Chairs' & Center Directors' Meeting Minutes

Date: March 25, 2013 (12:00 to 2:00 pm)
Location: WCH – Room 443
Attendees: Abbaschian, Reza
Bhuyan, Laxmi
Christopher, Phillip (for Nosang)
Farrell, Jay
Garay, Javier
Haddon, Robert
Hartney, Pat
Jenkins-Deas, Bronwyn
Matsumoto, Mark
Ravi
Rice, Dennis
Stahovich, Tom
Vafai, Kambiz
Wang, Albert

Absent: Barth, Matt
Bhanu, Bir
Boretz, Mitch
Myung, Nosang
Najjar, Walid
Rodgers, Victor
Tan, Sheldon

The agenda for the meeting is shown in Appendix 1.

1. Welcome and call for agenda items - Reza
Reza thanked Bronwyn Jenkins-Deas for attending this meeting to discuss BCOE's new International Student Program with UNEX.
No items were added to the agenda.

2. Approval of Minutes - Pat
The minutes of the March 11th Chairs/Directors meeting were unanimously approved.

3. International Student Programs – Bronwyn Jenkins-Deas
Bronwyn indicated that this Program was originally envisioned to be a one-year certificate program but has evolved into a program that enables BCOE faculty to assess potential PhD students from China. The 11 Chinese universities that are part of this Program are "near top rated" institutions. Bronwyn expects that we will receive 80-90 applications (at one time) from these Chinese universities to review within the next month. These applications will need to be reviewed quickly by departments. UNEX will be providing an English for Engineers course for accepted students in late summer. These students need to take a total of 36 units within

their one-year stay at UCR. These students have already completed all the required course work for a degree in China so the UCR courses are not relevant to their graduation. These are very high-quality students with minimum GPAs of 3.7. The first year goal is for each BCOE program to enroll 5-6 of these students. UNEX has a similar Program with UCR's School of Business (SoBA). SoBA enrolled 53 students in their program last year. Most of these students (42) are staying for a SoBA Masters degree program. Bronwyn suggested that some of these BCOE Program students may be candidates for the new On-Line MS Engr degree program. Bronwyn stressed that it's important to advise these students on what courses to take when they arrive. SoBA hired an Advisor to assist in this process. The students need to complete a project during their year at UCR so BCOE faculty will need to offer advice and input. It was noted that enrolling these students in departmental Senior Design courses may be problematic. Other course numbers could be used for this purpose. Even if they aren't accepted in a PhD program these students will still get an Engineering Certificate which will allow them to work in the US for one year. Bronwyn stressed the benefit for BCOE of the opportunity to monitor these students and assess their potential success as BCOE PhD students.

4. International Masters – Mark
Mark distributed a summary of BCOE International MS Applications, Admits and SIRs from AY 10/11 to AY 13/14. He noted the EVC/P has recently approved BCOE's proposal to share revenue from incoming international MS students. BCOE will receive half of the enrolled student's Non Resident Tuition (NRT). For the current fiscal year, this BCOE share is $7,551 per enrolled student per year. Mark noted that the number of International Student applications has increased from 413 in AY 10/12 to 1,071 in AY 13/14. The average percentage of Admits to Applications is 12-20% and the percentage of SIRs to Admits is 20-24%. This year's target is 80 additional MS students (for a total of about 150). There will no longer be the $5,000 in Fellowship funding provided by the Grad Division for incoming international MS students since BCOE will be receiving $7,551/student/year in flexible funding. The $3,000 for domestic MS students will still be provided. It was noted that some MS degree programs in BCOE are for only one year which would limit the financial advantage of this program. Reza suggested that programs develop 2-year plans for these MS students. Also, we will likely need to change the current TA allocation model factor from the number of incoming grad students to the number of incoming PhD students. Reza noted that UCLA's College of Engineering developed a very successful international MS program while UCSB's College of Engineering did not. UCSB didn't plan their program well. Also, Reza noted that BCOE's percentage of SIRs to Admits could increase since we will be admitting a larger number of students that are not top tier applicants (which are highly sought after by other universities). Lastly, Reza mentioned that we will need to develop a financial model on how best to share and distribute income from this program. Such a model could include incentives for participating faculty.

