

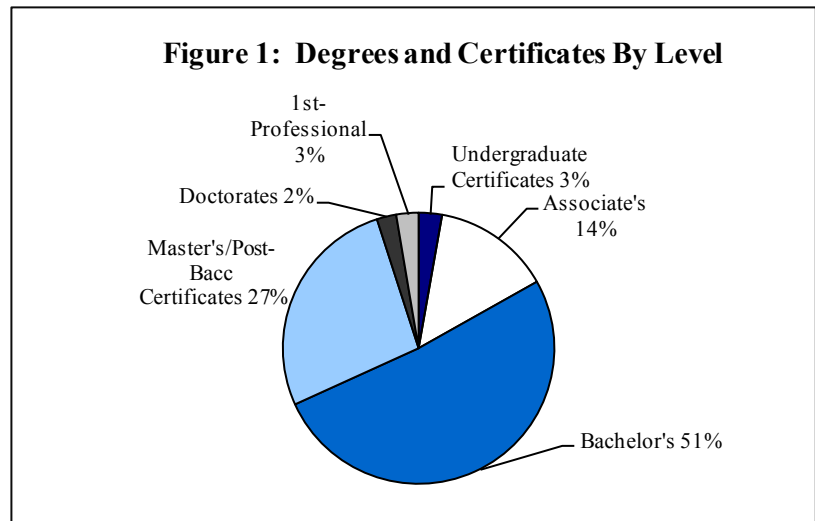


## 2006-07

### DEGREES CONFERRED BY CONNECTICUT INSTITUTIONS OF HIGHER EDUCATION HIGHLIGHTS

- Connecticut colleges and universities awarded 36,045 degrees in 2006-07 (up 1.0% over 2005-06) in the state's sixth consecutive year of growth. The cumulative increase during that period (2001 to 2007) is 21 percent.
- Over the last decade, the number of degrees has risen 25 percent, roughly reflecting the change in full-time equivalent (FTE) enrollment three to four years earlier.

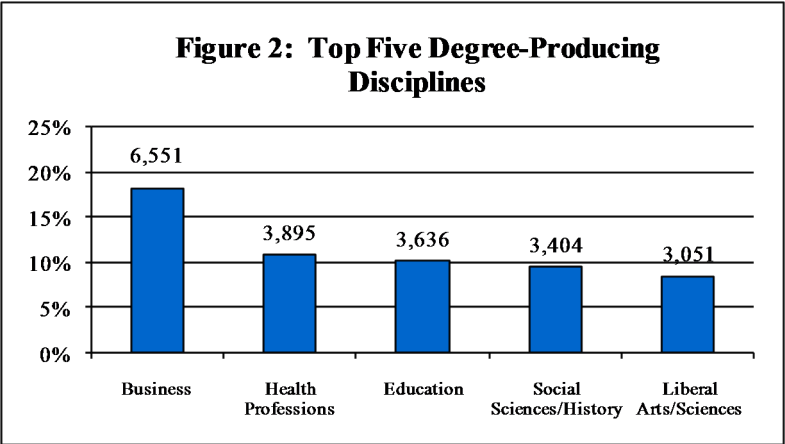
- Baccalaureate degrees again were a majority (51%) of all awards in 2006-07 followed by master's (26%) and associate's (14%) degrees (see Figure 1).



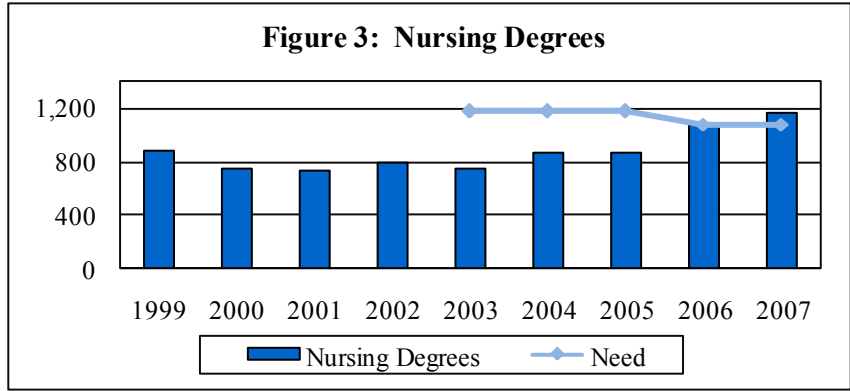
- Degrees with increases this year were doctorates, bachelors, and associates (up 13%, 3% and 1%, respectively.) Masters and first-professional degrees decreased two and nine percent, respectively.

