

Nuclear Engineering Enrollments and Degrees Survey, 2008 Data

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SURVEY UNIVERSE

The survey includes degrees granted between September 1, 2007, and August 31, 2008, and fall 2008 enrollments. Thirty-one academic programs reported having nuclear engineering programs during 2008, and data was provided by all thirty-one programs.

DEGREE DATA

Bachelor's Degrees. The number of B.S. degrees granted in 2008 by nuclear engineering programs increased by 10% over 2007, and is the highest number reported since 1988. (See Table 1.) This is the fifth consecutive year of increases. The rate of increase in 2008 was, however, the lowest in five years. Nuclear engineering majors accounted for 89% of all B.S. degrees. (See Table 2.)

Graduate Degrees. The number of master's degrees granted in 2008 increased for the sixth consecutive year and was almost 15% greater than in 2007. This is the highest number of masters' degrees reported since 1995 but still below the numbers granted annually from the early 1970s through the mid 1980s. The number of doctorate degrees increased substantially in 2008, and is 70% higher than in 2000. This is the highest number reported since 1996. (See Table 1.) Nuclear engineering majors accounted for over 90% of both the M.S. and Ph.D. degrees. (See Table 2.)

Table 1. Nuclear Engineering Degrees, 2000—2008

Year	Degrees		
	B.S.	M.S.	Ph.D.
2008	454	260	127
2007	413	227	89
2006	346	214	70
2005	268	171	74
2004	219	154	75
2003	166	132	78
2002*	195	130	67
2001	120	145	80
2000	159	133	74

*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.

Table 2. Nuclear Engineering Degrees, 2008, by Curriculum

Curriculum	B.S.	M.S.	Ph.D.
Nuclear Engineering Major	405	242	115
Nuclear Engineering Option	49	18	12

ENROLLMENTS AND SHORT-TERM OUTLOOK FOR DEGREE TRENDS

Undergraduate Students. In 2008, the reported enrollment of junior and senior nuclear engineering undergraduate students decreased about 2% from 2007, but was still over 1,300. Undergraduate enrollments in 2008 were 3% higher than two years earlier (2006), and almost triple the enrollment in 2000, but below the numbers reported from the mid 1970s through the early 1990s. The leveling off in junior/senior undergraduate enrollments over the last two years indicates that the number of B.S. degrees is likely to remain fairly constant in the next couple of years.

Graduate Students. Graduate student enrollment reported in 2008 was over 1,225, about 13% higher than in 2007. Graduate enrollments have increased each year since 2001. However, the graduate enrollments are still below the numbers reported from the mid 1970s through the early 1990s. The continued increase in graduate enrollment indicates that the number of both M.S. and Ph.D. degrees should continue to increase for the next several years.

EMPLOYMENT OR OTHER POST-GRADUATION PLANS

Employment and post-graduation data is presented in Table 3. Comparing the 2008 post-graduation data to data for earlier years reveals several major shifts in employment opportunities for new graduates. Employment in nuclear utilities of 2008 B.S. graduates is, on average, triple the numbers reported since 2000, and has returned to the annual numbers hired before 1998. Employment in the Federal Government of 2008 B.S. and Ph.D. graduates is triple to quadruple the numbers reported since 2000, and the highest numbers reported in 20 years. Employment in DOE contractors at all degree levels, but especially at the M.S. and Ph.D. levels, is also the highest reported in almost a decade. Data on employment in other nuclear-related businesses, which was first collected in 2006, shows a doubling for M.S. level and quadrupling for B.S. level in 2008 over 2006. These increases support other information showing an increase in interest in nuclear energy in the economy and growing replacement needs for an aging workforce in nuclear-related fields.

Table 3. Employment or Other Post-Graduation Plans, 2008

	B.S. Degree	M.S. Degree	Ph.D. Degree
Continued Study	108	89	10
Academic Employment	2	1	9
Federal Government Employment	29	16	20
DOE Contractor Employment	12	20	21
State and Local Government Employment	0	5	2
Nuclear Utility Employment	70	18	3
Other Nuclear-Related Employment	45	30	10
Other Business Employment	21	5	13
Foreign (non-U.S.) Employment	2	8	11
U.S. Military, Active Duty	56	10	2
Other Employment	12	11	0
Still Seeking Employment	19	3	1
Unknown/Not Reported	78	44	25
Totals	454	260	127

Table 4. Nuclear Engineering Degrees, 2008, by Academic Institution
(alphabetical by state and then university)

State	Name of Institution	Degrees Sept. 1, 2007 – Aug. 31, 2008		
		B.S.	M.S.	Ph.D.
CA	University of California, Berkeley	15	14	11
FL	University of Florida	14	26	9
GA	Georgia Institute of Technology	25	7	1
ID	Idaho State University	3	6	0
IL	University of Illinois at Urbana-Champaign	29	11	6
IN	Purdue University	33	9	4
KS	Kansas State University	21	4	0
MA	Massachusetts Institute of Technology	14	22	11
MA	University of Massachusetts, Lowell	5	0	0
MD	University of Maryland	10	8	8
ME	University of Maine	2	0	0
MI	University of Michigan	37	14	8
MO	Missouri University of Science and Technology	32	0	0
MO	University of Missouri – Columbia	0	7	3
NC	North Carolina State University	21	12	6
NM	University of New Mexico	12	9	6
NV	University of Nevada, Las Vegas	1	3	1
NY	Rensselaer Polytechnic Institute	49	2	0
NY	United States Military Academy	14	0	0
OH	Air Force Institute of Technology	0	6	2
OH	Ohio State University	0	10	0
OH	University of Cincinnati	0	4	1
OR	Oregon State University	12	9	2
PA	Pennsylvania State University	45	16	12
SC	South Carolina State University	2	0	0
SC	University of South Carolina	0	3	1
TN	University of Tennessee	20	13	1
TX	Texas A&M University	20	13	10
TX	University of Texas	0	7	11
UT	University of Utah	0	2	1
WI	University of Wisconsin	18	23	12
TOTALS		454	260	127

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