

2016 NE Graduate Program Review
Action Plan

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Introduction

The purpose of this document is to create a plan of actions to be taken in response to the 2016 review of the nuclear engineering graduate program at Oregon State. This plan will be reviewed in three years as part of a continuing improvement process within the School of Nuclear Science and Engineering.

Summary of Outcomes from 2016 Graduate Program Review

1. The goals of the NE graduate program and issues facing the program should be prioritized, an action plan should be developed and faculty members should be assigned to tackle them.
2. Identify and work with support at the College level to identify potential NE applicants from underrepresented groups. Develop and implement a plan for the NE graduate program to increase the recruitment, applications and retention of such students.
3. Work to manage faculty teaching load:
 - a. Review the curriculum with an eye toward reducing the number of NSE courses that are required at the MS and Ph.D level.
 - b. Review who teaches undergraduate courses and consider managing the unit's teaching FTE to allow other faculty more time to pursue research.
 - c. Develop a formal approach to meeting the university's graduate learning outcome on the responsible conduct of research and consider including the University's GRAD 520 course.
4. The lines of communication from the College level to the rank and file faculty in the program should be improved.
5. Rather than physically separating faculty by locating office space in different building on opposite sides of campus, consider physically proximate office locations. If that is not possible, allow faculty to develop acceptable alternatives to suggest to the College of Engineering leadership.
6. The School should consider alternative staffing models and/or funding mechanisms to maintain a high-quality academic program while supporting growth in research while continuing to maintain graduate student satisfaction with their research training
7. Collect data on the job placement of NE graduates on a regular (annual?) basis.

Actions to be Taken

1. As part of a reorganization of the School of Nuclear Science and Engineering's management structure, a Graduate Program Committee will be created and chartered with the responsibility to address all aspects of NSE's graduate programs, including discussing issues and setting priorities. This committee will nominally meet monthly, and will document meetings with minutes. The committee will suggest actions that will either be a) enacted by the Graduate Committee Chair, or b) taken to the NSE faculty for their consideration and vote. Membership on the committee will include at least one tenured faculty member, one member of the graduate faculty without tenured or tenure-track status, and the graduate student liaison. [A non-voting graduate student member will also be considered.]
2. The School of NSE will work with the College of Engineering's Associate Dean of Graduate Programs to identify approaches to increase the population of NE students from underrepresented groups. [For example, COE is re-joining the National GEM Consortium and will have a booth at the 2017 SACNAS conference in Salt Lake City. NSE will seek opportunities to participate in COE activities, as appropriate.] Our graduate student population is near capacity, given the number of faculty members in the school, but the proportion of students from underrepresented groups is an area where we can improve.
3. The Graduate Committee will propose at beginning of Fall, 2017 that all graduate students in the School of Nuclear Science and Engineering complete a formal course in ethical and responsible conduct of research (either GRAD 520, or, if desired by the faculty of NSE, a 1-CH NSE seminar course offered by a faculty member in the School).
4. The Graduate Committee will review the NSE curriculum with the goals of eliminating redundancies, improving the graduate student experience, and increasing the value of the courses taught and required for all majors offered through the School. This review will begin in Fall 2017 and be completed by January 2018.
5. The School of NSE will consider its use of graduate student teaching assistants, instructors, and non-tenured/tenure-track faculty and or staff in the teaching of undergraduate courses in the school of NSE. However, the most significant issue in the School is lack of growth in the tenure-track/tenured faculty ranks. To keep pace with our peer institutions, and to avoid burnout on the part of our highly-productive existing faculty members, we must grow our faculty. Leadership in the School of NSE will be aggressively pursuing an innovative hiring plan with the goal of growing to 15 tenured/tenure-track faculty in the next four years.

6. Contrary to the recommendations of the 2016 NE review committee, the School of NSE will continue to pursue new faculty and graduate student office space in buildings in the main part of the engineering campus at Oregon State. The administrative function of NSE (School Head, Graduate Student Liaison, Head Undergraduate Advisor, Public Information Representative, and undergraduate student worker) was relocated to Batcheller Hall in Fall 2016, and 11 new faculty offices will be available for NSE in Fall 2017 in the newly remodeled Merryfield Hall. This will allow the OSU Radiation Center to reclaim over 3000 sq. ft. of prime research space (designed for use of radiation/radioactive materials...) at a small fraction of the cost of new research space. The inconvenience of offices located away from lab space is real; however, the near impossibility of space for growth in the OSU Radiation Center requires that we accept this option to a) add new faculty and staff, b) add new research space, and c) continue to provide an excellent research/educational experience for our graduate students.
7. The School of NSE will continue to seek ways to leverage qualified professional faculty and instructor hires as appropriate to amplify our capabilities in research and teaching. We plan to employ three Radiation Center staff members in our research (Steve Reese) and undergraduate teaching (Robert Schickler and Todd Keller), and several of our recent NSE research faculty hires (Seth Cadell, Izabella Gutowska, Dan LaBrier, and Guillaume Mignot) have expressed interest in mentoring graduate students, writing proposals, serving on graduate committees and teaching courses.
8. The Graduate Committee will request that the NSE Graduate Student Liaison work with NSE School leadership, the College of Engineering and the OSU Foundation to ensure that exit interviews with graduates provide quality data on job placement and contact information to be used to track students after graduation.