- Degrees awarded to minority students increased 1.7 percent. Degrees earned by African Americans fell slightly (0.8%) and Hispanics/Latinos were up 1.6 percent. Minority students earned 17.7 percent of all awards in 2006-07, up from 13.0 percent 10 years ago (1996-97).
- Women earned just shy of 60 percent (59.97%) of all degrees in 2006-07, up from 57 percent one decade ago but down from last year's record high of 60.3 percent. Women maintained their slight majority of first-professional degrees for a second consecutive year, but lost the majority of doctoral degrees that they received in 2005 and 2006. For a third consecutive year, women earned more than two-thirds of combined associates degrees and undergraduate certificates.
- Once again, the top five degree-producing disciplines were business, health professions, education, social sciences/history and liberal arts and sciences (Figure 2). Those five fields comprise 57 percent of all degrees in 2006-07. All but education saw gains this year.

- Public colleges and universities awarded 18,606 degrees in 2006-07, up 0.5 percent over 2005-06. Independent institutions granted 17,439 degrees, up 1.5 percent over last year. The public sector this year produced 52 percent of all awards in its third consecutive year in the majority, following six years in the minority.



- Degrees across the health professions increased slightly (up 2%) to 3,900 in 2006-07, and are 31 percent above their production in 2003. Nursing degrees are up eight percent in 2007 and 55 percent over 2003, reflecting a mix of new programs and expanded production in existing programs.



- Degrees in four fields important to Connecticut’s industry “clusters” in 2007 were up slightly — four percent vs. 2006 and seven percent over 2003. Computer science awards fell (14%) in its fourth straight decline, but growth across the other three fields (engineering, biological and physical sciences) was good in both the short and medium terms.
- Performance among the 29 largest institutions (i.e., those awarding at least 500 degrees over the last two years and representing 95 percent of all degrees during that period) varied greatly:
  - ⇒ Three saw greater than 15 percent increases in 2006-07: Asnuntuck Community College (up 22%), Three Rivers Community College (up 18%) and Albertus Magnus (up 15%).
  - ⇒ Three encountered similarly double-digit percentage losses in 2006-07: Gibbs (down 39%) and Charter Oak and Rensselaer at Hartford (both down 15%).
- Forty-three percent (1,548) of the teacher preparation awards in 2006-07 were in the 11 critical shortage areas identified last year by the State Department of Education (see Table 7). That percentage share is the same as last year when there were only 10 shortage areas.

## 2006-07

# DEGREES CONFERRED BY CONNECTICUT INSTITUTIONS OF HIGHER EDUCATION

### INTRODUCTION

This report analyzes the number and types of degrees conferred by Connecticut institutions of higher education in 2006-07 and compares it to both previous years and perceived statewide needs. See “Glossary & Usage” at the end of this text for more precise definitions. These figures reflect the degrees awarded between July 1, 2006 and June 30, 2007. Disciplines are categorized according to the federal Classification of Instructional Programs (CIP) — the 2000 version starting in 2005 and the 1990 version for previous years.

### OVERVIEW

Connecticut’s colleges and universities awarded 36,045 degrees in 2006-07, an increase of 351 (1.0%) over the 2005-06 total of 35,694. A full list of degrees by institution and level appears in Appendix A.

Statewide degree production shows a strong upward trend over the last decade. (There were slight declines of less than 0.5% in 1998 and 2001.) Total degrees increased 25 percent between 1996-97 and 2006-07, with bachelor’s degrees (up 33%) showing above average growth, and associate’s (up 5%) and first-professional degrees (up 0.1%) seeing more tepid growth. Master’s and doctorate degrees mimicked the overall 25% growth rate.