On a related issue, Tom mentioned that ME faculty jointly supervise several grad students with other BCOE departments. These students do not show up in ME's grad student head counts and therefore do not increase ME's reputation and internal BCOE allocations that are based on the number of grad students (i.e., TA allocations). This topic will be discussed at a future Chairs/Directors meeting.

5. Graduate Education/Research – Mark
Mark distributed the latest summary of the numbers of BCOE grad student Applications, Admits, In-Process, Accepts and Declines. We've received a total of 2,111 grad student applications this year and have made about 250 offers. There are 52 Accepts so far this year which is a significant increase from last year at this time.

6. Budget – Reza/Pat
Reza distributed a summary of the eight new Junior faculty and six new Senior faculty positions that are being requested in the first year of BCOE's Budget Proposal to the campus. We will be requesting a total of 36 new faculty lines over the next 3-4 years. If approved, BCOE would eventually have about 140 faculty lines. When

all of these lines are approved, BCOE expects to have about 700 grad students and 3,000 undergrads. Reza noted that the specific areas and departments for the additional 22 faculty lines will depend on the outcome of the first year's 14 searches. Pat added that BCOE's proposal also includes 14 new staff positions and a request to cover the current shortfall in faculty/staff fringe benefits. The current shortfall in fringe benefits limits the amount of funding BCOE has available for operating expenses and new equipment in the College.

7. Undergraduate Education – Ravi
Ravi noted that UCR's undergraduate admissions is now complete and that 2,550 California students have been admitted to BCOE this year. Ravi believes that most BCOE programs will meet their targets from the initial AIS-cutoff pool. If needed, waitlists will be started after initial SIRs are complete. UCR wants more international undergraduate students in order to increase campus revenue.

8. ABET – Lessons Learned - Dennis
Dennis gave a Power Point presentation and provided handouts of the lessons learned from the November 4-6, 2012 ABET Visit. Some major points were:
- BCOE needs to keep up with annual ABET updates and changes
- ABET is moving to electronic documentation (only)
- PEOs need to be on in Catalog and on BCOE website
- ABET faculty support and training is important
- ABET coordinators should have one course relief per year and two course relief in the sixth year
- Each Program should establish a faculty committee to evaluate student outcomes
- ABET coordinators should regularly share ideas and information
- Agreements with Technical Writing and Math Department should be sought
- Decision needs to be made about seeking ABET accreditation for Business Informatics

On a related issue, Tom asked if there were any BCOE resources to develop software to automatically calculate ME's ABET data. Laxmi responded that CS did such a project internally by providing a 25% TA for one quarter to the department's ABET Coordinator.

Also, Ravi stated that the Academic Senate's review of BCOE academic programs will occur next year after the 2012 ABET Review report is available.

Lastly, Reza asked Ravi to chair a quarterly college-wide meeting of ABET Coordinators to help share ideas and provide updates of ABET efforts.

9. Other Matters
No other matters were discussed.

UNIVERSITY OF CALIFORNIA

RIVERSIDE
BOURNS COLLEGE OF ENGINEERING

Chairs' & Center Directors' Meeting

March 25, 2013

Agenda

Winston Chung Hall – Room 443

1.	Welcome - Request for Agenda Items from the Floor	Reza
2.	Approval of Minutes from March 11, 2013 Meeting	Pat
3.	International Student Programs	Bronwyn Jenkins-Deas
4.	International Masters	Mark
5.	Budget Proposal	Reza
6.	Graduate Education/Research	Mark
7.	Undergraduate Education	Ravi
8.	ABET – Lessons Learned	Dennis
9.	Other Matters	

