

Health Physics Enrollments and Degrees Brief

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HEALTH PHYSICS enrollments increased at the bachelor's level and decreased at the master's and doctoral level. Bachelor's and master's degrees decreased and doctoral degrees increased.

SURVEY UNIVERSE

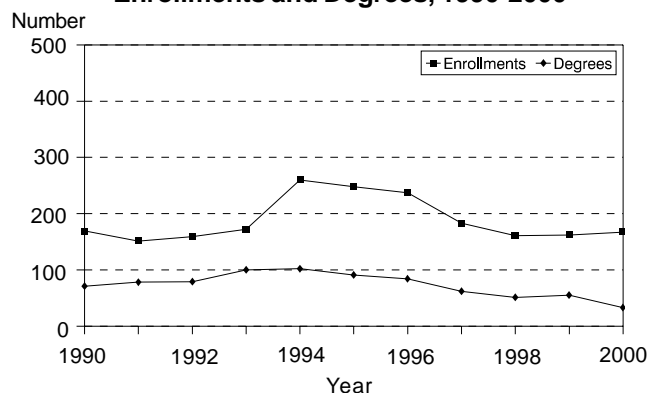
The "Health Physics Enrollments and Degrees, 2000" survey consisted of 46 institutions (48 programs) offering a major in health physics/radiation protection or radiation health, or an option program equivalent to a major (such as radiobiology or biophysics) that prepare the graduates to perform as health physicists. Responses were received from all 48 programs surveyed. Of the 48 programs, 2 schools discontinued their programs after 1999 and 1 school discontinued 1 of their 2 programs. In addition, 2 schools graduated their last students in 2000 and discontinued their program; and 1 school is phasing out their program.

UNDERGRADUATE ENROLLMENTS AND DEGREES

The total number of undergraduate enrollments increased from 162 to 167. (Figure 1.) Among the 16 undergraduate programs, 4 reported increased enrollments, 6 reported no change in enrollments, and 6 reported decreased enrollments.

Undergraduate degrees decreased by 40 percent from 55 to 33 students in 2000.

Figure 1. Health Physics Undergraduate Enrollments and Degrees, 1990-2000



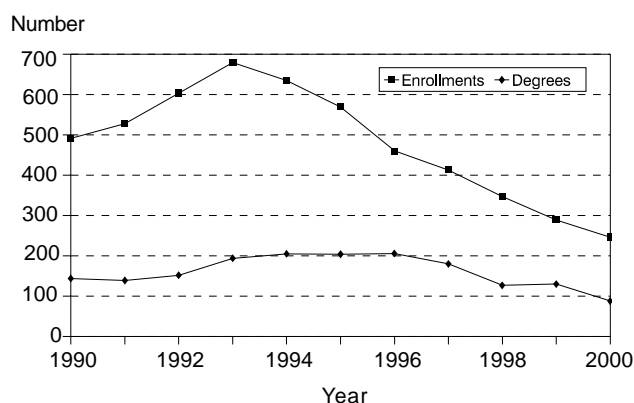
Undergraduate = Junior and Senior Level.
Source: Oak Ridge Institute for Science and Education.

MASTER'S ENROLLMENTS AND DEGREES

In 2000, the number of master's enrollments decreased by 15 percent, or from 289 students to 246, continuing the downward trend since 1993. (Figure 2.)

The number of master's degrees decreased by 32 percent in 2000 from 130 to 88 students. The majority of the degrees (65 percent) were awarded within the health physics/radiation protection or radiation health major, followed by the health physics option within medical or radiological physics programs (26 percent).

Figure 2. Health Physics Master's Enrollments and Degrees, 1990-2000



Source: Oak Ridge Institute for Science and Education.

