Program Performance Review: Culmination Meeting Memo Civil and Environmental Engineering, M.S. Program

The 2013-2014 Program Performance Review (PPR) process for the M.S. Program in Civil and Environmental Engineering concluded with a culmination meeting on May 1, 2015.

During the meeting, the program was commended for the significant progress made in the past several years, which includes:

- 1. Faculty members are dedicated to student success.
- 2. There has been dramatic growth in the program over the last six years.
- 3. Department should be commended for the work it is doing to educate such a large, diverse student body.
- 4. Department has good laboratory facilities for class and research use.

The major recommendations and concerns raised through the PPR process were discussed. Suggestions on how to address them were provided:

- 1. Faculty hiring should focus on balancing allocation of faculty among different areas; department should have at least two full-time faculty members in each specialty.
 - The department has successfully hired four full-time faculty members last year, and has extended three offers this year. Assuming the offers are accepted, each area will have two or more faculty. In addition, one new area Transportation will be created.
 - The Dean commended the program for having a very strong group of faculty with professional expertise.
 - The college will examine enrollment trends to determine whether new faculty hires are needed for next year.
- 2. Department should develop a Department Personnel Document to govern the RTP process.
 - The department has successfully developed and approved a new Department Personnel Standards (DPS) to govern the RTP process.
 - The department is commended for accomplishing this task.
- 3. Junior faculty mentoring program should be formalized.
 - The junior faculty are currently mentored by the department chair or senior faculty in their respective areas. The chair arranges the "matching" between the junior and senior faculty. The department intends to follow the newly established DPS to help junior faculty understand tenure expectations.
 - The faculty commented on the collaborative relationship between faculty; The Dean's Office also has an open-door policy, which helps junior faculty receive all the necessary information.
 - The department is encouraged to build upon the DPS, and move toward a formal junior faculty mentoring program.

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- 4. Department should enter into dialog with College about increasing support for faculty-student research.
 - The Dean stated that for master's programs in engineering, thesis requirement is not the standard; comprehensive exam or culmination project is the common option. The majority of students in the CEE program choose the comprehensive exam option.
 - The faculty reported that there are still a significant number of students who participate in faculty-led research projects. Currently, faculty supervision of student research is considered voluntary work. Resources to support student research supervision are much needed.
 - The department is building a "point system" that accounts for faculty supervision of student research and publication.
 - The university also recommended the department to work with the Office of Research to explore research funding opportunities.
- 5. Graduate advising load should be distributed evenly across faculty; designated advisor for each degree emphasis is needed.
 - Currently, students in the program receive advising from faculty in their specialty area first, and then receive general advising from Dr. Tiwari and Dr. Kim.
 - Faculty who provide advising receive course release, and seem to be happy with the current set-up. The department's "point system" also captures faculty contribution to advising.
 - The Deputy Provost commented that the current format of distributing advising across faculty is fine.
- 6. Faculty should integrate teaching industry-standard software packages into the curriculum.
 - Based on the PPR external reviewers' feedback, the department reassessed each disciplinary area, incorporated industry feedback, and purchased relevant software. The department is "in very good shape now".
- 7. Additional resources are needed to provide student fee waivers and support student conference attendance.
 - The college currently has a maximum of 11 fee waivers at any given time, and the number of waivers per year depends on the number of waivers used in the previous year. There is a strong need for more fee waivers.
 - The faculty emphasized the importance of attracting and retaining high quality students to work on research projects. The faculty try to include students on grants, but the university should establish a matching mechanism to provide additional support.

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- The Dean stated that ECS does not need fee waivers as a recruitment tool, but need them to retain students. The college would like some autonomy in how to purpose the fee waivers this should not be an "administrative decision" by the university.
- The Deputy Provost acknowledged that this is a common issue in the PPR discussions, and the university is currently working to address this problem.
- 8. Assessment plan should expand beyond in-class assignments to incorporate other measures.
 - The Deputy Provost suggested the possibility of using alumni surveys as an indirect measure of student learning.
 - The college acknowledged the importance of tracking alumni, but stated that the current focus is on undergraduate students due to ABET accreditation requirements. The Dean also stated that ABET has initiated an accreditation program for master's programs, but it currently is aimed at institutions that do not have undergraduate programs.
 - The Office of Assessment and Educational Effectiveness will work with the college next year to develop assessment for graduate program.

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