Future Meeting Dates

2012	2013
~~Monday, October 15~~	~~Monday, January 14~~
~~Monday, October 29~~	~~Monday, January 28~~
~~Friday, November 16~~	~~Monday, February 11~~
~~Monday, December 3~~	~~Monday, February 25~~
~~Monday, December 17~~	~~Monday, March 11~~
	~~Monday, March 25~~
	Monday, April 8
	Monday, April 22
	Monday, May 6
	Monday, May 20
	Monday, June 3
	Friday, June 14
	Monday, July 1

UCR Ph.D. Preparation Program Application

ucRIVERSIDE

☐ 2013-2014 UCR Ph.D. in Engineering Preparation Program

Family Name _____ **First Name** _____ **Middle** _____

As it appears on your passport

Gender : ☐ Male   ☐ Female   **Date of Birth:** _____ (month/day/year)

Program Choice: ☐ Bioengineering   ☐ Chemical and Environmental   ☐ Computer Science
              ☐ Electrical   ☐ Materials Science   ☐ Mechanical

Country of Birth: _____   **Country of Citizenship:** _____

Address in home country: _____   **Mailing Address:** _____

_____

_____

_____

Email Address: _____   **Phone:** _____

Academic History

School Name	City, State, Country	Language of Instruction	Grade System (Letter or Numeric)	Begin Date	End Date	Diploma/ Certificate and Date of Completion

**Please list any standardized tests that you have completed or plan to complete.
(SAT/ACT, SAT Subject Exams, GRE/GMAT, TOEFL, or IELTS)**

Testing	Date	Score	Date	Score	Date	Score

UCR Ph.D. Preparation Program Application

Refund Policy

☐ **I have read and acknowledge the refund policy below.**

Tuition and fees can only be refunded upon receipt of the following BEFORE the program start date as clearly indicated on your I-20: a written request for withdrawal from the program and the original I-20 issued by University of California, Riverside Extension. No refunds will be granted AFTER the program start date. Refund requests take six to eight weeks to be processed and a processing fee will be assessed. Program application fees and housing placements fees are non-refundable. ALL REFUNDS WILL BE ASSESSED A 10% PROCESSING FEE.

Signature: Date:

Student Certification and Signature

I certify that the information in this entire form is correct to the best of my knowledge. I give my permission for any or all information on this form to be provided by the University of California Riverside Extension, International Education Programs to Bourns College of Engineering (BCOE).

Signature: Date:

Please check off the following items with your application:

☐ UCR-PPP Enrollment Application non-refundable fee of $150. (Payable by VISA, MasterCard, money order or wire transfer).
☐ Copy of your passport ID page.
☐ Copy of all undergraduate transcripts translated into English.
☐ Copy of your TOEFL or IELTS results and results from any other examinations you have completed.
☐ Financial support statement along with a bank statement with funding of at least US$38,100 USD from the person sponsoring your studies in the U.S.
☐ Resume
☐ Statement of Purpose

UCR Representative Information:

Company Name:_____ ID #:_____

Contact Name:_____

Email:_____

Address:_____

City, State, Zip Code:_____

Phone/ Fax:_____

IMPORTANT For Sponsored Students:

Our office receives requests from your agent/representative to release your application status, financial and academic information. Under University policy, your written consent is required to release any information to a third party. By signing below, you authorize the release of the above information.

Student Signature: _____

Credit Card Authorization

Choose type: ☐ VISA   ☐ MasterCard

_____
Credit Card Holder Name

_____
Relationship to Student

_____
Credit Card Number

Expiration Date_____

Validation Code (located on back of card)_____

Amount authorized to be charged: $_____

_____
Cardholder Signature

UCR Ph.D. Preparation Program Application

Statement of Purpose

<u>Please state your specific interests with respect to the program to which you are applying</u>: Use additional pages if needed.

