

Unit Name: College of Engineering

- 1. Academic Units:** Please provide a 1-2 page description of how your unit will fund growth plans identified in the Annual Academic Plan workbook through current or anticipated incremental revenue to your unit. Please provide specific fund source names and projections (in dollars). If these plans assume additional Provost Reinvestment Funds (supplement), please make that clear in this section.
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The College of Engineering received \$3.8 million in Proviso funding to support student access and program growth. That funding, and related ABB allocations, will help grow faculty, TAs, and advising staff to support our students. Specific enrollment and degree targets were specified in our recent MOU with the provost on engineering expansion related to Proviso funding – a summary of that MOU is attached.

The Molecular Engineering and Sciences (MoES) Institute opened last year and the MoES building was occupied over the summer. The overall launch was successful, and the recent DoE center awards to the energy group and the NSF-STC site visit for the drug delivery group demonstrated that we have an internationally competitive organization in place. The Institute currently operates on a small permanent fund originally associated with the nanotechnology center and a start-up package given to Pat Stayton (center director) a year ago. Within this package, Pat was given both a venture capital fund to help incent faculty recruiting aligned with the Institute and a temporary operating fund of \$400,000 per year for two years.

We believe it is time to permanentize these operating funds to maintain current programs, grow the MoES educational program, and coordinate campus-wide programs in molecular and nanoscale technologies. In our original financial models for MoES, we assumed that RCR returns from interdisciplinary investigators within the building could be used for operating and facility funds. Given the current approach to keep facilities RCR funds centrally, there is no need for a specific facilities fund for operations, maintenance, and minor modifications since central facilities operations will support the building. However, there is great need for a permanent operating fund since the RCR generated by institute faculty and programs continues to be returned to individual colleges and departments. We request that MoES be given \$500,000 in permanent Provost Reinvestment Funds to permanentize the current operating budget, support institute-wide programs such as the new educational program, and insure that the successful institute opening results in a stable organization able to compete at the highest level.

Similar to our approach last year, additional inter-college/school initiatives will be identified during the CoE's budget process running through the winter quarter. The results of this process will be presented to the provost either by acting dean Judy Ramey or by the new dean during our annual budget meeting.

- 2. Academic Units:** If you are recommending the creation of a new tuition category, please identify the original tuition category, the proposed category, a suggested tuition rate for FY14 and a percentage increase for FY15. If you plan to move only a subset of your programs into a new category, please identify those programs.
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We have identified only one new tuition category at this point for a Masters in Industrial and Systems Engineering (ISE). Several departments are also considering new terminal MS programs that will create new tuition categories in the next academic year similar to those created last year by Chemical Engineering (ChemE) and Materials Science and Engineering (MSE).

At the undergraduate level, we recommend a minimum 5% tuition increase for each of the next two fiscal years (FYE14 and FYE15). In addition, if there is any elasticity in the maximum tuition allowable that will not bankrupt the current GET program, then we support at least a \$1,000 per year differential tuition for all upper division students at the university as discussed previously with the provost.

At the graduate level, we recommend minimum 5% tuition increases for each of the next two fiscal years (FYE14 and FYE15) for Tiers 1&3. We believe that the terminal MS programs in MSE and ChemE are underpriced for the market and propose to raise tuition in FYE14 by 15%. Another increase would be expected for these programs in FYE15, but the exact rate should be determined by the new dean in consultation with the chairs of the two departments.

- 3. Administrative Units:** Please provide a 1-2 page overview of your current strategic plan and include a summary of any operational risks that the UW must work to mitigate over time. Note that there are very few Provost Reinvestment Funds, so your summary should provide a clear sense of how your unit intends to minimize risk, maximize service, and if necessary, repurpose existing funds to do so.
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Not applicable.

- 4. Academic and Administrative Units:** Considering your strategic plans (particularly if they assume growth) please provide a short summary (1-2 pages at most) that relates these plans to your current space assignment. In particular, you might consider the following questions when drafting your response:
- Does your current space inventory meet current programmatic requirements? Contrarily, does the type or quality of the space place any constraints on your ability to meet program requirements? If not, please provide specific quality or space type concerns (location, specific quality concern, etc.).
 - Will your unit be able to accommodate your growth plans within existing inventory of space? If additional space will be necessary, please describe the amount, type, or quality of *additional* space you may need to meet programmatic objectives and growth plans.
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The facilities and infrastructure of CoE is critical to the reputation, technical advancements, and educational mission of our departments. Yet the primary buildings in which these departments are housed fall into one of two categories: half are primarily housed in buildings 12 years old or younger while the other half are housed in buildings 40 years old or older. Our recent precinct plan details how we propose to replace our older space and develop new space to meet the needs of expanding enrollments through significant developments in North Lake Union. This expansion will be the focus of our next capital campaign.

