

# Nuclear Engineering Academic Programs Survey, 2004

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## SURVEY UNIVERSE

The survey includes degrees granted between September 1, 2003 and August 31, 2004. Thirty-two academic programs reported having nuclear engineering programs during the survey time period and all but one responded to the survey. One nuclear engineering program was discontinued after 2003. This year the survey data includes enrollments of junior and senior undergraduate students and graduate students, plus data by degree level on post-graduation status.

## DEGREE DATA

**Bachelor's Degrees.** The number of B.S. degrees granted in 2004 by nuclear engineering programs increased from 2003 and was the highest reported since 1998. (See Table 1.) The number of degrees in 2004 was still substantially below the number of B.S. degrees granted during the mid 1990s. Nuclear engineering majors accounted for almost 94% of all B.S. degrees with the remaining 6% in nuclear engineering option programs. (See Table 2.)

**Graduate Degrees.** The number of masters' degrees granted in 2004 increased over 2003 and was the highest reported since 1998. The number of doctorate degrees was down slightly from 2003. (See Table 1.) Nuclear engineering majors accounted for 97% of the M.S. degrees and 100% of the Ph.D. degrees. (See Table 2.)

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**Table 1. Nuclear Engineering Degrees, 1998-2004**

Year	Degrees		
	B.S.	M.S.	Ph.D.
2004	219	154	75
2003	166	132	78
2002	195*	130	67
2001	120	145	80
2000	159	133	74
1999	199	142	86
1998	222	160	98

\*Three programs were discontinued/out-of-scope after 2002 and not included in the 2003 survey. These three programs reported a total of 17 B.S. degrees in 2002.

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**Table 2. Nuclear Engineering Degrees by Curriculum, 2003**

Curriculum	B.S.	M.S.	Ph.D.
Nuclear Engineering Major	205	149	75
Nuclear Engineering Option	14	5	0

## ENROLLMENT DATA

### Undergraduate Enrollments

Enrollment data were not collected in the 2003 survey. In 2004, the reported number of junior and senior level undergraduate students, majoring in nuclear engineering or a nuclear engineering option, was lower than in 2002, but somewhat above the numbers reported in 1999 and 2000.

### Graduate Enrollments

Graduate student enrollment reported in 2004 was approximately 10% greater than in 2002, and approximately 20% greater than in 2000. Graduate student enrollment has increased approximately to the levels reported in the mid 1990s.

## POST-GRADUATION STATUS DATA

Data on post-graduation status was not collected in 2003. Comparing the 2004 to the 2002 post-graduation data, indicates, in general, a fairly similar distribution by type of employment or continued study for each of the degree levels. Continued study is still the single largest post-degree activity for the B.S. and M.S. graduates.

There are three notable differences between 2004 and 2002 in the distribution of post-graduation status data. The reported number of PhDs hired by DOE contractors in 2004 is less (by 50%) than in 2002, but approximately the same for B.S. and M.S. degree levels. The reported number hired by nuclear utilities in 2004 is less than in 2002 for all three degree levels (for all degree levels combined the number hired was approximately 40% less). The number of graduates entering active duty in the U.S. military in 2004 was more than in 2002 for all three degree levels (for all degree levels combined the number in active military service was approximately 45% more).

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**Table 3. Post-Graduation Status Data, 2004**

	B.S. degree	M.S. degree	Ph.D. degree
Continued Study	69	58	6
Academic Employment	6	2	9
Federal Government Employment	9	13	10
DOE Contractor Employment	5	15	10
State and Local Government Employment	2	1	0
Medical Facility Employment	0	5	4
Nuclear Utility Employment	17	5	1
Other Business Employment	19	12	9
Foreign (non-U.S.) Employment	3	8	5
U.S. Military, active duty	47	19	4
Other Employment	2	1	6
Still Seeking Employment	3	4	1
Not reported	37	11	10
Totals	219	154	67

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**Table 4. Nuclear Engineering Degrees, 2004, by Academic Institution**

DOE NEST F&S Status as of 2005		Name of Institution	State	Degrees, September 1, 2003 - August 31, 2004		
Scholarship	Fellowship			B.S.	M.S.	Ph.D.
Yes	Yes	University of California, Berkeley	CA	7	8	5
Yes	Yes	University of Florida	FL	8	10	2
Yes	Yes	Georgia Institute of Technology	GA	10	2	1
Yes	Yes	Idaho State University	ID	2	2	0
Yes	Yes	University of Illinois, Urbana	IL	4	6	4
Yes	Yes	Purdue University	IN	15	3	2
Yes	Yes	Kansas State University	KS	0	0	0
		Louisiana State University	LA	0	0	0
Yes	Yes	Massachusetts Institute of Technology	MA	4	20	13
Yes		University of Massachusetts, Lowell	MA	3	2	0
		University of Maryland, College Park	MD	7	0	2
		University of Maine	ME	3	1	0
Yes	Yes	University of Michigan, Ann Arbor	MI	13	12	8
Yes	Yes	University of Missouri, Columbia	MO	0	1	4
Yes	Yes	University of Missouri, Rolla	MO	10	5	0
Yes	Yes	North Carolina State University	NC	6	5	2
Yes	Yes	University of New Mexico	NM	8	4	0
		Cornell University	NY	0	0	1
Yes	Yes	Rensselaer Polytechnic Institute	NY	30	7	5
		United States Military Academy	NY	20	0	0
		Air Force Institute of Technology	OH	0	10	2
Yes	Yes	Ohio State University	OH	0	7	0
Yes	Yes	Oregon State University	OR	15	0	0
Yes	Yes	Pennsylvania State University	PA	17	6	4
		University of South Carolina	SC	new program		
		Tennessee Technological University	TN	0	0	0
Yes	Yes	University of Tennessee, Knoxville	TN	7	15	4
Yes	Yes	Texas A&M University, College Station	TX	24	7	7
Yes	Yes	University of Texas, Austin	TX	0	6	0
		University of Utah	UT	0	1	2
Yes	Yes	University of Wisconsin, Madison	WI	6	12	5
		<i>Estimate for non-responding program</i>		0	2	2
<b>Totals</b>				219	154	75

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