Welcome

Introducing new members …

- Orhan Norman, National Semiconductor
- John Perzow, Analog Devices
- Ken Saller, National Semiconductor
- Julie Zinn-Patti, Spirae
Agenda

- Department Update & Spring Action Items
- Research Spotlight: Professor Chandra
- Industry Spotlight: Woodward
- Break
- Systems Engineering Program Overview
- Existing Collaborations with CSU’s College of Business
- Breakout: Partnering with CSU’s College of Business
- Lunch and Student Forum
- Next Steps & Closing Thoughts
Recognition of Service

IAB members with 10 years of service (or more):

Duane Spence
Department News

- Chandra wins Provost’s Instructional Innovation Award

- Prof Chen takes breakthrough research to K-12 classrooms with $2.7M NSF grant

- Profs Maciejewski and Siegel awarded $1M grant to design more robust computer systems
Department News

- Professor Lear uses optics to advance Lab-on-a-Chip technology
  - His work was featured on the cover of the journal Lab on a Chip

- Prof Krapf leading team to develop optical technique that provides easy way to detect TB bacteria in fluids
  - His work was featured by the Optical Society of America
Department News

- ECE creates exchange agreement with the University of Luxembourg


- Profs Rocca and Collins celebrate service milestones
Department News

- ECE in the Media:
  - [www.engr.colostate.edu/ece](http://www.engr.colostate.edu/ece)
    - Krapf’s Tuberculosis research
    - Maciejewski and Siegel NSF grant
    - Chen’s NSF grant

- Best Paper Contest winner announced in May
  - Lauren Netherton and Joel Kindt, “Optical Biosensors”

- ECE student takes grand prize at Colorado undergraduate space research symposium (Jonathan Cox)
Department News

- ECE research expenditures reach new all-time high

Events:
- Engineering Exploration Day: **Feb 13, 2010**
- Engineering Internship Fair: **Feb 25, 2010**
- College of Engineering Alumni Awards Dinner: **April 10, 2010**
- ECE Centennial Celebration: **May 1, 2010**
Distribution of Engineering Faculty

CSU

- ME: 22%
- ECE: 26%
- CBE: 11%
- CEE: 41%

Nationwide

- ECE: 38%
- CEE: 21%
- CBE: 14%
- ME: 27%
Distribution of COE Research Expenditures

2008-2009

AS 28%
CIRA 27%
ECE 17%
CEE 17%
ME 8%
CBE 3%

Engineering Departments 46%
ECE Enrollment Trends
Undergraduate Degrees Awarded

AY 00-01  AY 01-02  AY 02-03  AY 03-04  AY 04-05  AY 05-06  AY 06-07  AY 07-08  AY 08-09

Number

BSCpE
BSEE
Enrollment Trends by Class

- Freshmen Total
- Sophomore Total
- Junior Total
- Senior Total

Year: FA98, FA99, FA00, FA01, FA02, FA03, FA04, FA05, FA06, FA07, FA08, FA09
Freshmen Enrollment Trends

- Freshmen CpE
- Freshmen EE

Year: FA98, FA99, FA00, FA01, FA02, FA03, FA04, FA05, FA06, FA07, FA08, FA09
Sophomore Enrollment Trends

- Sophomore CpE
- Sophomore EE

FA98 FA99 FA00 FA01 FA02 FA03 FA04 FA05 FA06 FA07 FA08 FA09
Junior Enrollment Trends

- **Junior CpE**
- **Junior EE**
Senior Enrollment Trends

- Senior CpE
- Senior EE
Freshman Quality Trends

Quality Metric:
- SAT-C
- ACT-C
- HS GPA
- HS Rank
- CCHE Index

Percent of Maximum:
- 0.0
- 20.0
- 40.0
- 60.0
- 80.0
- 100.0

Years:
- 2004
- 2005
- 2006
- 2007
- 2008
- 2009
Graduate Degrees Awarded

AY 00-01 AY 01-02 AY 02-03 AY 03-04 AY 04-05 AY 05-06 AY 06-07 AY 07-08 AY 08-09
Number

Legend:
- ME
- MS
- Ph.D.
% of Grad Degrees Awarded to Int’l Students

Academic Year

AY 00-01  |  AY 01-02  |  AY 02-03  |  AY 03-04  |  AY 04-05  |  AY 05-06  |  AY 06-07  |  AY 07-08  |  AY 08-09

ME  |  MS  |  PhD  |  Total

Percentage
Spring Action Items

provide greater flexibility with distance education courses. For example, develop new certificate programs or short courses in specialty areas.

