Chair's Response to Graduate Program Review for Civil and Environmental Engineering

Prepared for

Dr. Fred Hartmeister
Dean
Graduate School
Texas Tech University
Lubbock, Texas 79410

by

H. Scott Norville, P.E., Ph.D.
Professor and Chair
Civil and Environmental Engineering
Texas Tech University
Lubbock, Texas 79410

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Introduction

The Graduate Program in the Civil and Environmental Engineering (CEE) Department underwent review during the 2008-2009 academic year. The committee consisted of three members from Texas Tech as well as an external member. The members were Drs. Thomas Thompson (committee chair), Edward Quitevis, Walt Oler, and Jacob Najjar. Dr. Najjar, the external committee member, is Professor and Interim Department Head of Civil Engineering at Kansas State University. The CEE Department expresses its appreciation for the time and effort the committee members put into their thoughtful review. The review came back embodied in two reports. Dr. Najjar prepared one report, dated April 6, 2009. The internal committee members prepared a separate report dated April 18, 2009. The reports are very similar.

The graduate school forwarded the reports to the chair of the CEE Department via email on or about May 6, 2009. Finally, the Dean of the Graduate school, Dr. Fred Hartmeister, convened a meeting on June 9, 2009. Attendees to the meeting included Drs. Thompson and Quitevis of the review committee, Dr. Hartmeister and Marlene Kenady from the Graduate School, Dr. Rob Stewart from the Provost’s Office, Associate Dean Dr. John Kobza from the College of Engineering, and Dr. Scott Norville representing CEE.

In the meeting Dr. Thompson summarized the review findings, after which the author responded verbally. This response chronicles the planned actions of the CEE Department in response to findings that require improvements or changes in performance by the CEE faculty.

Recommendations Arising from the Review

This section of the report summarizes those findings of the review that require improvements or changes in performance by the CEE Department. The author distilled the nine items below from the recommendations in the two reports coupled with the meeting on June 9.

1. **Strategic Plan**: The Department should revise its strategic plan. According to one report, the goal of the revision should be to reflect goals and strategies for growing the graduate program. According to the other report the strategic plan revision should reflect precisely the actual goals as well as include metrics that can help quantify the Department’s achievements.

2. **Departmental Web Site**: The Department should Improve its web site for the web site is a portal into the department, and it should keep it up to date.

3. **Resources**:
   a. The Department should secure resources from the college, university, or other funding mechanisms to increase the number of funded TA lines to 19. Actually, this number should be 21 because the Department is adding two new faculty members in the fall.
   b. The Department should evaluate the effectiveness of the $1000 scholarships for incoming graduate students.
   c. The College or University should provide resources to renovate classrooms 1 and 5 in the Civil Engineering Building.
4. **Curriculum:** The Department should streamline the curriculum for all graduate degree programs in order to achieve an optimal compromise between the faulty teaching load and the required graduate course offerings.

5. **Graduate Student Handbook:** The Department should develop a graduate student handbook and post it on the website.

6. **Completion of Ph.D. Degree:** The Department should make every effort to reduce the number of years for completion of a Ph.D. degree from the current average of 8.6 years to 5 years.

7. **Master of Environmental Engineering Program:** The Department should assess long-term viability of the MEnvE program in order to quantify its impact on the resources allocated to the MSCE and Ph.D. programs.

8. **Graduate Program:** The Department should shift its focus from predominantly master-based to more Ph.D.-based programs.

9. **WISE:** The Department should resolve counting issues related to the Wind Science and Engineering Program.

**Actions to be Taken or Already Undertaken in Response to Items Above**

The numbering system below corresponds to the system in the previous section.

1. **Strategic Plan:** The CEE Department will revise its strategic plan to better reflect goals and achievement. **Expected Completion Date:** May 31, 2010.

2. **Departmental Web Site:** The website is under continual scrutiny and revision. The reports are not specific concerning the deficiencies of the website. The Department will review and update the website. **Expected Completion Date:** August 31, 2009 (with continued monitoring).

3. **Resources:**
   a. Within the budget constraints placed upon the CEE Department, the faculty and Chair have been attempting to provide more TAs to faculty. The Department Chair will make a formal request to increase the CEE budget to provide funding for up to 21 half time TAs. **Request to be made by December 31, 2009.**
   b. The Department Chair will appoint an *ad hoc* committee to assess the effectiveness of the $1000 graduate scholarships. **Expected Completion Date:** December 31, 2009.
   c. The Department Chair, through the College of Engineering, has placed classrooms 1 and 5 on the list for renovation. He will request the Dean of the College of Engineering Office to emphasize the immediate need for renovation. **No expected completion date.**

4. **Curriculum:** This is a continual process that rarely gets completed. The Department Chair has attempted to prevent new assistant professors from introducing new courses and, with the aid of the curriculum committee, has eliminated several courses and one under-manned program. The Chair points out that one effort at streamlining the curriculum consists of “dual listing” some upper level undergraduate
and lower level graduate courses to facilitate leveling for graduate students who entered from other institutions. Our proposal to dual list courses in the past six years have been vetoed by the graduate school. We will gladly revisit this topic in our streamlining efforts. \textit{No expected completion date.}

5. \textbf{Graduate Student Handbook}: The Department will compile a graduate student handbook and publish it on its website. \textit{Expected Completion Date: May 31, 2010.}

6. \textbf{Completion of Ph.D. Degree}: The Department is working on minimizing appointments of graduate students as full time research associates. This type of appointment has been made in the CEE Department for at least 25 years. The Chair is pushing the faculty to appoint graduate students to no more than one-half time position. As the effect of this appointment policy takes hold, the time to complete a Ph.D. should come down significantly. \textit{Expected Completion Date for Implementation of Graduate Student Appointment Policy: December 31, 2009.}

7. \textbf{Master of Environmental Engineering Program}: This recommendation was carried out well before this graduate review occurred. The five year MEnvE program has two courses that are unique from the BSCE and MSCE programs: the one hour freshman seminar and the final design project. Students can apply other courses in the MEnvE curriculum to their undergraduate (BSCE) or graduate degree (MSCE and Ph.D.) programs, as appropriate. Consequently, the MEnvE program does not drain resources from other degree programs in the department. \textit{Completed.}

8. \textbf{Graduate Program}: Faculty members in CEE have begun making the shift towards a more Ph.D. oriented approach about three years ago. This effort will continue. \textit{No expected completion date.}

9. \textbf{WISE}: This is more than a “counting” issue. It is an issue the CEE Department and the College of Engineering began discussing with the Dean of the Graduate School early in the Spring Semester of 2009. The CEE Department and the College of Engineering would like to see a resolution to this issue also. The purpose of the Graduate School, in the author’s opinion, is to ensure uniform procedures and quality among the various Ph.D. programs in the University. An administrative division such as the Graduate School that effectively has no faculty and no research programs should not award degrees. The only satisfactory resolution for CEE as well as for the College of Engineering is for Ph.D. degrees awarded to engineering students should be Engineering Degrees and not Graduate School degrees. This same philosophy should hold true for Ph.D.’s graduates in the multidisciplinary programs from other colleges: their degree should come from the college of their home department and not from the graduate school. At this point there appears to be no simple resolution to this issue. \textit{No expected completion date.}

\textbf{Closure}

In closing, this response outlines issues raised in the review committee’s report and the external reviewer’s report. The previous section gives a detailed response to the issues, point by point. At the end of each point, the previous section provides the Department’s expected timeline for dealing with the issues.