

Health Physics Enrollments and Degrees Survey, 2016 Data

Number 79

Oak Ridge Institute for Science and Education

June 2017

Survey Universe

The 2016 survey includes degrees granted between September 1, 2015 and August 31, 2016. Enrollment information refers to the 2016 fall term. Twenty-three academic programs were included in the survey universe this year, with all 23 programs providing data. Since 2009, data for two health physics programs located in engineering departments are also included in the nuclear engineering survey. The enrollments and degrees data include students majoring in health physics or in an option program equivalent to a major.

Degree Data

Bachelor's Degrees. The number of B.S. degrees granted in 2016 was 14 percent higher than in 2015, but was 16 percent lower than in 2014. (Table 1) The 2016 number of B.S. degrees is 21 percent below the number of B.S. degrees reported in 2006 but is 70 percent higher than the low point reached in 2000, which represented the lowest number of B.S. degrees awarded in health physics since 1972. Health physics programs accounted for almost 84 percent of all B.S. degrees. (Table 2)

Graduate Degrees. The number of M.S. degrees granted in 2016 was 21 percent less than in 2015, 19 percent lower than in 2014, and 27 percent lower than the number of M.S. degrees awarded in 2006. The number of Ph.D. degrees granted in 2016 was nearly 28 percent higher than the number awarded in 2015, more than double the number reported for 2014 and 92 percent higher than in 2006. (Table 1) Health physics programs accounted for 74 percent of the M.S. degrees and 39 percent of the Ph.D. degrees. (Table 2)

TABLE 1 | Health Physics Degrees, 2007-2016

Year	B.S.	M.S.	Ph.D.
2016	56	66	23
2015	49	84	18
2014	67	81	10
2013	88	86	14
2012	82	91	15
2011	64	85	5
2010	62	89	15
2009	77	83	9
2008	73	108	8
2007	79	91	28
2006	71	90	12

Source: Oak Ridge Institute for Science and Education.

TABLE 2 | Health Physics Degrees by Curriculum, 2016

Curriculum	B.S.	M.S.	Ph.D.
Health Physics Program	47	49	9
Medical Health Physics	1	14	8
Other Health Physics Option	8	3	6

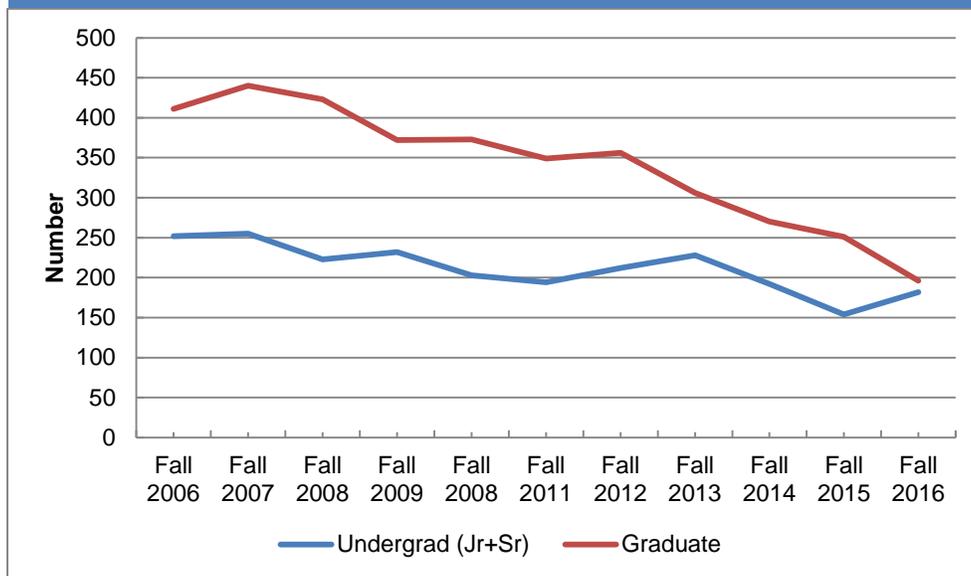
Source: Oak Ridge Institute for Science and Education.

Enrollment Trends and Short-Term Outlook for Degree Trends

Undergraduate Students. In 2016, the enrollment of junior and senior undergraduates was approximately 180, an 18 percent increase over 2015, but a 5 percent decrease from the level reported in 2014. (Figure 1) The 2016 number is 28 percent below the number reported in 2006, but similar to 2004 undergraduate enrollment and considerably higher than the number reported in 2000. The undergraduate enrollment increase in 2016 indicates that the number of B.S. degrees is likely to remain at current levels in 2017 and 2018.

