

Nuclear Engineering Enrollments and Degrees Brief

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NUCLEAR ENGINEERING undergraduate degrees continued to decline, undergraduate (junior and senior) enrollments increased, graduate degrees increased, master's enrollments increased, and doctorate enrollments decreased slightly.

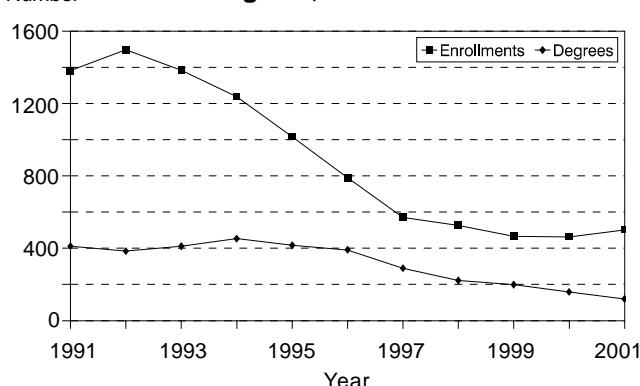
SURVEY UNIVERSE

The survey of "Nuclear Engineering Enrollments and Degrees, 2001" was sent to 37 institutions offering a major in nuclear engineering or an option program in another discipline or department (such as electrical or mechanical engineering) equivalent to a major that qualifies the graduates to perform as nuclear engineers.

UNDERGRADUATE ENROLLMENTS AND DEGREES

Nuclear engineering undergraduate enrollments of juniors and seniors increased by 8 percent from 2000 to 502 students. (Figure 1.) Among the 28 undergraduate programs, 19 reported increased enrollments, 2 reported no change in enrollments, and 7 reported decreased enrollments.

Figure 1. Nuclear Engineering Undergraduate (Juniors and Seniors) Enrollments and Degrees, 1991-2001



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

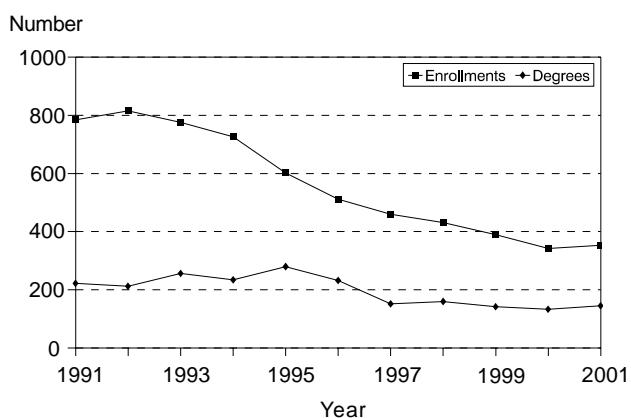
Undergraduate degrees decreased by 25 percent in 2001, or by 39 students. This decline in undergraduate degrees reflects the decrease in undergraduate enrollments in past years.

MASTER'S ENROLLMENTS AND DEGREES

Master's enrollments increased by 3 percent to 353 students. This is the first increase in 9 years. (Figure 2.)

Nuclear engineering master's degrees increased by 9 percent, from 133 to 145 in 2001.

Figure 2. Nuclear Engineering Master's Enrollments and Degrees, 1991-2001



Source: Oak Ridge Institute for Science and Education.

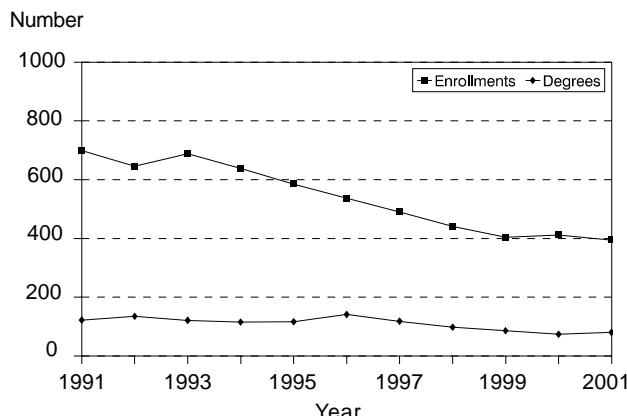
DOCTORAL ENROLLMENTS AND DEGREES

Doctoral enrollments decreased slightly in 2001 from 412 to 394, or by 4 percent. (Figure 3.)

Doctoral degrees increased from 2000 by 8 percent, or from 74 to 80 students.

GRADUATE ENROLLMENT TRENDS

Among the 31 graduate programs (master's and/or Ph.D.), 13 reported increased enrollments, 3 reported no change in enrollments, and 15 reported decreased enrollments in comparison to the previous year.

Figure 3. Nuclear Engineering Doctoral Enrollments and Degrees, 1991-2001

Source: Oak Ridge Institute for Science and Education.

EMPLOYMENT OR POSTGRADUATION PLANS

Reported postgraduation plans: (Table 1.)