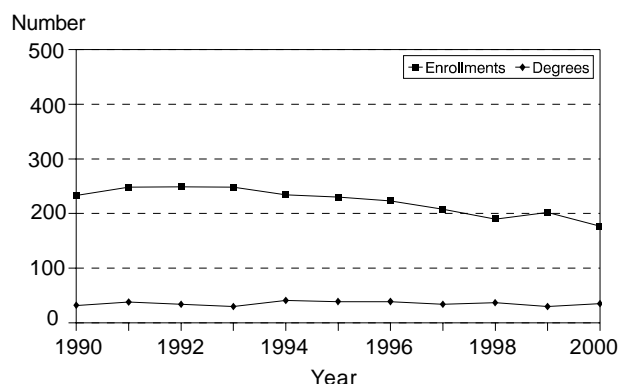
DOCTORAL ENROLLMENTS AND DEGREES

Doctoral enrollments decreased in 2000 by 12 percent, or from 202 students in 1999 to 177. (Figure 3.)

Doctoral degrees increased in 2000 by 17 percent, or from 30 in 1999 to 35 students, continuing the moderate fluctuating pattern of the last decade. The highest number of degrees (40 percent or 14 students) were awarded within the health physics/radiation protection or radiological health programs, while the health physics option within medical or radiological physics programs accounted for 37 percent, or 13 students.

NEW GRADUATE ENROLLMENT TRENDS

Among the 41 graduate programs (master's and/or doctoral), 6 reported increased enrollments, 13 reported no change in enrollments, and 22 reported decreased enrollments.

Figure 3. Health Physics Doctoral Enrollments and Degrees, 1990-2000

Source: Oak Ridge Institute for Science and Education.

EMPLOYMENT OR POSTGRADUATION PLANS

Reported postgraduation plans: (Table 1.)

Undergraduates

- 18 percent of the bachelor's (6 students) elected to continue study for a higher degree
- 12 percent went to work in nuclear electric utilities (4 students)
- 12 percent joined the U.S. military (4 students)

Master's

- 24 percent (21 students) elected to continue study for a higher degree
- 15 percent (13 students) went to work in medical facilities
- 14 percent (12 students) went to work for DOE contractors

Ph.D.

- 23 percent of new doctorates (8 students) reported U.S. other industrial employment
- 20 percent (7 students) went to work in medical facilities
- 17 percent (6 students) obtained academic employment

GENDER/ETHNICITY OF STUDENTS

(Data reported for 54 percent of students receiving degrees.)

- 31 percent of undergraduate degrees were awarded to females (excluding foreign nationals)

Table 1. Employment or Postgraduation Plans of Health Physics Graduates by Degree Level, 2000 (Percent Distribution)

Employment or Postgraduation Plans	B.S.	M.S.	Ph.D.
<i>Number of degrees</i>	33	88	35
Continued study	18%	24%	14%
U.S. academic employ.	6	2	17
Federal gov. employ.	3	5	6
DOE contractors (M&Os)	6	14	6
State and local gov. employ.	0	5	3
Medical facilities employ.	3	15	20
U.S. nuclear utility employ.	12	2	0
U.S. other industrial employ.	9	3	23
Employ. with foreign employer	0	2	6
U.S. military service	12	7	0
Other	3	1	0
Still seeking employment	0	0	0
Unknown	18	11	0
Not reported	10	9	5
TOTALS	100%	100%	100%

NOTE: Percentages are rounded to nearest whole number.

Source: Oak Ridge Institute for Science and Education.

- 30 percent of graduate degrees (master's and Ph.D.'s) were awarded to females (excluding foreign nationals)
- 14 percent of undergraduate degrees were awarded to minorities (excluding foreign nationals)
- 21 percent of graduate degrees (master's and Ph.D.s) were awarded to minorities (excluding foreign nationals)

FOREIGN NATIONAL PARTICIPATION

Degrees awarded to foreign nationals: (Table 2.)

- Bachelor's increased from 1 to 2 students
- Master's decreased from 23 students to 15
- Doctorates increased from 6 to 10

Table 2. Percentage of Health Physics Degrees Awarded to Foreign Nationals, 1996-2000

Year	B.S.	M.S.	Ph.D.
<i>Number of degrees</i>	33	88	35
1996	0%	11%	26%
1997	3	12	26
1998	4	10	32
1999	2	18	20
2000	6	17	29

Source: Oak Ridge Institute for Science and Education.