**TABLE 1**  
**DEGREES AND CERTIFICATES CONFERRED IN CONNECTICUT BY LEVEL**  
**CONNECTICUT COLLEGES AND UNIVERSITIES**

Number	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Undergraduate Certificates	824	772	1,098	1,253	1,140	1,046	1,056	1,086	952	978	1,002
Associate's	4,842	4,500	4,654	4,385	4,391	4,469	4,727	4,807	5,059	5,018	5,069
Bachelor's	13,946	14,102	14,430	14,548	14,137	14,819	16,038	16,857	16,836	18,001	18,513
Post-Baccalaureate Certificates	33	31	32	2	76	139	117	200	210	315	245
Master's	7,592	7,742	8,024	7,951	8,367	8,434	8,904	9,068	9,828	9,593	9,426
Doctorates	667	686	629	667	614	599	649	692	683	735	834
First-Professional	955	884	845	951	962	992	1,008	949	1,014	1,054	956
<b>Total</b>	<b>28,859</b>	<b>28,717</b>	<b>29,712</b>	<b>29,757</b>	<b>29,687</b>	<b>30,498</b>	<b>32,499</b>	<b>33,659</b>	<b>34,582</b>	<b>35,694</b>	<b>36,045</b>

% of Total	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Undergraduate Certificates	3%	3%	4%	4%	4%	3%	3%	3%	3%	3%	3%
Associate's	17%	16%	16%	15%	15%	15%	15%	14%	15%	14%	14%
Bachelor's	48%	49%	49%	49%	48%	49%	49%	50%	49%	50%	51%
Post-Baccalaureate Certificates	0.1%	0.1%	0.1%	0.01%	0.3%	0.5%	0.4%	0.6%	0.6%	0.9%	0.7%
Master's	26%	27%	27%	27%	28%	28%	27%	27%	28%	27%	26%
Doctorates	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
First-Professional	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Bachelor’s degrees were a majority of degrees as they were last year and in 2004 and in the years between 1987 and 1993. Associate’s, bachelor’s and master’s degrees combined account for 92 percent of all awards this year, the norm for the last two decades. What has changed is the relative share of associate’s degrees which is now just 14 percent down from 18 percent in 1987 and master’s which is up two percentage points to 25 percent from two decades ago.

Finally, one unexplained anomaly in 2007 is the 9.3 percent decrease in first-professional degrees (i.e., medical doctors broadly defined, lawyers and clergy), even though this level consists of only 10 programs at five universities. The decreases, however, are almost across the board including all five universities and seven of the 10 programs in this degree level.

## DEGREES AWARDED BY SECTOR

The public sector (including the U.S. Coast Guard Academy) awarded 51.6 percent of all degrees in 2007, down slightly from 51.9 percent last year. That puts the public sector in the majority for the last three years (see Table 2), with the independent sector awarding a majority of degrees from 1999 to 2004.

The public sector regained its majority of degrees in 2005 and kept it in 2006 because of higher growth rates vis-à-vis the independent sector. The growth, however, in 2007 was 0.5 percent in the public sector and 1.5 percent across the independent colleges, which reduced the public share.

