

Program Performance Review: Culmination Meeting Memo Civil Engineering MS

The 2021-2022 Program Performance Review (PPR) process for the MS Civil Engineering program in the College of Engineering and Computer Science (ECS) concluded with a culmination meeting on October 10, 2022.

The following people attended the meeting: Carolyn Thomas (Provost), Elaine Frey (AVP for Graduate Studies, AVPGS), Susamma Barua (Dean, ECS), Sang June Oh (Associate Dean, ECS), Phoolendra Mishra (Department Chair, Civil Engineering), Uksun Kim (Faculty and Graduate Advisor), David Naish (Faculty), and Su Swarat (Senior AVP for Institutional Effectiveness and Planning, SAVPIEP).

The Provost congratulated the program for successfully completing the PPR process, and thanked the department and college leadership for their oversight. The Provost commended the program on the following specific accomplishments:

- The program has grown significantly since the previous PPR, and has well-established focus areas. The Provost commended the program for looking for business and industry connections, and seeking to attract students from a variety of community sectors.
- The program is sensitive to the needs of the community and students by expanding course offerings in different areas (e.g., Transportation Engineering) and modalities.
- The program offers successful pathways for non-engineering students. The Provost recognized this as a demonstration that the program thinks carefully about the needs of different student populations. The Dean added that this program is one of the disciplines in ECS that attracts female students, another testament of the program's intentionality in meeting different students' needs.
- The part-time faculty are well-experienced, qualified, and renowned in the industry. The Provost commended the department for providing intentional support to part-time faculty.
- Faculty are engaged and satisfied with the program's curriculum. The Provost commented that this is an uncommon commendation, which speaks to the program's quality.
- Students have access to a popular and effective tutoring program and to a laboratory space that comprises of several focus areas.
- Students' ability to find employment opportunities upon completion of the program reflects the quality of the program. The Provost commented that this is indicative of the strong reputation the program has among the industry partners.

Major recommendations and issues raised through the accreditation process were discussed as follows:

1. Increase Enrollment:

- The external reviewers recommended the program to increase student enrollment, which would facilitate the program's desire for increased flexibility in course offerings. This requires increased efforts in student outreach and recruitment activities.
- The AVPGS pointed out that the numbers of applications and enrollment have decreased in recent terms, and encouraged the program to develop strategies to attract

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new students. One strategy to consider is to increase RA and TA positions, and to explore donors for graduate student scholarship funds.

- The Chair acknowledged that the current enrollment is lower than desired (30), and stated that the program is working on a branding effort using social media to increase enrollment. The program is conducting outreach to nearby industries in hope to attract professionals to enroll, and is encouraging current undergraduate students to pursue the master's degree.
- The Dean echoed that her office is working on outreach efforts directly with the departments. One immediate measure includes increased presence at local grad fairs.

2. Faculty hire in the area of Transportation Engineering:

- The external reviewers recommended an immediate faculty hire in the area of Transportation Engineering, which would help support the development of graduate courses in this area (currently taught by part-time faculty).
- The Dean stated that there are 2 faculty positions on hold for the department, and the department is determining when to launch the search.
- The Chair confirmed that growth is needed in this area, and the department is thinking about launching the search next year. Part of the consideration is also to establish the courses in this area first, and then bring in a new faculty member to a more stabilized curricular structure.
- The faculty expressed that part of the hesitation is that this area is in direct competition with nearby institutions (e.g. UCI and Cal Poly Pomona), which may appear more established and attractive to potential hires. Both the Provost and the Dean encouraged the program to not be limited by the competitors, and explore the program's potential to grow in this area.

3. Faculty capacity to support student research:

- The external reviewers pointed out that the faculty's capacity to support student research is limited by their workload and lack of dedicated space for students to work in.
- The Chair reported that currently there is no WTUs awarded for thesis work, and the college is working on developing strategies to address this issue.
- The Associate Dean stated that optimizing the class size could help create a "banking" system to compensate for faculty's supervision work on student research/thesis. This can only be done if the department minimizes the financial loss from small class sizes.
- The Provost encouraged the program to look into this issue in connection with the aforementioned discussion on enrollment growth – could increase enrollment help support faculty capacity?
- In terms of space, the Dean reported that the college is accommodating student research needs within the existing space. The planned Innovation Hub facility should address the space challenge, and the hope is to have the funding in place in two years.

4. Staff retention:

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- The external reviewers recommended the program to allocate additional resources to support the retention of its staff.
 - The Dean acknowledged that staff recruitment and retention are challenging. Progress has been made recently with replacing the IT Technician position, and extending an offer on the Instructional Technician position. The college also strives to employ students in the labs to address staffing issues, and to offer student hands-on experience.
5. Course modality and flexibility:
- The external reviewers recommended the program to increase flexibility in course offerings by offering more Friday/Saturday courses and hybrid courses.
 - The Chair stated that the department is considering adding more hybrid modality, and is in the process of creating standards for hybrid courses to ensure quality.
 - The Dean reported that from a college perspective, it is examining how the Engineering Management program (which plans to switch to be fully online) works out before encouraging more programs to explore the online/hybrid option.
6. PPR logistics:
- The Chair reported that the PPR external reviewer hiring process is extremely cumbersome, which negatively affects the PPR process.
 - The SAVPIEP mentioned that this has been reported by other programs as well, and she will work with the senate AEEC to seek possible alternatives.

The Provost concluded the meeting by thanking the faculty for their hard work, and the Dean, the Associate Dean, the Chair for their excellent leadership.