Undergraduates

- 28 percent of the bachelor's (33 students) elected to continue study for a higher degree
- 13 percent (16 students) went in the U.S. military
- 12 percent (14 students) went to work in nuclear utilities

Master's

- 41 percent (59 students) were continuing study
- 18 percent (26 students) reported employment with U.S. other industrial employment
- 9 percent (13 students) went in the U.S. military service

Ph.D.

- 29 percent (23 students) reported U.S. other industrial employment
- 20 percent (16 students) were employed in U.S. academic employment
- 13 percent of new doctorates (10 students) were working with DOE contractors

Table 1. Employment or Postgraduation Plans of Nuclear Engineering Graduates by Degree Level, 2001
(Percent Distribution)

Employment or Postgraduation Plans	B.S.	M.S.	Ph.D.
<i>Number of degrees</i>	120	145	80
Continued study	28%	41%	10%
U.S. academic employ.	1	1	20
Federal gov. employ.	5	3	5
DOE contractors (M&Os)	4	5	13
State and local gov. employ.	0	0	0
U.S. nuclear utility employ.	12	8	1
U.S. other industrial employ.	6	18	29
Employ. with foreign employ.	0	4	6
U.S. military service	13	9	4
Other	1	3	1
Seeking employment	2	0	0
Unknown	29	8	11

NOTE: Percentages are rounded to nearest whole number.
Source: Oak Ridge Institute for Science and Education.

FOREIGN NATIONAL PARTICIPATION

Degrees awarded to foreign nationals: (Table 2.)

- Foreign national bachelor's decreased from 4 to 2 students in 2001
- Master's increased from 43 students to 44
- Foreign national doctorates increased from 29 to 33 students in 2001

Table 2. Percentage of Nuclear Engineering Degrees Awarded to Foreign Nationals, 1996-2001

Year	B.S.	M.S.	Ph.D.
1996	3%	25%	46%
1997	2	26	36
1998	2	21	39
1999	2	27	38
2000	3	32	39
2001	2	30	41

Source: Oak Ridge Institute for Science and Education.

Table 3. Nuclear Engineering Enrollments and Degrees, by State and Institution, 2001

State	Institution	Enrollments			Degrees		
		Undergraduate*	Master's	Doctoral	B.S.	M.S.	Ph.D.
ARIZONA	University of Arizona	-	1	1	-	-	-
CALIFORNIA	University of California, Berkeley	22	34	10	7	7	4
FLORIDA	University of Florida, Gainesville	18	17	0	8	1	2
GEORGIA	Georgia Institute of Technology	15	3	13	3	4	4
IDAHO	Idaho State University	2	6	2	-	6	1
	University of Idaho	-	-	1	-	-	-
ILLINOIS	University of Illinois, Urbana	22	7	34	5	12	3
INDIANA	Purdue University	28	12	25	7	9	4
	University of Notre Dame	5	-	-	6	-	-
KANSAS	Kansas State University	8	6	2	4	2	-
LOUISIANA	Louisiana State University	-	1	1	-	-	-
MAINE	University of Maine	5	-	-	1	-	-
MARYLAND	University of Maryland	6	6	19	2	1	1
	University of Maryland, Univ. College	16	-	-	-	-	-
MASSACHUSETTS	Massachusetts Institute of Technology	16	64	42	2	16	19
	University of Massachusetts Lowell	6	8	2	-	1	-
	Worcester Polytechnic Institute	4	-	-	-	-	-
MICHIGAN	The University of Michigan, Ann Arbor	22	11	54	8	17	4
MISSOURI	University of Missouri, Columbia	-	7	10	-	2	1
	University of Missouri, Rolla	26	4	4	7	5	-
NEW MEXICO	University of New Mexico	13	16	16	-	5	4
NEW YORK	Columbia University	-	-	3	-	-	-
	Cornell University	-	1	4	-	1	-
	Rensselaer Polytechnic Institute	28	4	16	21	2	2
	U.S. Military Academy	20	-	-	6	-	-
NORTH CAROLINA	North Carolina State University	30	10	19	-	4	1
OHIO	Air Force Institute of Technology	-	19	6	-	6	-
	The Ohio State University	-	18	5	-	8	1
	University of Cincinnati ¹	-	10	8	-	5	1
OREGON	Oregon State University	25	9	5	11	7	2
PENNSYLVANIA	Pennsylvania State University	52	12	27	8	8	4
TENNESSEE	Tennessee Technological University	1	-	-	1	-	-
	University of Tennessee, Knoxville	22	25	7	-	3	4
TEXAS	Texas A&M University	51	22	12	9	2	4
	University of Texas, Austin	11	8	11	-	5	3
UTAH	University of Utah	6	3	7	1	2	7
WISCONSIN	University of Wisconsin, Madison	22	9	28	3	4	4
TOTALS		502	353	394	120	145	80

*Junior and Senior students only.

Source: Oak Ridge Institute for Science and Education.

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Pat Pressley
 Oak Ridge Institute for Science and Education
 SEE/AEP, MS 36
 P.O. Box 117
 Oak Ridge, TN 37831-0117