Status: Carl Melle is working with constituents to determine what model makes the most sense. Professor Sudeep Pasricha is developing a certificate program in embedded systems.

Help students prepare to compete in a global economy by encouraging more interaction with international student population.

Status: The presentations available through our PLI series educate our students on a wide range of topics that help prepare them for our global economy. Opportunities like the exchange agreement with the University of Luxembourg allows students to connect with people from all over the world.
Spring Action Items

- Educate students on cyclical nature of the economy to provide encouragement during down times.
  
  **Status:** Don Morris, who delivered the presentation at our last board meeting, spoke to the senior design class in September. Events like Design Your Future Day give students a chance to meet with professionals and learn first-hand about the economic climate.

- To help prepare students for a global economy, encourage study abroad at an international university.
  
  **Status:** Exchange agreement established with the University of Luxembourg.
Spring Action Items

- Make it easier for companies to donate equipment to the department.
  - **Status:** We are continually sharing our equipment needs with industry and have recently secured equipment gifts from our corporate partners. The process is fairly easy. If anyone is interested in donating, please contact Andrea Leland.

- Increase opportunities for social networking with CSU and IEEE.
  - **Status:** The ECE department works closely with Alvin Loke (IEEE-SSCS) and Pete O’Neill (IEEE-Centennial) to make sure students and faculty are aware of IEEE social activities, seminars, and other events. An ECE alumnae is serving as the CSU IEEE student liaison; Andrea serves as industrial liaison for the Centennial Subsection.
Spring Action Items

See if industry partners are interested in giving lectures and/or teaching short courses on specific topics. The ECE department could identify potential areas of interest and solicit companies for interested presenters.

**Status:** Don Van Zyl with AE taught a course last spring.

ECE has gained approval for a group studies course. One mechanism would be to have a group of IAB members collaboratively offer a 3-4-week lecture course on topics of interest. A faculty member would be assigned as the official instructor for the course.

Create an online social networking group, e.g., LinkedIn, to serve as an additional communication mechanism and place for networking.

**Status:** A LinkedIn group for the board has been created. We will use this as an additional mechanism for communicating with the board.
Spring Action Items

- Get information from Fernando Tomasel on the Trade Adjustment Assistance program to see if ECE can provide support that readily fits with the training that people recently laid off may need.
  - **Status:** We received the information from Fernando. The needs of the laid off workers did not fit with the kind of support the ECE department can offer.

- Encourage professors to strengthen relationships with industry to solicit additional research activity during a down economy.
  - Faculty are engaged in new relationships with National Semiconductor and LSI.
Spring Action Items

Additional activities that resulted from IAB discussions:

- Design Your Future Day held on October 7.
  - 24 industry representatives from 17 companies attended.

- Carl Melle with Distance Education has been working with IAB members to promote our Systems Engineering program.
ECE to Celebrate a Century of Innovation

Visit our centennial web site: www.engr.colostate.edu/ece/centennial/

Event scheduled for May 1, 2010

We encourage the board’s input and ideas regarding the event. Tentative plans:

- Feature alumni who led the successful 2008 Mars Mission (six ECE alumni worked on the project)
- Produce a brief video that provides highlights throughout the last 100 years
- Honor emeritus faculty
- Give a future innovator award (for a current ECE student)
- Feature past and present projects
- Name the May 2010 graduating class the “Centennial Class”
Research Spotlight

Professor V. Chandreskar
Industry Spotlight

Dr. Kamran Eftekhari Shahroudi
Break
Background on Existing/Potential Collaborations with CSU’s College of Business

Drs. Thomas Siller and John Hoxmeier
Breakout Session

Facilitator: Michael Coddington, IAB VP
Considerations for Breakout Session

- What kinds of interactions make sense?
- What should be the depth of the relationship?
- Which business courses are most relevant?
- What are the suggested next steps?
Discuss Results of Breakout Session

Facilitator: Michael Coddington, IAB VP
Lunch and Open Forum/Q&A Session with ECE students

Facilitator: Alvin Loke, IAB President
Closing Thoughts

Spring meeting set for April 30, 2010

Tony Maciejewski