In an essay, discuss how your personal background informs your decision to pursue a graduate degree. Please include any educational, familial, cultural, economic, or social experiences, challenges, or opportunities relevant to your academic journey and how you might contribute to social or cultural diversity within your chosen field.

Please note that your statement is limited to 1500 characters. (1-2 pages is fine.)

1. **Eight New Assistant Professors**

- One junior hire in High-Throughput Screening and Drug Design (1 FTE Bien)

The University of California is located in one of the richest areas in the nation in terms of medical device companies. In fact, over 2,000 biomedical products companies are located in Southern California and California's biomedical companies' revenues for 2008 were an estimated $75.9 billion. With the emergence of the accredited School of Medical, the University has a tremendous opportunity to contribute to this major industrial section of California. Bioengineering has recently hired a junior faculty member in this area and, another faculty member in the area of medical device research would strengthen and catalyze BCOE's focus in this area, by, perhaps developing a Center for Medical Devices as well as establishing new, creative areas of research in this important field.

- One junior hire in Air Quality and atmospheric Transformations (1 FTE CEE)---CEE and CE-CERT

Air quality monitoring and control and climate change are one of the strategic research areas of CE-CERT and BCOE. CE-CERT is in the process of expanding its atmospheric chamber laboratory by creating a national research user facility available for use by U.S. industry, universities, other national laboratories, state and local governments, and the scientific community to directly address many of the issues relating particulate matter (PM), ozone, and atmospheric transformations, modeling, and monitoring. The proposed hire will fill a void created by the retirement of Professor Joseph Norbeck. A new hire with expertise in the anticipated needs areas of atmospheric regional modeling (focused on PM), atmospheric PM mechanistic modeling, life cycle energy systems and GHG analysis, and or research instrumentation development will advance discovery and provide important synergies. In addition, this new hire will provide the overall campus with an important technology complement as we pursue a major research initiative in sustainable communities.

- One junior hire in Advanced Materials (1 FTE CEE)---CEE and MSE

The projected dramatic increase of world energy consumption within the next 50 years, coupled with the growing demand of "greener" energy sources, has brought increasing need to develop efficient, clean, and renewable energy sources. In response to these needs, UC-Riverside has established a new Winston Chung Global Energy Research Center (WCGEC). To become a world leader in a clean, safe, and sustainable energy researches, CEE seeks to team up with the Materials Science and Engineering (MSE) program and WCERC to hire a few outstanding faculty in energy storage materials to build a critical mass in the area.

- One junior hire in Network Systems and Security (1 FTE CSE)

We propose to create a Center on Secure Networked Cyber-systems, which will be led by the senior person as its Director, as discussed later. The area of building secure networked systems spans a broad area of topics including the design and building of intelligent cryptosystems, secure wireless networks, detecting and preventing the spread of malware. Networked systems and security are integral to new areas such as cyber-physical systems. These systems require

various components to be networked effectively to transport sensitive information (such as health data) is of paramount importance across heterogeneous devices, in real time

- One junior hire in High Performance Scientific Computing (1 FTE CSE)

CSE department is strong in the area of High Performance Computing (HPC) architecture area. We also successfully recruited two faculty members in the area of scientific computing. Both of them are assistant professors with outstanding research records. One of them recently obtained the prestigious NSF CAREER award. A number of faculty members in COE and CNAS are already involved in research that deal with machine designs, environmental sciences, atmospheric research, oil exploration, and fire-spread models, etc. All these areas have high impact on the future of CA as well as the country and are declared priority areas of research. All these UCR professors need computer science collaboration that we are unable to provide at the moment. Recruiting a senior person in this area will produce high degree of collaboration with others to develop large research projects and programs.

- One junior hire in Smart Grid (1 FTE EE)—EE, WCGEC

This junior faculty would be capable of interdisciplinary leading center level proposals on energy systems in collaboration with Computer engineering and WCGEC center on storage and distribution area.