Graduate Students. Graduate enrollment reported for 2016 was approximately 200 students. This is nearly 22 percent lower than in 2015 and 27 percent lower than in 2014. (Figure 1) Graduate enrollment in health physics education programs in 2016 is half the level reported for 2006. The enrollment trends indicate that the number of M.S. degrees is likely to continue to fall in 2017 and 2018, while the number of Ph.D. degrees is likely to also decrease from 2016 levels as well.

FIGURE 1 | Health Physics Enrollment Trends, Fall 2002 – Fall 2016



Source: Oak Ridge Institute for Science and Education.

Citizenship, Gender, and Race/Ethnicity of Degree Recipients

Note that citizenship, gender, and race/ethnicity data were not reported for all degree recipients. Percentages for the B.S., M.S., and Ph.D. degrees are based on the 51 B.S. degrees, 48 M.S. degrees, and 19 Ph.D. degrees for which data was reported. (Table 3)

Citizenship. U.S. citizens comprised 100 percent of B.S. degree recipients. Non-U.S. citizens accounted for 6 percent of M.S. degree recipients and 26 percent of Ph.D. degree recipients.

Gender. Females comprised 43 percent of the B.S. degree recipients, 23 percent of the M.S. degree recipients, and 32 percent of the Ph.D. recipients.

Race/Ethnicity. Among B.S. degree recipients, 18 percent of the U.S. citizens were members of minority groups. Among M.S. and Ph.D. degree recipients, 11 percent and 21 percent of the U.S. citizens were members of minority groups, respectively.

TABLE 3 Citizenship, Gender, and Race/Ethnicity of Degree Recipients, 2016 ¹						
	B.S.		M.S.		Ph.D.	
	Female	Male	Female	Male	Female	Male
Non-U.S. Citizens	0	0	2	1	1	4
U.S. Citizens	22	29	9	36	5	9
African/Black American	1	0	0	1	1	0
American Indians	0	0	0	0	0	0
Asian/Pacific Island American	1	2	1	0	1	1
Hispanic American	3	2	1	2	0	0
White/Caucasian American	16	23	6	28	3	8
Other or Unknown	1	2	1	5	0	0
Totals	22	29	11	37	6	13

¹Citizenship, gender, and race/ethnicity data were not available for 5 B.S. degree recipients, 18 M.S. degree recipients, and 4 Ph.D. degree recipients.

Source: Oak Ridge Institute for Science and Education.

TABLE 4 | Health Physics Degrees, 2016, by Academic Institution

State	Name of Institution	Degrees (Sept. 1, 2015 – Aug. 31, 2016)		
		B.S.	M.S.	Ph.D.
AL	University of Alabama at Birmingham ¹	0	0	0
CA	San Diego State University	0	7	0
CO	Colorado State University	0	3	2
DC	Georgetown University	0	0	0
ID	Idaho State University	1	4	2
IL	Illinois Institute of Technology	0	10	0
IN	Purdue University	2	2	0
LA	Louisiana State University	0	1	0
MA	University of Massachusetts Lowell	5	12	1
ME	University of Maine	2	2	0
MO	University of Missouri	0	0	5
NC	Duke University	0	1	3
NJ	Thomas Edison State University	8	0	0
NV	University of Nevada, Las Vegas	1	4	0
NY	Rensselaer Polytechnic Institute	0	0	3
OH	University of Cincinnati	0	0	1
OR	Oregon State University	4	14	3
PA	Bloomsburg University	3	0	0
SC	Clemson University	0	3	2
SC	Francis Marion University	6	0	0
TN	University of Tennessee	5	1	1
TN	Vanderbilt University	0	0	0
TX	Texas A&M University	19	2	0
Totals		56	66	23

¹Health physics program added to 2016 survey.

Source: Oak Ridge Institute for Science and Education.

Prepared by: Oak Ridge Institute for Science and Education (ORISE), June 2017.

This document was prepared for the U.S. Nuclear Regulatory Commission by the Oak Ridge Institute for Science and Education (ORISE) through an interagency agreement with the U.S. Department of Energy (DOE). ORISE is managed by Oak Ridge Associated Universities under DOE contract number DE-SC0014664.

The views and opinions of authors expressed herein do not necessarily state or reflect those of the U.S. Government or any agency thereof, Oak Ridge Institute for Science and Education, or the sponsoring institutions of Oak Ridge Associated Universities.
