Coddington
Closing Remarks, IAB Social

Tony Maciejewski