

Nuclear Engineering Enrollments and Degrees Survey, 2010 Data (June 2011 Update)

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(One academic program provided additional data after the original publication distribution, and these revisions are included in this updated report.)

SURVEY UNIVERSE

The survey includes degrees granted between September 1, 2009 and August 31, 2010. Enrollment information refers to the fall term 2010. Thirty-two academic programs reported having nuclear engineering programs during 2010, and data was provided by all thirty-two. The enrollment and degree data includes students majoring in nuclear engineering or in an option program equivalent to a major.

DEGREE DATA

Bachelor's Degrees. The number of B.S. degrees reported for 2010 by nuclear engineering programs increased (after a decrease in 2009), but remains 2% lower than in 2008. (See Table 1.) However, the number of B.S. degrees in 2010 was approximately 2.7 times the number reported in 2003 and 28% greater than the number reported in 2006. Nuclear engineering majors accounted for 91% of all B.S. degrees. (See Table 2.)

Graduate Degrees. The number of master's degrees reported in 2010 increased after a one-year decline in 2009, and is the highest number reported since 1985. The number of M.S. degrees has more than doubled since the beginning of the decade and is nearly 42% greater than the number reported in 2006. The number of doctoral degrees reported also increased in 2010, but is still 11% below the number reported in 2008. (See Table 1.) The increase in graduate degrees reflects the increase in graduate enrollments experienced since 2001. Nuclear engineering majors accounted for 90% of the M.S. and 92% of the Ph.D. degrees. (See Table 2.)

Table 1. Nuclear Engineering Degrees, 2003 - 2010

Year	Degrees		
	B.S.	M.S.	Ph.D.
2010	443	303	113
2009	395	233	87
2008	454	260	127
2007	413	227	89
2006	346	214	70
2005	268	171	74
2004	219	154	75
2003	166	132	78

Table 2. Nuclear Engineering Degrees, by Curriculum, 2010

Curriculum	Degrees		
	B.S.	M.S.	Ph.D.
Nuclear Engineering Major	405	274	104
Nuclear Engineering Option	38	29	9

ENROLLMENTS AND SHORT-TERM OUTLOOK FOR DEGREE TRENDS

Undergraduate Students. In 2010, the reported enrollment of junior and senior nuclear engineering undergraduate students was nearly 1,800, an increase of about 18% since 2009. Undergraduate enrollments in 2010 were the largest reported since 1982. The growth in enrollments will likely generate an increase in the number of bachelor's degrees earned over the next two years, since the undergraduate junior and senior enrollments reported for 2009 and 2010 were significantly higher than in the recent past.

Graduate Students. The reported graduate student enrollment in 2010 was over 1,500, about 19% higher than in 2009, and 47% higher than the enrollments reported in 2006. Graduate enrollments have increased annually since 2001 and represent the highest reported graduate enrollment since 1982. The continued increase in graduate enrollment indicates that the number of both M.S. and Ph.D. degrees should increase over the next several years.

EMPLOYMENT OR OTHER POST-GRADUATION PLANS

Post-graduation plans for 2010 graduates are presented in Table 3. Comparing 2010 post-graduation plans with 2008 post-graduation plans (the last year placement data were collected) reveal several shifts in employment opportunities for new graduates. While employment in nuclear utilities among 2010 B.S. graduates is lower than in 2008, employment of M.S. graduates is higher. Employment in the Federal government among 2010 B.S. and Ph.D. graduates is significantly lower than was the case for 2008 graduates. Employment by DOE contractors at the B.S. and Ph.D. levels continued the increase noted in 2008, reaching the highest reported in a decade. However, 2010 data on employment in other nuclear-related businesses show a decrease of B.S.-level graduates since 2008. This data was first collected in 2006. Finally, 2010 B.S. and M.S. graduates show more interest in continued study and also have a higher percentage still seeking employment. The post-graduation plans of 2010 graduates offer somewhat less support for recent trends showing an increased interest in nuclear energy in the economy. However, growing replacement needs for an aging workforce in nuclear-related fields continue to offer employment opportunities for new nuclear engineering graduates with DOE contractors and, to a lesser extent, nuclear utilities.

Table 3. Employment or Other Post-Graduation Plans, 2010

	Degrees		
	B.S.	M.S.	Ph.D.
Continued Study	139	116	7
Academic Employment	1	2	12
Federal Government Employment	18	16	15
DOE Contractor Employment	21	17	27
State and Local Government Employment	0	2	0
Nuclear Utility Employment	49	30	1
Other Nuclear-Related Employment	38	29	10
Other Business Employment	9	7	5
Foreign (non-U.S.) Employment	0	7	12
U.S. Military, Active Duty	24	18	2
Other Employment	6	11	5
Still Seeking Employment	25	10	1
Unknown/Not Reported	113	38	16
Totals	443	303	113

Table 4. Nuclear Engineering Degrees, 2010, by Academic Institution
(alphabetical by state and then university)

State	Name of Institution	Degrees		
		Sept. 1, 2009 – Aug. 31, 2010		
		B.S.	M.S.	Ph.D.
CA	University of California, Berkeley	13	13	5
FL	University of Florida	23	13	6
GA	Georgia Institute of Technology	27	21	8
ID	Idaho State University	4	5	1
IL	University of Illinois at Urbana-Champaign	14	10	11
IN	Purdue University	37	9	4
KS	Kansas State University	19	6	0
MA	Massachusetts Institute of Technology	10	23	15
MA	University of Massachusetts, Lowell	8	2	0
MD	University of Maryland	0	4	2
ME	University of Maine	4	0	0
MI	University of Michigan	39	40	9
MO	Missouri University of Science & Technology	20	6	1
MO	University of Missouri – Columbia	0	17	9
NC	North Carolina State University	21	15	2
NM	University of New Mexico	10	9	1
NV	University of Nevada, Las Vegas	0	3	0
NY	Rensselaer Polytechnic Institute	16	0	1
NY	United States Military Academy	9	0	0
OH	Air Force Institute of Technology	0	10	1
OH	Ohio State University	8	4	5
OH	University of Cincinnati	0	3	2
OR	Oregon State University	19	2	0
PA	Pennsylvania State University	50	10	8
SC	South Carolina State University	4	0	0
SC	University of South Carolina	0	12	0
TN	University of Tennessee	38	16	6
TX	Texas A&M University	32	19	7
TX	University of Texas	0	8	1
UT	University of Utah	0	1	0
VA	Virginia Commonwealth University	0	9	0
WI	University of Wisconsin	18	13	8
Totals		443	303	113

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