Welcome

New members:
• Matt Bold, Lockheed Martin
• John Diubaldo, Raytheon
• Bob Heesemann, Boeing
Agenda

- Department Update
- Curriculum Update
- Break
- Breakout Session: Identifying Technical Electives for Specific Industry Sectors
- Discuss Results of Breakout Session
- Irwin Jacobs Lecture
- Lunch
- Senior Design Presentations
- Elections
Department Update

Tony Maciejewski, ECE Department Head
Recognition of Service

• IAB members with 10 years of service (or more):
  – Grant Miller
Faculty News

• Prof. Rocca Receives Two Prestigious Honors
  – 2011 Arthur L. Schawlow Prize in Laser Science by American Physical Society
  – Willis E. Lamb Award for Contributions in X-Ray Laser Physics

• Prof. Marconi Named IEEE Fellow
• Prof. Biedron Named SPIE Fellow

• Prof. Bringi Wins American Meteorological Society Remote Sensing Award

• Two CSU Awards for Prof. Chandra
  – 2011 College of Engineering Alumni Award Winner
  – CSU Ventures’ Award for Innovative Excellence
• Biedron and Milton Secure Big Grants
  – Office of Naval Research ($2M)
  – Boeing
  – Accelerator gift
    • Duo also appointed to DOE Fact-Finding Committee for Particle Accelerator Science and Technology

• Prof. Bartels Attends Unprecedented Arab-American Symposium
Student News

• Graduate Student Organization Created

• PSOC n’ Pizza events – student ambassador workshops featured in IEEE (ask Olivera for details)

• Sergio Carbajo Named Recipient of 2011 Frontiers in Optics Hilbert Memorial Student Travel Grant
ECE to Launch Online Program in FA12

Three new certificates available:

- Computer Engineering
- Embedded Systems
- Power & Energy Engineering

M.E. degree in ECE also available online. Please help promote within your companies.
Engineering Building Update

• The 122,000 sq ft *Engineering II* is being constructed

• Move-in and final equipment installation scheduled for June-August 2013.

• College plans to occupy the building in FA13
COE Research Expenditures
COE Research Expenditures

2010-2011

College of Engineering 46%
ATS 26%
CIRA 27%
ECE 20%
CEE 14%
ME 8%
CBE 5%
National Enrollment Trends

- Biomedical Engineering
- Electrical & Computer Engineering
- Mechanical Engineering
- Chemical Engineering
- Engineering Science
- Civil Engineering
- Environmental Engineering
- Total Engineering
Undergraduate Degrees Awarded

Calendar Year

2006 2007 2008 2009 2010 2011

BScpE BSEE

Number

0 10 20 30 40 50 60
Graduate Degrees Awarded

[Bar chart showing the number of graduate degrees awarded by calendar year from 2006 to 2011. The chart includes categories for ME-Systems, MS, and Ph.D. degrees.]

- **2006**: 36 degrees awarded
- **2007**: 29 degrees awarded
- **2008**: 24 degrees awarded
- **2009**: 22 degrees awarded
- **2010**: 21 degrees awarded
- **2011**: 30 degrees awarded

Legend:
- ME-Systems
- MS
- Ph.D.
% of International Degrees Awarded

Calendar Year

- 2006
- 2007
- 2008
- 2009
- 2010
- 2011

MS
Ph.D.
Total
Fall Action Items

• **Action item:** Report back on the grad placement rate for mechanical engineering.
  
  – **Status:** 2011 placement rates for College of Engineering*

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<th>CpE</th>
<th>EE</th>
<th>ME</th>
<th>CE</th>
<th>CBE</th>
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<tr>
<td>Grad</td>
<td>100%</td>
<td>93%</td>
<td>72%</td>
<td>61%</td>
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• **Action item:** Follow-up on discussions with Math Department on ideas to improve learning in courses for engineering students.

  – **Status:** First math course specifically for ECE students under way this semester.

*COE Placement Survey
• **Action item:** Take a poll by email to see if IAB members like the idea of hosting a meeting off-campus, e.g., Denver.
  
  – **Status:** The board voted to try an offsite location, preferably near Denver. We will consider this for a future meeting.

• **Action item:** Share details of online ME in ECE degree program. Ask for help with marketing, company visits, etc.
  
  – **Status:** Shared details earlier. Contact Carl Melle for more info: (970)391-1992.
• **Action item:** Determine ways to spark interest in electrical and computer engineering early in the undergraduate program, possibly by adding a new freshman course.
  – **Status:** Dr. Notaros will provide an update on important curriculum changes later today.

• **Action item:** Work with the College of Engineering to see if they will accept field trips as PLI credit.
  – **Status:** Memo submitted to College Curriculum Committee in February. Thanks for your support. We’ll keep you posted.
• **Action item:** Modernize teaching methods by using current techniques such as blogs, podcasts, Google, Facebook, Twitter, Youtube, etc.
  – **Status:** Taking advantage of online learning tools through CSU *OnlinePlus*. Some faculty are incorporating social media, blogs, etc.

• **Action item:** Consider adding robotics opportunities earlier in the curriculum as a way to bring engineering concepts to life.
  – **Status:** We do not yet have a class designed, but it is an option under consideration as part of future curriculum changes.
• **Action item:** Within CSU, advertise seminars across disciplines.
  – **Status:** ISTeC is a great example of successful advertising across disciplines. We also share ECE seminars with other departments.

• **Action item:** Work on K-12 outreach strategies to help engineering students enter the university better prepared, possibly in partnership with industry or IEEE.
  – **Status:** Karen Ungerer has been working with industry and schools to promote engineering in K-12. She has been visiting local high schools and elementary schools, as well as recruitment events geared toward this audience. Members of HKN have helped with these efforts.
Curriculum Update

Professor Branislav Notaros
Break
Breakout Session
Facilitators: Jim Greener, Scott Makinen
Discuss Results of Breakout Session

Facilitators: Jim Greener, Scott Makinen
Irwin Jacobs Lecture
Closing Remarks