- One junior hire in Transportation Sensing, Communications and Automation (1 FTE EE)—EE and CE-CERT

This person would collaboratively with CE-CERT in the area of autonomous transportation and electric transportation with CE-CERT and WCGEC.

- One junior hire in Air Quality and Regional Scale Dispersion Modeling (1 FTE ME)--- ME and CE-CERT

The Mechanical Engineering Department currently has one of the leading research groups in urban air pollution modeling. The group is unique in having both experimental and theoretical expertise. The research includes studies of the generation of particulates and aerosols and the fate and transport of pollutants. The latter efforts are focused on urban-scale pollution dispersion, which has become important in view of recent findings on the health effects of pollution on people living close to urban sources. We plan to build on current strengths by expanding our efforts to understand both the sources of pollutants and their fate and transport.

2. Seven Senior faculty (including one joint hire with CNAS and one joint hire with SOM)

- One senior hire in Network Systems and Security, to create and direct a **Center on Secure Networked Cyber-Systems** (1 FTE CSE)

We propose to create a Center on Secure Networked Cyber-systems, which will be lead by the senior person as its Director. The area of building secure networked systems spans a broad areas mentioned earlier for the junior faculty. This cluster hiring will enable us to establish research critical for homeland security, energy and water management (e.g., smart grid, water regulation and control) and managing medical devices (e.g., implanted sensors). The emergence of social networks has also increased the need for security and privacy controls at almost all levels.

- One senior hire in Materials/Device for Green/Renewable Energy (1 FTE, EE)---EE and MS

This person would be hired collaboratively to interact with the Chung Energy Center and Materials Science and Engineering Program campus wide. The focus will be on energy materials for battery and storage applications.

- One Senior hire in Materials Characterization: Thermal and Electrical (1 FTE ME)--- ME and MSE

Solutions to society's growing healthcare and energy problems will depend on the development of advanced materials. The ME department's current materials expertise comprises the synthesis of nano materials and powders, the synthesis of novel bulk materials, and the characterization of the mechanical properties of materials. However, the department needs one junior faculty with expertise in the characterization of the thermal and electrical properties of materials. This expertise is essential for developing the energy applications of new materials.

- One senior hire in Lower Power Computer Design and Architecture (1/2 FTE EE, ½ FTE CSE)—CS, CE and EE

The energy consumption of computing devices continues to grow at an alarming rate. It has been fueled for the past 10 years by the rapid growth of mobile, wearable, and implantable devices, which place a premium on battery lifetime, and in the future, by the rapid growth of warehouse-scale "data centers" whose energy consumption rivals that of small cities.

- One Senior hire in Electronic Materials and Nanodevices, Joint hire with CNAS to create and lead a Materials Research Institute (1/2 FTE ME, ½ FTE CNAS)

UCR materials research efforts are mostly focused on the synthesis and characterization of novel materials. We need to expand our efforts by hiring faculty with expertise in translating this research into devices and systems for specific applications. Specially, we seek to hire one senior faculty member with expertise in device / system integration. In particular this faculty needs to lead the campus toward getting an MRSEC, and establishment of a campus wide Materials Research Institute.

- One senior hire in Neuroprosthetics, joint with SOM (1/2 FTE Bien, ½ FTE SOM)

The University of California is located in one of the riches areas in the nation in terms of medical device companies. In fact, over 2,000 biomedical products companies are located in Southern California and California's biomedical companies' revenues for 2008 were an estimated $75.9 billion. With the emergence of the accredited School of Medical, the University has a tremendous opportunity to contribute to this major industrial section of California. Bioengineering has recently hired a junior faculty member in this area and, a senior faculty member in the area of medical device research would catalyze BCOE's focus in this area, by, perhaps developing our previously proposed Center for Medical Devices as well as establishing new, creative areas of research in this important field.

