NUCLEAR ENGINEERING DEGREES

ORISE releases results of 2016 survey

The survey found a slight decrease from the previous year in the number of undergraduate and master's degrees awarded, while the number of doctoral degrees increased.

The annual survey conducted by the Oak Ridge Institute for Science and Education found that the number of bachelor's and master's degrees awarded by nuclear engineering programs fell slightly in 2016 following a rebound in 2015. *Nuclear Engineering Enrollments and Degrees Survey, 2016 Data*, reports the results of a survey of 35 U.S. universities with nuclear engineering programs and includes degrees granted between September 1, 2015, and August 31, 2016.

According to the report, 621 students received bachelor's degrees in nuclear engineering in 2016, a 5 percent decrease from 2015 and 1 percent lower than in 2014. This is the fourth-highest number of bachelor's degrees reported since 1984. The number of master's degrees in nuclear engineering awarded in 2016 decreased by 2 percent from 2015 but is 10 percent higher than the number awarded in 2014. The number of master's degrees—355—is the third-highest since 1984.

The survey data show that the number of doctoral degrees granted in 2016 rose to 161, a 9.5 percent increase over 2015. This continues a trend of increases since 2010 after a one-year decrease in 2015. Doctorate numbers reported in 2016 are the second-highest reported since 1972.

Of the 35 universities surveyed, Pennsylvania State University awarded the most nuclear engineering degrees in 2016, with 90 bachelor's degrees, 30 master's degrees, and four doctoral degrees, followed by the University of Michigan and the University of Tennessee.

In 2016, nuclear engineering enrollment overall for undergraduate students was up 9 percent compared with 2015. This approaches levels reported from 2011 through 2013, and undergraduate enrollment appears to have recovered after the decline experienced in 2014. The 2016 undergraduate enrollment is the fourth-highest number reported since 1978. Graduate enrollment in 2016 remained similar to numbers reported in 2014 and 2015, although these remain below those reported from the mid-1970s. The increase in undergraduate enrollments will likely result in modest increases in the number of bachelor's degrees earned over the next year or two, and this number should remain above 600 in 2017. The continued strength in graduate enrollment indicates that the number of graduate degrees awarded in the coming years is likely to remain near the levels of the past three years.

TABLE 1. Nuclear Engineering Degrees, 2007-2016

Year	B.S.	M.S.	Ph.D.
2016	621	355	161
2015	652	363	147
2014	627	322	169
2013	655	362	147
2012	610	333	119
2011	524	277	113
2010	443	303	113
2009	395	233	87
2008	454	260	127
2007	413	227	89
2006	346	214	70

Source: Oak Ridge Institute for Science and Education

The ORISE survey also looked at citizenship, gender, and race/ethnicity data for the 2016 degree recipients. Percentages for bachelor's, master's, and doctoral degrees are based on the 525 bachelor's degrees, 305 master's degrees, and 158 doctoral degrees for which data were reported. Non-U.S. citizens accounted for 4 percent of bachelor's degree recipients, 17 percent of master's degree recipients, and 28 percent of doctoral degree recipients. Female recipients comprised 18 percent of the bachelor's degrees, 15 percent of the master's degrees, and 16 percent of the doctoral degrees. Among bachelor's degree recipients, 20 percent of the U.S. citizens were members of minority groups. Among master's and doctoral degree recipients, 13 percent and 16 percent, respectively, of the U.S. citizens were members of minority groups.

ORISE, a Department of Energy research and education institute, has collected and monitored data on enrollments and degrees in science- and energy-related fields of study for the DOE and other federal agencies since the mid-1970s. The report can be found on the institute's website, at <www.orise.orau.gov>.