**TABLE 2**  
**TOTAL DEGREES AND CERTIFICATES BY SECTOR**  
**CONNECTICUT COLLEGES AND UNIVERSITIES**

	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
<b>Public Institutions</b>											
Undergraduate certificates	751	722	681	646	674	716	783	782	721	793	820
Associate's	3,885	3,547	3,700	3,355	3,260	3,349	3,503	3,556	3,795	3,747	3,940
Bachelor's	7,031	6,896	6,881	6,975	6,898	7,116	7,934	8,359	8,722	9,556	9,600
Post-Baccalaureate certificates							37	54	81	75	92
Master's	2,979	2,937	3,034	2,871	3,154	2,843	3,248	3,244	3,603	3,578	3,411
Doctorates	254	253	227	275	234	221	237	257	261	443	361
First-Professional	324	307	296	339	331	379	341	356	402	327	382
<b>Subtotal</b>	<b>15,224</b>	<b>14,662</b>	<b>14,819</b>	<b>14,461</b>	<b>14,551</b>	<b>14,661</b>	<b>16,100</b>	<b>16,635</b>	<b>17,579</b>	<b>18,514</b>	<b>18,606</b>
<b>Independent Institutions</b>											
Undergraduate certificates	73	50	417	607	466	330	273	304	231	185	182
Associate's	957	953	954	1,030	1,131	1,120	1,224	1,251	1,264	1,271	1,129
Bachelor's	6,915	7,206	7,549	7,573	7,239	7,703	8,104	8,498	8,114	8,445	8,913
Post-Baccalaureate certificates	31	33	31	32	2	76	102	63	119	135	153
Master's	4,613	4,805	4,990	5,080	5,213	5,591	5,656	5,824	6,225	6,015	6,015
Doctorates	413	433	402	392	380	378	412	435	422	611	473
First-Professional	631	577	549	612	631	613	667	593	612	408	574
<b>Subtotal</b>	<b>13,635</b>	<b>14,055</b>	<b>14,893</b>	<b>15,296</b>	<b>15,136</b>	<b>15,837</b>	<b>16,399</b>	<b>17,024</b>	<b>17,003</b>	<b>17,180</b>	<b>17,439</b>
<b>All Institutions</b>											
Undergraduate certificates	824	772	1,098	1,253	1,140	1,046	1,056	1,086	952	978	1,002
Associate's	4,842	4,500	4,654	4,385	4,391	4,469	4,727	4,807	5,059	5,018	5,069
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<b>Grand Total</b>	<b>28,859</b>	<b>28,717</b>	<b>29,712</b>	<b>29,757</b>	<b>29,687</b>	<b>30,498</b>	<b>32,499</b>	<b>33,659</b>	<b>34,582</b>	<b>35,694</b>	<b>36,045</b>

The overall 51.6 percent share for the public sector this year varies greatly by level. The public institutions represent more than three-fourths (78%) of associate's degrees and undergraduate certificates combined and a slight majority (52%) of bachelor's degrees, but less than two-fifths (37%) of all post-baccalaureate (including first-professional) awards.

## DEGREES AWARDED TO MINORITY STUDENTS

Minority students earned 6,369 degrees in 2007 or 1.7 percent more than in 2006, which is twice the 0.8 percent growth among students not classified as racial/ethnic minorities (see Table 3). African American graduates were down by 0.8 percent, and the growth rates for Hispanic/Latinos and Asian Americans were 1.6 and 5.7 percent, respectively. American Indians saw a double-digit percentage gain, but off of a small base — i.e., from 134 in 2006 to 149 in 2007. The number of degrees awarded to racial/ethnic minorities has consistently grown over the last two decades with the one exception of an eight-student decline in 2002.