International MS Applications

Cohort	BiEN	CEE	CEN	CPSC	ELEN	MSE	MCEN	BCOE
2010-11	11	27		177	165	8	25	413
2011-12	20	47		216	272	25	50	630
2012-13	21	47		361	365	28	62	884
2013-14*	24	55	37	461	383	45	66	1071

International MS Admits

Cohort	BiEN	CEE	CEN	CPSC	ELEN	MSE	MCEN	BCOE
2010-11	0	10		43	23	1	5	82
2011-12	7	9		52	40	5	2	115
2012-13	3	13		64	19	0	3	102
2013-14*	4	8	0	0	10	0	3	25

International MS SIRs

Cohort	BiEN	CEE	CEN	CPSC	ELEN	MSE	MCEN	BCOE
2010-11	0	2		12	3	0	2	19
2011-12	2	1		11	8	2	1	25
2012-13	1	1		16	4	0	2	24
2013-14*	3	1	0	0	1	0	0	5

International MS Admits/Applications

Cohort	BiEN	CEE	CEN	CPSC	ELEN	MSE	MCEN	BCOE
2010-11	0%	37%		24%	14%	13%	20%	20%
2011-12	35%	19%		24%	15%	20%	4%	18%
2012-13	14%	28%		18%	5%	0%	5%	12%
2013-14*	17%	15%	0%	0%	3%	0%	5%	2%

International MS SIRs/Admits

Cohort	BiEN	CEE	CEN	CPSC	ELEN	MSE	MCEN	BCOE
2010-11	NA	20%		28%	13%	0%	40%	23%
2011-12	29%	11%		21%	20%	40%	50%	22%
2012-13	33%	8%		25%	21%	#DIV/0!	67%	24%
2013-14*	75%	13%	#DIV/0!	#DIV/0!	10%	#DIV/0!	0%	20%

25-Mar-13

APPLICATIONS

Program	MS			PHD			MS/PHD		
	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total
BIEN	36	24	60	47	30	77	83	54	137
CEE	20	55	75	40	98	138	60	153	213
CEN	7	37	44	0	0	0	7	37	44
CPSC	47	461	508	31	209	240	78	670	748
ELEN	32	382	414	30	224	254	62	606	668
MSOL	0	0	0	0	0	0	0	0	0
MSE	10	45	55	21	68	89	31	113	144
MCEN	26	66	92	14	51	65	40	117	157
BCOE	178	1070	1248	183	680	863	361	1750	2111

ADMITS

Program	MS			PHD			MS/PHD		
	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total
BIEN	13	4	17	25	4	29	38	8	46
CEE	11	8	19	27	25	52	38	33	71
CEN	3	0	3	0	0	0	3	0	3
CPSC	0	0	0	13	20	33	13	20	33
ELEN	8	10	18	6	24	30	14	34	48
MSOL	0	0	0	0	0	0	0	0	0
MSE	5	0	5	10	1	11	15	1	16
MCEN	17	3	20	8	1	9	25	4	29
BCOE	57	25	82	89	75	164	146	100	246

IN PROCESS

Program	MS			PHD			MS/PHD		
	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total
BIEN	1	1	2	0	2	2	1	3	4
CEE	0	1	1	3	1	4	3	2	5
CEN	1	0	1	0	0	0	1	0	1
CPSC	0	0	0	1	0	1	1	0	1
ELEN	1	7	8	1	6	7	2	13	15
MSOL	0	0	0	0	0	0	0	0	0
MSE	0	0	0	0	1	1	0	1	1
MCEN	0	1	1	0	1	1	0	2	2
BCOE	3	10	13	5	11	16	8	21	29

ACCEPTS

Program	MS			PHD			MS/PHD		
	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total
BIEN	2	3	5	1	2	3	3	5	8
CEE	1	1	2	4	10	14	5	11	16
CEN	0	0	0	0	0	0	0	0	0
CPSC	0	0	0	5	6	11	5	6	11
ELEN	0	1	1	0	8	8	0	9	9
MSOL	0	0	0	0	0	0	0	0	0
MSE	1	0	1	2	0	2	3	0	3
MCEN	3	0	3	2	0	2	5	0	5
BCOE	7	5	12	14	26	40	21	31	52

