Annual Faculty Meeting
May 23, 2012
MEETING MINUTES

- UNIVERSITY OF CALIFORNIA, DAVIS VOLUME XXXVIII, NO. 3
- ACADEMIC SENATE
- MINUTES
- REGULAR MEETING
- FACULTY OF THE COLLEGE OF ENGINEERING (DAVIS)
- May 23, 2012, 3:30 p.m., room 1065 Kemper Hall
Order of Business

1. Announcements by the President, Mark Yudof (none)

2. Announcements by the Chair, Marjorie Longo
   - Slides to follow
Executive Committee Activities

- Department of Applied Science – signed off on proposal to close.
- Optical Science Major and Minor – voted to discontinue.
- Merger of the Division of Textiles and Clothing with BAE – signed off on proposed merger.
- Electronic Materials Major – voted to discontinue.
- Combined COE-MPS Spring Commencement – voted to reject Chancellor’s proposal.
- Three new minors approved at campus level – Biomedical Engineering, Computational Biology, Materials Science.
- GE2 to GE3 Transition – continues to cause difficulties.
Executive Committee Activities Cont.

- COE 50th Anniversary Advertising and Website – voiced concerns to COE administration.
- Incentive Based Tuition Model – concerns forwarded to AS Chair Bison and COE Members of 2020 Taskforce.
- New ICR Model – request to Dean Lavernia that Dean’s Office returns ICR to departments minimally at current level.
- Engineering Supplemental Fee – we continue to discuss our response to UC Deans’ Position Paper.
- Bernard Levy (ECE) elected as Vice-Chair for AY 2012/13, Jeannie Darby (CEE), will serve as Chair of CEC for AY 2012/13.
ORDER OF BUSINESS

3. Announcements by Dean, Enrique J. Lavernia

Separate Presentation
New Faculty since July 2011

Eduardo Silva (BME) appointed 11/1/2011

Joshua Hihath (ECE) appointed 7/1/2011

Xiaoguang (Leo) Liu (ECE) appointed 11/1/2011

Omeed Momeni (ECE) appointed 7/1/2011

Erkin Seker (ECE) appointed 7/1/2011
Faculty Searches in Progress

Neural Bioengineering (BME)
Geotechnical Engineering (CEE:TOE)
Microwave, Millimeter-Wave and THz Electronics (ECE: 2 FTE)
Manufacturing (MAE)
Manufacturing/Energy Interface (MAE)
REPORTS FROM STANDING COMMITTEES

Committee on Undergraduate Educational Policy,
Angie Louie, Chair

Awards Committee, John Bolander, Chair
Report presented by Bruce Hartsough
REPORTS CONTINUED….

Research and Library Committee,  
Alex Revzin, Chair

Committee on Graduate Study,  
Roland Faller, Chair

Committee on Student Recruitment, Development,  
and Welfare, Anna Scaglione, Chair  
Report presented by Fadi Fathallah
Order of Business continued…

4. Special orders (none)

5. Petitions of students (none)

6. Unfinished business (none)

7. New business: Proposed Bylaw Changes
Proposed Bylaw Changes

- **SEE HAND OUT**
  - Change in units from 10 to 16 for UNEX Courses, Approved
  - Reg. #35-D   Double Counting of Units, Approved
  - Reg. #35-F   GE Requirements before graduation, Approved
  - Former Reg. #35-C   Deleted: Of the total units required for the Bachelor of Science Degree in Engineering, at least 35 of the final 45 units characteristic of the student’s curriculum must be completed while he or she is registered in the College of Engineering, Approved.

- 41 Faculty were in attendance at this meeting.
COE Standing Committees 2012/13

EXECUTIVE COMMITTEE

David Slaughter  BAE
Simon Cherry    BME
Marjorie Longo  CHMS
Jeannie Darby, Chair  CEE
Nina Amenta    CS
Bernard Levy, Vice-Chair  ECE
Niels Jensen   MAE
COE Standing Committees 2012/13

COMMITTEE ON STUDENT RECRUITMENT, DEVELOPMENT AND WELFARE

Tina Jeoh Zicari  BAE
Marc Facciotti   BME
Adam Moule      CHMS
Kenneth Loh     CEE
Matt Franklin   CS
Xiaoguang Liu   ECE
Valeria La Saponara  MAE
COE Standing Committees 2012/13

COMMITTEE ON UNDERGRADUATE EDUCATIONAL POLICY

Michael Delwiche  BAE
Tony Passerini  BME
Julie Schoenung  CHMS
Amit Kanvinde  CEE
Phillip Rogaway  CS
Saif Islam  ECE
Mike Hill  MAE
COE Standing Committees 2012/13

AWARDS COMMITTEE

Bryan Jenkins  BAE
Atul Parikh     BME
Bruce Gates     CHMS
Boris Jeremic   CEE
Zhendong Su     CS
Anh-Vu Pham     ECE
Ian Kennedy     MAE
COE Standing Committees 2012/13