Over the next 3-5 years, however, we must remodel existing space to meet the research and academic needs of new faculty and students. We believe this is a general need for the campus and propose to form a working group with other schools and colleges chaired by OPB to develop policies, procedures, and incentives to promote shared lab space and reallocation of underutilized space.

Working with OPB, we recently launched large-scale design studies to remodel significant space in both Fluke Hall and the 2nd floor of the Mechanical Engineering Building. We are also developing plans to optimize CoE space on the 4th and 6th floors of the Hall Building. Similar remodeling within the current CoE footprint should be expected in the next few years. Our approach is to renovate space for clusters of faculty and graduate students rather than continuing to use and renovate facilities to solely meet the requirements of an individual faculty member.

- 5. Academic and Administrative Units:** Should the 2013 Legislature lift the ongoing salary freeze and allow increases, we certainly hope that state funding will be provided for GOF increases. In the event that state funding for compensation is not available, all units should have plans to cover GOF/DOF salary increases out of tuition or other fund sources. Should no tuition revenue be available to your unit, Provost Reinvestment Funds may be dispatched to provide support for increases. Please provide your units' plans to cover expenses associated with salary increases. A salary and tuition revenue model is available on the OPB website; this model is designed to give you a sense of the magnitude of the support that will be required at various percentage increases.
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Based on CoE permanently budgeted GOF and DOF salaries, each 1% increase in salaries will require approximately \$500,000 in additional GOF/DOF funding. We have a diversified revenue stream to support other salary increases for non-state funded positions. In addition, CoE has supported a pre-emptive retention funding pool from CoE reserves and vacant positions to support opportunities across the departments.

We note that increased tuition dollars associate with increased enrollments and degrees related to Proviso funding cannot be used for salary increases or else we will not be able to meet the enrollment and degree targets agreed upon (see attachment).

- 6. Academic and Administrative Units:** Your unit may have identified growth plans in the Annual Academic Plan workbook; if so, as part of question 1 your unit should have included a description of the funds necessary, including Provost Reinvestment Funds, to support such growth. For this section, however, please provide specific requests of Provost Reinvestment Funds for new initiatives. Please provide a one-page summary of these requests, articulating how much funding is requested by an initiative, whether temporary or permanent funds are requested, and how the funds would be spent (new positions, systems, etc.).
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The proposal for permanent funds to support the MoES Institute is detailed above. Again, we request \$500,000 in permanent funds to grow campus-wide educational and research programs in molecular engineering and sciences.

Last year the CoE established a new budget process to align with the central ABB process. Departments formulate their plans during the fall and meet with dean's office staff in early winter to review programs and budgets and to propose new initiatives. The dean's office integrates departmental and unit plans into a complete plan for the CoE and presents it to the provost during the annual budget meeting in late winter/early spring. Last year this process led the CoE to endorse the campus-wide "big data" initiative and to endorse the CEE-led proposal for cluster hiring in "water" jointly in CEE and the College of the Environment.

We plan to continue this process through the dean transition – Judy Ramey will complete it in the winter assuming that a new dean does not actively participate in budgeting before FYE14. In the future, the new dean may change both process details and timing. This year, however, we plan to request support for additional initiatives that will rise to the top during our budget process. Only inter-college/school proposals will be presented. For example, given our recent focus on hiring in synthetic biology and protein design, we think there is an opportunity for a CoE-SoM-A&S cluster hiring opportunity. Also, there may be opportunities to leverage the search for the new director of the NSF-ERC in Sensorimotor Neural Engineering for additional hires in Biology, Neurosurgery, and EE/CSE/BioE/ME. In each case, we would expect permanent funds of \$100-150,000 to support a faculty position and help with startup costs and facilities. We will not be able to present these opportunities as specific proposals until the winter. We hope that the provost will consider them as part of FYE14's Provost Reinvestment Funds.

[Please return response to Amy Floit by Wed, Nov 21, 2012.](#)

**COLLEGE OF ENGINEERING
ENROLLMENT AND DEGREE TARGETS
FYE 2013-2016**

ENROLLMENT	BASELINE	FYE 2013	FYE 2014	FYE 2015	FYE 2016
Bachelors	2,020	2,150	2,200	2,300	2,350
Graduate	1,105	1,150	1,200	1,225	1,260
Totals	<u>3,125</u>	<u>3,300</u>	<u>3,400</u>	<u>3,525</u>	<u>3,610</u>

DEGREES	BASELINE	FYE 2013	FYE 2014	FYE 2015	FYE 2016
Bachelors	762	800	825	850	865
Master	362	375	385	400	418
PhD	109	115	125	135	143
Totals	<u>1,233</u>	<u>1,290</u>	<u>1,335</u>	<u>1,385</u>	<u>1,426</u>

Note: Enrollments and Degrees Baseline - Average FYE 08,09,10,11