**TABLE 3**  
**DEGREES AWARDED BY RACE AND ETHNICITY**  
**CONNECTICUT COLLEGES AND UNIVERSITIES**

	African American	Hispanic/Latino	Asian American	American Indian	Total Minority	White	Non-Resident Alien	Unknown	Total
1996-97	1,548	1,041	1,078	75	3,742	22,187	1,805	1,125	28,859
1997-98	1,575	1,085	1,110	83	3,853	22,005	1,822	1,037	28,717
1998-99	1,715	1,226	1,260	91	4,292	22,356	1,802	1,262	29,712
1999-00	1,835	1,312	1,217	100	4,464	22,251	1,782	1,260	29,757
2000-01	1,867	1,454	1,184	116	4,621	21,503	1,937	1,626	29,687
2001-02	1,915	1,416	1,188	94	4,613	21,508	2,011	2,366	30,498
2002-03	2,153	1,516	1,313	107	5,089	22,691	2,267	2,452	32,499
2003-04	2,433	1,743	1,342	110	5,628	23,380	2,186	2,465	33,659
2004-05	2,478	1,794	1,371	129	5,772	23,847	2,281	2,682	34,582
2005-06	2,720	1,957	1,451	134	6,262	24,413	2,158	2,861	35,694
2006-07	2,698	1,988	1,534	149	6,369	24,601	2,061	3,014	36,045
1 Year Change	-0.8%	1.6%	5.7%	11.2%	1.7%	0.8%	-4.5%	5.3%	1.0%
Change, 1997 to 2007	74%	91%	42%	99%	70%	11%	14%	168%	25%
Percent of Total	7.5%	5.5%	4.3%	0.4%	17.7%	68.3%	5.7%	8.4%	100.0%
<b>Reference groups:</b>									
CT Adult Population, 2005*	8.5%	9.5%	3.2%	0.2%	21.4%	77.8%	n.a.	0.8%	100.0%
Total Fall 2006									
CT Collegiate Enrollment	9.8%	7.7%	4.1%	0.4%	22.0%	65.8%	4.0%	8.2%	100.0%

\*Population 18 years or older, based upon U.S. Census Bureau estimates for July 1, 2005 from the Current Population Survey. Asian American includes Native Hawaiian or other Pacific Islander. Unknown are non-Hispanics in more than one of the specific Census racial categories, excluding the "some other [unspecified] race" option available in the 2000 Census.

The minority share of total degrees generally increased over the last two decades. Minority students earned 17.7 percent of all awards in 2007 compared to 7.3 percent in 1987 and 13.0 percent in 1997.

Despite this growth, their share lags behind their representation in two larger groups — Connecticut adults (those aged 18 and older in 2005 based upon U.S. Census Bureau estimates) and college students enrolled in-state in fall 2006 (the start of the 2006-07 academic year that produced these degrees).

The 17.7 percent share for minorities among degree recipients in 2007 compares to a 21.4 percent minority share in the state's adult population as of 2005 with some groups doing better than others. Asian Americans were 4.3 percent of all graduates compared to 3.2 percent of the adult general

population. In contrast, African Americans and especially Hispanics/Latinos remain underrepresented among degree recipients compared to their representation in the adult population.

Even more distressing is the 17.7 percent share of degrees awarded to minority students in 2007 compared to their 22.0 percent share among Connecticut college students in fall 2006. African Americans (7.5% of degrees vs. 9.8% of enrollments) and Hispanic/Latinos (5.5% and 7.7%, respectively) have smaller shares at the end of the pipeline than at the beginning. While part of this divergence is due to recent surges in minority enrollment that are not yet reflected in degrees data, too many African Americans and Hispanic/Latinos do not progress to degree completion.

Finally, the third largest percentage gain in degrees by race/ethnicity in 2007 is for those with race/ethnicity unknown. They increased 5.3 percent over 2006 and represent 8.4 percent of all degree recipients this year, or more than the share in any of the four minority categories. This is disturbing because as the number of students with race/ethnicity unknown grows (there were none as late as 1989), the ability to accurately report on the enrollment and success of underrepresented groups is diminished. (See Glossary & Usage for more details.)

#### DEGREES AWARDED TO WOMEN

Women earned just under 60 percent (59.97%) of all degrees in 2007, down from 60.3 percent in 2006 (Table 4). They captured a majority of degrees at every level except doctorates, where women lost the majority that they held in both 2005 and 2006. This is the second consecutive year that women received a majority of first-professional degrees and the third year of their receiving more than two-thirds of associate's degrees and certificates combined. This gender imbalance is neither limited to Connecticut nor to college graduates, as opposed to college students.