RESEARCH & LIBRARY COMMITTEE

Julia Fan  BAE
Leonor Saiz  BME
Pieter Stroeve  CHMS
N. Sukumar  CEE
Michael Neff  CS
Soheil Ghiasi  ECE
Harry Cheng  MAE
COE Standing Committees 2012/13

COMMITTEE ON GRADUATE STUDY

Niels Jensen  DAS
Fadi Fathallah  BAE
Kent Leach  BME
Yayoi Takamura  CHMS
Frank Loge  CEE
Pat Mokhtarian  TTP
Kwan-Liu Ma  CS
TBA  ECE
Jean-Pierre Delplanque  MAE
College of Engineering
Budget Briefing

Presented to:
Annual faculty meeting – May 23, 2012
Faculty Executive Committee – May 30, 2012
Provost and Executive Vice Chancellor – May 31, 2012
College Overview

• 3,463 undergraduate majors
• 1,252 graduate students (includes 826 PhD students)
• 194 faculty FTE (paid)
• 7 departments, history of decentralized administration
  – Departments are generally consistent in size and academic foundations
• General fund expenditures, unrestricted = $38.4 million
  – Net of Budgetary Savings Target = $907K, shared
• Extramural expenditures = $90.4 million
  – Includes gifts = $4.5 million
  – Nearly all restricted

COE General Fund Expenditures, Unrestricted
FY 2010-11

Faculty, $25.4
Staff, $8.4
Teaching Assistants, $2.0
Other Academics, $0.9
Supplies & Equipment, $1.4
Travel, $0.2
Ratio of COE graduate students to undergraduates = 0.36
Ratio of PhD to all graduate students = 0.66
COE Extramural Research Expenditures per Faculty FTE

$0

$100,000

$200,000

$300,000

$400,000

$500,000

$600,000

2006-07  2007-08  2008-09  2009-10  2010-11
Average undergraduate student majors per 9-month, 50% TA

Note: Expenditures are corrected for salary range adjustments (constant 2011-12 dollars)
Graduate Student Support
Monthly fall stipends for GSRs, TAs, Fellowships

Numbers above bars are appointments with stipends
Budget Structure
Departmental base budgets

- Allocation methodology driven by workload metrics:
  - Extramural expenditures: weighted 50%
  - Student credit hours: weighted 20%
  - Undergraduate enrollments: weighted 10%
  - Graduate enrollments: weighted 10%
  - Faculty FTE: weighted 10%
- Recalculated annually
  - Uses 3-year average for each metric
### Base Budget Allocation Methodology, 2011-12

**Working Base Budget:** $3,756,585

<table>
<thead>
<tr>
<th>Drivers</th>
<th>Faculty FTE</th>
<th>Extramural Expenditures</th>
<th>Total SCH Course Origin</th>
<th>Pay Department</th>
<th>UG Majors</th>
<th>Graduate Enrollments</th>
<th>Department Allocation</th>
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<tr>
<td>%/driver</td>
<td>10%</td>
<td>50%</td>
<td>15%</td>
<td>5%</td>
<td>10%</td>
<td>10%</td>
<td>100%</td>
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<tr>
<td>Department</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>BAE</td>
<td>$10,628</td>
<td>$58,849</td>
<td>$15,790</td>
<td>$5,666</td>
<td>$18,003</td>
<td>$15,967</td>
<td>$124,902</td>
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<tr>
<td>BME</td>
<td>$42,306</td>
<td>$335,133</td>
<td>$42,049</td>
<td>$14,095</td>
<td>$35,699</td>
<td>$42,996</td>
<td>$512,278</td>
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<tr>
<td>CHMS</td>
<td>$62,025</td>
<td>$288,609</td>
<td>$70,671</td>
<td>$29,730</td>
<td>$51,953</td>
<td>$45,189</td>
<td>$548,177</td>
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<tr>
<td>CEE</td>
<td>$64,296</td>
<td>$406,450</td>
<td>$106,101</td>
<td>$35,106</td>
<td>$77,585</td>
<td>$78,502</td>
<td>$768,041</td>
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<tr>
<td>CS</td>
<td>$64,152</td>
<td>$249,828</td>
<td>$114,529</td>
<td>$37,233</td>
<td>$56,726</td>
<td>$69,367</td>
<td>$591,837</td>
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<td>ECE</td>
<td>$61,751</td>
<td>$302,648</td>
<td>$106,875</td>
<td>$30,053</td>
<td>$60,774</td>
<td>$70,051</td>
<td>$632,153</td>
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<tr>
<td>MAE</td>
<td>$70,499</td>
<td>$236,775</td>
<td>$107,473</td>
<td>$35,947</td>
<td>$74,918</td>
<td>$53,585</td>
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<td>allocation/driver</td>
<td>$375,659</td>
<td>$1,878,293</td>
<td>$563,488</td>
<td>$187,829</td>
<td>$375,659</td>
<td>$375,659</td>
<td>$3,756,585</td>
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</table>

