

The Graduate and Professional Student Senate

Program Review of the Department of Civil and Environmental Engineering

Winter 2012: Catalyst Survey Results

Submitted to the University of Washington Graduate School: February 28, 2012

The Graduate and Professional Student Senate (GPSS) conducts program reviews of academic departments that coincide with the Graduate School's Program Review process. GPSS reviews are a vital component of the final Graduate School Program Report. The data collected and presented by the GPSS serves as a primary source of graduate and/or professional student feedback in the Graduate School's Program Review process.

For most program reviews, the GPSS conducts a two-part review of the academic department that results in two separate reports. The first part is based on an electronically administered Catalyst survey requesting feedback from the graduate and/or professional students within the department being reviewed. The survey results are largely quantitative, and the results of that survey are contained within this report. The second part of the GPSS-sponsored program review involves an in-house focus group session led by GPSS senators that is dedicated to exploring further the issues raised by the Catalyst survey. This activity collects largely qualitative information. The senators take their notes from the focus group and compile the second report. The results of the focus group meeting should be reported within one to two weeks after the external review committee has visited the department.

For more information about the GPSS Program Review process or questions regarding this report, please contact gpsspa@uw.edu.

Department of Civil and Environmental Engineering Graduate Program Review

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Review, Scope, and Purpose

This review *does* contain a summary of graduate student opinions and feelings regarding their department. This review *does not* seek to evaluate the department or give a general overview of the academic program. For more general and background data regarding the department, academic program, faculty, courses, and research, please see the Department of Civil and Environmental Engineering Self-Study.

Executive Summary of Findings

The Graduate and Professional Student Senate (GPSS) sponsored and administered a Catalyst survey to the graduate and/or professional students in the University of Washington Department of Civil and Environmental Engineering between February 6 and 10, 2012. Runze Yu, GPSS senator from the Department of Civil and Environmental Engineering, assisted the GPSS to achieve a 32% return rate (72/228) for this survey. The responses comprised of 45 master's students, 18 doctoral students, and 9 doctoral candidates. Of these, 65 were full-time students and seven were part-time. The purpose of this survey was to ensure the voices and opinions of the students within this program were included in the review process and thereby taken into account during the planning of the future direction of the program. The results of this survey are summarized within this executive summary. A copy of the survey and the summarized data are presented as appendices. The original survey data is available from the GPSS upon request, and a summary of the data is provided in this report (Appendix A).

Executive Summary of Survey Results:

The follow sections correspond to the sections as indicated in the survey (Appendix B).

I. Academic Program

The majority of the survey respondents (89%) considered the Department of Civil and Environmental Engineering's academic standards to be very good or excellent, with another 8% noting it as "good". According to participants, the



Percentage of Respondents Who Agree/Strongly Agree the Program Fosters...

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program integrates current developments in the field very well, with 83% noting it as excellent or very good. Additionally, the majority of respondents (89%) rated the intellectual quality of the faculty as excellent or very good.

An area of concern noted for the program was space and facilities. Only 32% of respondents considered these excellent or very good, while 38% considered facilities good. Over a quarter (27%) of respondents considered space and facilities as fair or poor. One respondent stated, "Facilities need cleaning and upgrading!" Another mentioned that "classroom and office spaces are sub-par." Another area highlighted was how well program activities fostered a sense of intellectual community. Nearly one out of every three respondents (31%) were either neutral or disagreed with the statement.

Outside of fostering a sense of intellectual community, respondent mostly agreed or strongly agreed that the program supported research or professional goals, encouraged collaboration, provided opportunities to take coursework outside of the department, and engaged in interdisciplinary work.

II. Research Experience

With regards to their research experience, 49% of survey respondents found their training prior to beginning on their own to be high or above average. Twenty-three percent responded that it was average. When generating the research topic, 45% of respondents found the quality of faculty guidance to be high or above average, with 25% responding it was average. However, once a topic was formulated, respondents' experiences were better; 51% noted that their experience collaborating with faculty was high or above average, and only 14% noted it to be average. An area of concern is in regards to assistance from support or technical staff; 13% marked it as below average or low. Another 24% noted their experience as average.