**TABLE 4**  
**PROPORTION OF DEGREES CONFERRED TO WOMEN BY LEVEL, SELECTED YEARS**  
**CONNECTICUT COLLEGES AND UNIVERSITIES**

	Associate's & Undergraduate Certificates	Bachelor's	Master's & Post-Baccalaureate Certificates	Doctorates	First-Professional	Total
1986-87	63.0%	52.3%	53.8%	36.4%	37.0%	<b>53.9%</b>
1999-97	65.7%	55.4%	58.2%	40.2%	43.4%	<b>57.4%</b>
2003-04	66.7%	58.0%	58.8%	46.7%	49.4%	<b>59.3%</b>
2004-05	66.7%	57.4%	60.6%	52.7%	46.6%	<b>59.5%</b>
2005-06	67.8%	57.9%	61.7%	51.2%	50.9%	<b>60.3%</b>
2006-07	67.1%	58.0%	61.0%	49.0%	51.3%	<b>60.0%</b>

The gender imbalance is even more pronounced in two of the minority groups with the female share at 67.6 percent among African Americans and 63.6 percent among Hispanics/Latinos.

## DEGREES AWARDED TO NON-RESIDENT ALIENS

Degrees awarded to non-resident aliens (international students here on a student visa) fell to 2,061 in 2007 (down 4.5% and also included in Table 3) after more than tripling over the previous two decades. The decrease in 2007 produced fewer degrees for non-resident aliens this year than in any of the four preceding years of 2003 to 2006.

Degrees to non-resident aliens peaked in 2005. Given that non-resident aliens are more heavily represented in graduate enrollment, assumed that doctorate students rushed to complete their degrees, out of fear that student visas and other travel restrictions might tighten further after the September 11th attacks. In effect, the increase in non-resident alien degrees between 2003 and 2005 (vs. 2002 levels) were primarily a displacement — i.e., degrees that normally would have been awarded over many years instead were accelerated into those three years. Now that the decline has started, it is expected it to continue for at least the near future.

## TOP FIVE DISCIPLINES

The top five degree-producing disciplines in 2007 continue to be the same as those for the last 20 years. In descending order (see Figure 2), the top five were business, health professions, education, social sciences and history, and liberal arts and sciences. See the Glossary & Usage section for a description of two recent changes in reporting data by discipline.

A total of 20,537 students received degrees in those five fields, representing 57 percent of all degrees. The other 32 fields combined provided the remaining 43 percent of degrees. Appendix C provides a complete tally of degrees by discipline and level.

## DEGREE PRODUCTION IN INDUSTRY CLUSTERS

The development of human capital is critical to Connecticut's economic prosperity. The state has identified nine industry "clusters" that require special attention and nurturing: aerospace, agriculture, bioscience, insurance/finance, maritime, metal manufacturing, plastics, software/information technology and tourism.

All but tourism are heavily dependent on employees with advanced scientific and technical knowledge. Table 5 shows degree production in four fields relevant to those clusters. (There are few exact or unique matches between academic programs and industry workforce needs, except in fields involving state licensure.) Across the four fields combined, the 3,500 awards in 2007 represent a four percent increase from last year and a seven percent gain over the last five years.

- **Biological sciences** saw solid growth (13%) of 1,287 awards in 2007 in its fifth straight year of gains, with a cumulative 27 percent increase since 2003 indicating slower annual growth during the earlier years of this half decade. This was a discipline, however, with many new programs due to the CIP code changes in 2005, so its growth over the last three years could be mostly due to definitional changes, rather than "true" growth.
- **Engineering** is a major success in the medium-term (up 35% over the last five years, albeit with only three percent growth in 2007) producing 1,112 awards. The longer term, however, is less favorable because annual awards in engineering averaged 1,179 for the first 10 years of data (i.e.,

1983, 1985 and 1987-1994) and peaked at 1,486 in 1985. Engineering as a percentage of total awards fell from 5.5 percent in that peak year of 1985 to 3.1 percent in 2007 with this year's datum including the double/multiple majors that were not even collected in 1985.

- **Physical sciences** (e.g., chemistry and physics) produced the fewest number of degrees among these four cluster fields, although the 504 awards in 2007 represents an increase of eight percent over 2006. More importantly, awards in 2007 are 35 percent above the 23-year low of 373 in 2004.
- **Computer science** degrees decreased 14 percent in 2007 in its fourth year of decline that has produced a cumulative 41 percent drop since its peak year in 2003.