### Three-year average: AY 2007-08, 2008-09, 2009-10

<table>
<thead>
<tr>
<th>Source/Metrics</th>
<th>BAE*</th>
<th>BME</th>
<th>CEE</th>
<th>CHMS</th>
<th>CS</th>
<th>ECE</th>
<th>MAE</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ladder faculty/Lecturer-SOE FTE</td>
<td>5.2</td>
<td>20.6</td>
<td>31.2</td>
<td>30.1</td>
<td>31.2</td>
<td>30.0</td>
<td>34.3</td>
<td>182.5</td>
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<tr>
<td>Total Undergraduate SCHs</td>
<td>1,422</td>
<td>2,914</td>
<td>11,026</td>
<td>7,413</td>
<td>12,716</td>
<td>11,534</td>
<td>12,883</td>
<td>59,910</td>
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<tr>
<td>Graduate Student Credit Hours (course origin)</td>
<td>1,081</td>
<td>3,752</td>
<td>5,796</td>
<td>3,791</td>
<td>5,441</td>
<td>5,410</td>
<td>4,156</td>
<td>29,427</td>
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<tr>
<td>Undergraduate Student Enrollments, SISDS 410 Majors by discipline (3-qtr average, first major count)</td>
<td>135</td>
<td>268</td>
<td>583</td>
<td>391</td>
<td>426</td>
<td>457</td>
<td>563</td>
<td>2,824</td>
</tr>
<tr>
<td>Graduate Student Enrollments (3-qtr average)</td>
<td>36</td>
<td>97</td>
<td>177</td>
<td>102</td>
<td>156</td>
<td>158</td>
<td>121</td>
<td>847</td>
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<tr>
<td>Extramural expenditures, including indirects UCD Campus Financial Schedule E + C Overhead</td>
<td>$1,859,865</td>
<td>$10,591,478</td>
<td>$12,845,384</td>
<td>$9,121,135</td>
<td>$7,895,529</td>
<td>$9,564,845</td>
<td>$7,483,004</td>
<td>$59,361,240</td>
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</table>
Budget Structure
Impacts of budget cuts

• Absorbing last 3 years of budget cuts
  – 2009-10 = $1.67M: About half within dean’s office, half to departments
    • Shared services for purchasing, HR/payroll, IT
  – 2010-11 = $2.45M: All in dean’s office. College has returned exit salaries for 16.6 faculty retirements. Another $162K remains.
  – 2011-12 = $521K: Campus guidance on implementation. COE formed two faculty committees to evaluate feasibility.
    • Salary cost recovery is a no-go.
    • New revenues are promising. Collaborations with Unex & Summer Sessions.
    • Absorbed $159K through staff reductions; another $362K remains in dean’s office.

• Dean’s Office operating deficit 2011-12 = $942K

• Changes for 2012-13:
  – Reduced deficit for NCNC = $266K
  – Retired previous years deficit in Development = $303K
  – Use $362K from new ICR distribution to absorb remaining 2011-12 budget cut
Budget Structure
Anticipated changes

• Budgetary Savings Target: cost = $907K
  – May use new ICRs to phase out, over multiple years. Approx 75% would go to departments, 25% to EDO.

• Northern California Nanotechnology Center: cost = $325K
  – Large staff reductions implemented, reduced deficit by 50%.
  – Newly engaged faculty → higher usage → increase recharge by ~$100K

• Development: cost = $270K
  – Will worsen when campus support for Exec Director ends 2013-14
  – Campus-wide problem: Development very successful, but mostly restricted
  – COE will request additional support from Provost
Strategic Goals
2012/13 to 2015/16

• Instructional support
  – Teaching Assistants and computer labs
  – Absorb influx of international students
  – Est. cost = $300K-$400K annually to return to 2008-09 levels

• Curriculum Changes
  – Student Retention and 2025 Committee Recommendations
  – Engineering design experience during freshman year
  – Est. cost = $300K-$350K annually for curriculum development and teaching support

• Student Diversity and Retention in Engineering
  – New SAO funded by Provost to develop programs to retain students
  – Gifts of $150K to fund construction of student study space
Strategic Goals
2012/13 to 2015/16

• Support Research with Financial Incentives
  – Return some ICRs directly to PI discretionary accounts
  – Est. cost = $460K/year for 5% return
  – ICRs to COE must cover OP tax $748K and benefits $427K

• EME-50 Course Bottleneck
  – Est. cost = $1M-$2M for lab expansion/renovation

• Recruitments and Start-Up Costs
  – Est. cost = $5M-$10M over next 3 years

• Special Challenges
  – Skewed age distribution in MAE
  – Garamendi and BME