It should be noted that a relatively large number of respondents (19-28%) responded "no opinion" to the quality of their research experiences.

A small portion of respondents have helped with writing grant proposals (21%). Just under half have attended professional conferences (43%). Of those that did, 77% presented a paper or poster session at the conference.



III. Career Counseling/Job Search

There is *significant room for improvement* in the department's ability to help with career counseling and job searches. Only half of the respondents felt they were very satisfied or satisfied with their career counseling from advisors or faculty. Twenty-three percent were somewhat satisfied, and another 20% provided no opinion. One respondent mentioned, "I have received no guidance from an advisor (haven't been able to get one) or faculty on any of these topics. If you don't start the program with a faculty sponsor, nobody seems interested in helping you find one." This is further reflected in the questions gauging the quality of advice or assistance from advisers and faculty; a significant portion of respondents (30-39%) responded "no opinion." When looking at only the respondents that had an opinion, *a significant portion* felt they had *below average or low assistance* in how to search for a job (34%), preparing a resume or curriculum vitae (37%), preparing for an interview

(42%), and awareness about opportunities outside academia (34%). On the other hand, most respondents who had an opinion felt their advice or assistance about employment opportunities within academia (81%) or teaching in higher education (89%) was average or higher.

IV. Advising

While a majority of respondents (58%) were satisfied or better with the quality of advising, over a quarter of respondents were somewhat satisfied (26%), with a small minority (8%) stating they were dissatisfied with their advising.



Of the applicable respondents, most felt that they received adequate advice on research, exam preparation, developing and selecting a thesis, along with plagiarism and intellectual property issues (72-88%). Respondents were less likely to have received advice on their thesis/dissertation draft (66%) or final defense preparation (63%).

V. Departmental Community

Overall, respondents had a *positive opinion* of the departmental community, with 21% finding the sense of community high—29% above average and 36% average.

Respondents found the department open to diversity (88% average or higher), committed to attracting diverse students (78%), and supportive of the needs of diverse student (71%).

The majority of the respondents either *did not know or had no opinion* if the department had a diversity committee (68%) or believed it did not have one (8%), while a quarter (24%) of the respondents indicated the department had such a committee.

VI. Funding

A majority of the respondents (58%) expected to have no loans upon completing the program; another 11% expected to have loans less than \$9999, another 11% would have loans between \$10,000 and \$24,999, and 9% expected loans of \$25,000 to \$39,999.

More than one half (53%) of the respondents received part of their funding from research assistantships, with 22% receiving more than 9 quarters of funding. Less than a third of the students (32%) received their funding from teaching assistantships. More than a third of the students (35%) did not feel the department provided sufficient funding.

VII. General Assessment

Respondents overwhelmingly (97%) have had a good, very good, or excellent experience at the University of Washington.

Most respondents (82%) said they were *very likely to complete* their degree objective along with probably or definitely (85%) recommending their academic program to prospective students

When asked about obstacles, the top three were: course scheduling (54% minor/somewhat/major), work/financial commitments (46%), and family obligations (46%).

All told, 35 of the 72 students surveyed listed they had applied to the following other universities or programs:



Highest number of applications:

University of Colorado (9), University of California, Berkeley (7), Stanford (6), Oregon State University (5), University of Michigan (5), University of Texas at Austin (5), University of Illinois (4), Purdue University (3), University of Florida (3), University of Wisconsin (3), Carnegie Mellon University (2), Colorado School of Mines (2), MIT (2), University of California, Davis (2), University of California, Santa Barbara (2), University of Idaho (2), Washington State University (2).

Other universities:

Appalachian State University, Arizona State University, Colorado State University, Cornell University, Georgia Tech, John Hopkins, Northwestern, Notre Dame, Portland State University, University of Arizona, University of California, Irvine, University of California Los Angeles, University of Cincinnati, University of Pittsburgh, University of Toronto, Penn State University, Villanova, Washington State University at Vancouver