DECLINES

Program	MS			PHD			MS/PHD		
	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total
BIEN	0	0	0	1	0	1	1	0	1
CEE	2	4	6	5	1	6	7	5	12
CEN	0	0	0	0	0	0	0	0	0
CPSC	0	0	0	1	4	5	1	4	5
ELEN	0	0	0	2	3	5	2	3	5
MSOL	0	0	0	0	0	0	0	0	0
MSE	1	0	1	1	0	1	2	0	2
MCEN	0	0	0	1	0	1	1	0	1
BCOE	3	4	7	11	8	19	14	12	26

ABET Lessons Learned
Site Visit Nov 4-6, 2012

Chairs Meeting
March 25, 2013

Issues

- Annual ABET changes in Criteria and Self Study Reports
  - Specific program criteria as well as common-to-all items
  - eg. "Measurement of PEOs"
- Paper-based vs digital-based archival process
- Annual publication of approved PEOs and curriculum in Campus Catalog
- Annual publication of approved PEOs on BCOE website
- Course coverage of Student Outcomes
- Defining specific time spans for documented ABET assessment process
  - Annually?
  - Three two year cycles?
  - Two three year cycles?
- ABET faculty support and training
- Sharing of information, ideas, and resources among programs
- Agreements with Technical Writing and the Math Department
- Workload and course relief for ABET coordinators
- Intent to seek accreditation for Business Informatics

Bourns College of Engineering
March 21, 2012

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Suggestions (Page 1 of 2)

- Identify two/one faculty members per program to be trained as ABET PEVs (CEN & CS)
- Establish one faculty standing committee (3 members) per program to meet once per year to evaluate student outcomes (CE)
- Track only those courses which adequately ensure coverage of Student Outcomes (CEN & CS)
- Commit to a digital-based archival process for all programs (CEN).

- Obtain draft reports 6 months early from areas not directly connected with the ABET process (EE)
- Update Self-Study tables and figures annually(EE)
- ABET coordinators to have ongoing one course release per year to be coordinated with department chair and two course relief in the sixth year (EE)

Suggestions (page 2 of 2)

- Assign a faculty member as the ABET Coordinator to chair a committee for each program to provide ongoing review, evaluation, and recommendations
  - Ensure the Coordinator and the committee members are knowledgeable of the ABET processes
  - Develop a check list for each program to be submitted after each term to assess the ABET status for review in the Dean's Department and Center Chair Meetings
  - Ensure annual publication of approved PEOs and curriculum in Campus Catalog and approved PEOs on BCOE website
- Encourage sharing of ideas, resources, and information among program ABET Coordinators
- Associate Dean, Student Academic Affairs, to ensure closure on agreements with Technical Writing and Math Department
- Consider a summary plan for a continual process over the next six years to minimize the extraordinary effort usually associated with an ABET site visit
- Decide on Business Informatics accreditation

FOR THE 2018 ABET EVALUATION

Recommendations following the 2012 Computer Engineering ABET evaluation and visit

These notes are intended as recommendations for the next visit, in 2018. Although they are based on the experience with the Computer Engineering Program evaluation and visit, they are applicable to all programs. Most of these recommendations have been confirmed through my discussion with ABET coordinators or program directors outside UCR.

1. The coverage of the student outcomes by the course objectives. So far, in the CS and CEN programs, all the required courses were tracked. It is best to identify a subset of the courses whose course objectives maximally cover the student outcomes and track only those courses. This can reduce the workload by half.