Table 3. Health Physics Enrollments and Degrees, by State and Institution, 2000

State	Institution	Enrollments			Degrees		
		Undergraduate	Master's	Doctoral	B.S.	M.S.	Ph.D.
CALIFORNIA	San Diego State University	-	7	-	-	2	-
	University of California, Irvine ¹	-	-	-	-	-	1
	University of California, Los Angeles	-	1	43	-	2	5
	University of Southern California	-	-	2	-	-	-
COLORADO	Colorado State University	-	5	10	-	2	-
	University of Colorado HSC ¹	-	-	-	-	1	-
DIST. OF COLUMBIA	Georgetown University	-	13	-	-	8	-
FLORIDA	Florida A&M University	-	2	-	-	2	-
	University of Florida, Gainesville	-	22	3	-	7	4
GEORGIA	Georgia Institute of Technology	-	21	-	-	5	-
IDAHO	Idaho State University	8	20	4	2	3	1
ILLINOIS	Rush University	-	2	4	-	-	1
	University of Illinois, Urbana	7	3	4	1	2	1
INDIANA	Purdue University	6	-	4	5	2	1
KENTUCKY	University of Kentucky	-	8	-	-	4	-
LOUISIANA	Louisiana State University	-	11	-	-	1	-
MAINE	University of Maine	3	1	-	-	-	-
MARYLAND	Johns Hopkins Sch. of Public Health	-	1	1	-	-	-
MASSACHUSETTS	Harvard School of Public Health ²	-	-	-	-	-	1
	Massachusetts Institute of Technology	-	3	4	-	1	1
	University of Massachusetts Lowell	4	13	18	-	5	2
	The University of Michigan ³	-	-	4	-	2	-
MICHIGAN	University of Michigan ³	-	-	4	-	2	-
MISSOURI	University of Missouri, Columbia	-	7	1	-	-	1
	University of Missouri, Rolla	2	1	-	1	-	1
NEVADA	University of Nevada, Las Vegas	10	11	-	2	1	-
NEW JERSEY	Thomas Edison State College	95	-	-	8	-	-
NEW MEXICO	University of New Mexico	-	3	-	-	3	-
NEW YORK	Rensselaer Polytechnic Institute	5	-	3	2	-	3
NORTH CAROLINA	Univ. of North Carolina, Chapel Hill	-	5	-	-	2	-
	Medical College of Ohio	-	4	1	-	3	1
OHIO	University of Cincinnati ⁴	-	5	-	-	2	-
	The Ohio State University	-	5	3	-	1	-
	Oregon State University	9	4	3	7	3	1
OREGON	Oregon State University	9	4	3	7	3	1
	Bloomsburg Univ. of Pennsylvania	3	-	-	2	-	-
	Dickinson College	3	-	-	-	-	-
	University of Pittsburgh	-	2	-	-	-	-
SOUTH CAROLINA	Clemson University	-	9	4	-	7	-
	Francis Marion College	2	-	-	-	-	-
TENNESSEE	University of Tennessee, Knoxville	-	13	8	-	3	2
TEXAS	Texas A&M University	10	7	10	3	6	-
	University of Texas, Austin	-	3	3	-	-	-
UTAH	University of Utah	-	-	14	-	-	3
WASHINGTON	Washington State Univ. Tri-Cities	-	2	-	-	1	-
WISCONSIN	University of Wisconsin, Madison	-	32	26	-	7	5
TOTALS		167	246	177	33	88	35

NOTES: ¹Program discontinued; last degrees granted in June 2000.²No current enrollments.³The University of Michigan discontinued 1 of their 2 programs after 1999.⁴The number of health physics students within the mechanical, industrial, and nuclear engineering department at the University of Cincinnati are included with the radiological health program numbers above.

Source: Oak Ridge Institute for Science and Education.

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All opinions expressed in this report are the authors' and do not necessarily reflect policies and views of the U.S. Department of Energy or the Oak Ridge Institute for Science and Education.

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