Focus: Research, Ph.D.s

In 2008, the department's graduate student body was 70 percent master's degree students and 30 percent doctoral students. To support the department's strategy of focusing on growing scholarship, the emphasis was shifted toward Ph.D. students, who would be in the program long enough to generate significant research contributions and provide national impact. By 2018, the student body had transformed to 15 percent master's students and 85 percent doctoral students. For the last three years, UTNE has had the largest Ph.D. enrollment of all U.S. nuclear engineering programs, with up to 132 Ph.D.-seeking students. About 30 of these students are funded through national competitively granted fellowships, and another nine are supported by the military. The remainder of the students are largely funded through external research awards. Figure 1 shows the strong growth of graduate school enrollment and research expenditures over the last decade.

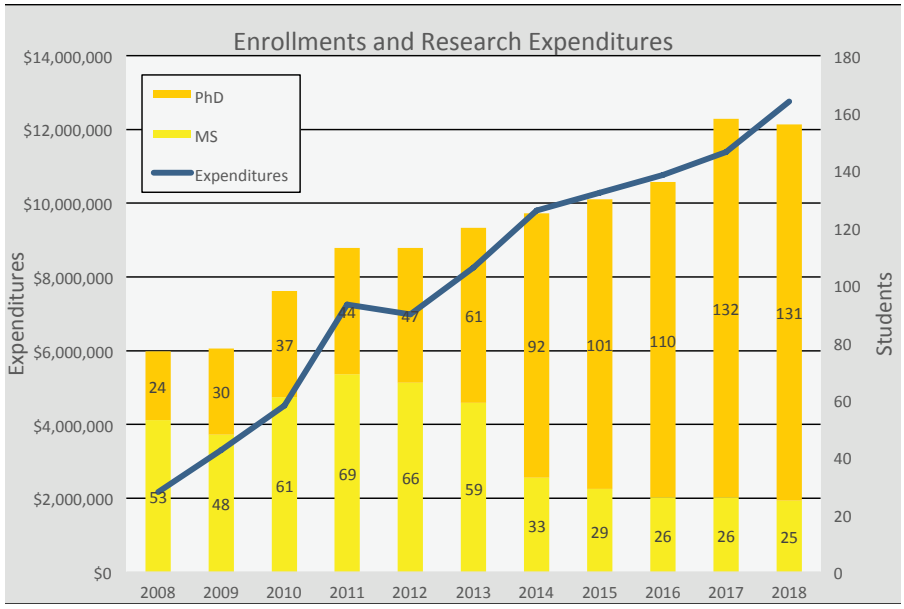

Fig. 1. UTNE graduate enrollment and research expenditures over the last decade

In fall 2001, the department started the first distance-education M.S. program in nuclear engineering in the United States. This program provided increased M.S. enrollment for over a decade, but with the entry of several other universities into the distance-education market, UTNE no longer had a competitive advantage, and enrollments were declining. With the newer focus on Ph.D. students and larger, more impactful, research projects, M.S. program growth was no longer a strategic objective, and freeing up faculty time for research activities was made a priority. In 2014, the department announced the phaseout of its distance-education M.S. degree program.

With the focus on Ph.D. students and research, the department had a need to recruit top students from across the country. In 2011, the department instituted a focused graduate recruiting process in which top students from across the country were flown in for a recruiting visit. The visit was made more impressive by incorporating a tour of unique research facilities at ORNL and a departing lunch attended by nucle-