2. Having two faculty members per program that are trained as ABET PEVs gives a lot of in-sight as well as confidence in preparing the evaluation and the visit. The first part of the training course is completely on-line and should take 20 to 25 hours. See http://www.abet.org/new-pev-training/

3. Have one ABET Faculty standing committee (suggested three members) per program. The task of this committee, meeting once a year, is to evaluate the program's student outcomes, how are they met by the courses offered that year and recommend actions to the Faculty as a whole. It can recommend changes or updates to the student outcomes of the program or the course objectives. These recommendations are transmitted to the Faculty for approval and to determine an appropriate course of action, hence closing the loop.

Items for consideration in the Lessons Learned meeting on ABET Lessons Learned from November 2012 Site Visit

1. Frequency of ABET status reviews?
    a. Departments' faculty meetings?
    b. Advisory Board meetings?
    c. Executive Committee Meetings?
    d. Department and Center Chairs meetings?
    e. ABET Coordinators meetings?
    f. Formal reviews with documentation resolving concerns with each program
2. Share information provided by ABET evaluators
3. Share ideas and resources between ABET coordinators
4. Follow-up on agreements with the Technical Writing organization and the Math Department
5. Consider creating a process chart for each program (similar to the posters provided by Chemical and Environmental Engineering for the November 4-6, 201 visit)
6. Annually publish approved PEOs and curriculum in Campus Catalog
7. Annually publish approved PEOs on BCOE website
8. All future information to be generated electronically?
9. Addressing measurement of PEOs –" *We will follow a process which will conform to the 2013-2014 ABET guidelines which eliminate the requirement for assessment and evaluation to determine achievement of PEOs. The guidelines emphasize the periodic review of the PEOs to ensure they remain consistent with the institutional mission, the program constituents' needs, and ABET criteria.* "
10. Evaluate Walid's recommendation
11. ID changes to ABET Criteria and Self Study Reports
12. ID plan for the next 6 years
13. ?

1) Our offerings of CS179 (our capstone) are inconsistent in presentation and evaluation. This has now largely been fixed.

2) Our ABET archival system can, and should be moved from paper-based to digital. Eamonn will implement this in Fall 2013.

3) We should measure outcomes on a smaller set of classes, probably just CS179, ENGR100, CS100 and one of (CS12, CS140, CS61). This will be sufficient, allow better quality control, and burden the TAs and lecturers less.

4) Having a faculty member trained as ABET PEVs would be useful for us; however, it is hard to imagine any faculty volunteering for this, as it takes 25 hours online, plus a 1 and ½ day workshop. It might be possible to get a volunteer if the campus offered a teaching release for this.

Eamonn

ABET Feedback from EE

The following comments are specific to the experience in EE. They may be applicable to other programs also.

1. There are portions of the self study that require information from various offices not directly connected with the ABET process in the department. For example, facilities or student statistics. Most of these would not change significantly over a year just before the review. These portions can be written well in advance. It would be ideal if the dept ABET coordinators could get drafts of their reports with these parts filled in. In the last review, most of the work on the self studies started in earnest in the Fall. Maybe these pro-forma portions can be filled in into the drafts over the previous summer and handed over to the dept coordinators. These parts were provided continuously over 6 months with updated versions which required us to keep track of these while writing the more core components of the studies. 2. The main work in writing the core part of the study (Objectives, Outcomes, Continuous Improvement) was in preparing the tables and figures. I suggest that the current items be updated every year by coordination through a college-wide ABET committee (along the lines of Walid's suggestion). This will significantly ease the burden of writing the report. It will also identify items for continuous improvement and make sure that we are not missing any relevant actions. 3. Course relief for ABET coordinators should be provided at the rate of 1 course/year. However, I suggest that ABET coordinators be provided flexibility to work with dept chairs on how this relief is implemented. In the year of the review, the workload of writing the study is immense and one course relief is not enough (the study needs two quarters to write, which means that there is teaching in one quarter). This may continue if there are significant issues to address after the review. The coordinator and Dept Chair should be provided the flexibility to take the course relief non-uniformly, while not exceeding the average rate of 1 course/year