Excluding computer science, the other three disciplines combined saw an eight percent increase in 2007 and are up 28 percent over these five years.

**TABLE 5**  
**DEGREES CONFERRED IN SCIENTIFIC DISCIPLINES**  
**CONNECTICUT COLLEGES AND UNIVERSITIES**

	2003	2004	2005	2006	2007	1-Year Change	2003-07 Change
Biological Sciences	1,015	1,046	1,100	1,134	1,287	13%	27%
Computer Science	1,013	897	881	694	597	-14%	-41%
Engineering	822	931	1,062	1,080	1,112	3%	35%
Physical Sciences	426	373	460	465	504	8%	18%
Total	3,276	3,247	3,503	3,373	3,500	4%	7%

Notes:

- 1) The 2005-2007 data are not directly comparable to that of 2004 and before due to implementation of new CIP (Classification of Instructional Program) codes. We do not now know how much of the change between 2004 and 2005 onward is "real" change, vs. change resulting from a re-shuffling of programs between these CIPs.
- 2) Collecting data on double/multiple majors began in 2001, and that data for the third time is included above because we now have five-plus years of it. When looking at high priority fields, it does not matter whether it is a first or second major because the person received the degree in that field.

There is both a pessimistic and an optimistic interpretation of the sustained drop in computer science awards. The pessimistic take is that the decline of the last three years may be understated because many new options were added to computer science due to the changes in CIP codes. These include high-growth fields such as networking and web applications that either did not exist or were very nascent when the 1990 version of the CIP codes was created in the mid 1980s. Those added options starting in 2005 could have absorbed degrees that formerly were classified under communications technology, engineering technology and business.

The more benign interpretation is that the recent drop in computer science degrees reflects the market demand for advanced computer skills, but short of a full-fledged computer science degree. There will always be a bedrock demand for computer scientists, but the demand for advanced computer skills will always be larger. Perhaps these skills are imparted as part of the training in the disciplines in which they are heavily used — e.g., business, education and library science — and instead are showing up in those fields.

## HEALTH AND NURSING PROFESSIONS

Degrees in health fields saw above average growth of 2.3 percent to 3,900 in 2007 and are up 31 percent over the last five years. (See earlier caution about the CIP code changes that could mean part of the degree growth was due to definitional changes, rather than underlying growth across the previous definition of health professions.)

**TABLE 6**  
**DEGREES CONFERRED IN HEALTH PROFESSIONS**  
**CONNECTICUT COLLEGES AND UNIVERSITIES**

	2003	2004	2005	2006	2007	1-Year Change	2002-07 Change
All of Health Professions	2,974	3,231	3,532	3,811	3,900	2.3%	31%
Nursing Degrees*	753	866	862	1,076	1,165	8.3%	55%

\*Nursing here is defined narrowly as R.N. training below the doctoral level because there is no easy way to differentiate other nursing credentials and levels. See also the two footnotes in Table 5 about changes for 2005 onward.

Degrees in nursing saw an even larger growth of 8.3 percent in 2007, albeit much smaller than the 25 percent increase in 2006 that resulted mostly from Goodwin College awarding the first degrees from its new nursing program. (Goodwin produced 108 degrees in its first year of 2006 and 124 this year.) The medium-term picture is also salutary with a 55 percent increase over the last five years, largely due to new programs at Goodwin and Gateway and major increases in graduates from existing programs at Fairfield, Quinnipiac and University of Connecticut.

This year's supply of 1,165 nursing degrees is larger than the projected annual job openings (1,081) for registered nurses in the latest labor market forecasts produced by the Connecticut Department of Labor. However, this should not be construed as 84 "surplus" nursing awards (1,165 supply vs. 1,081 demand) for two reasons:

- These awards are educational credentials and do not equate to passing a licensure exam. (It is akin to a law degree as a necessary, but not sufficient, condition to pass the bar exam and practice law.) Nursing slippage can result from graduates not passing the exam and/or from passing it but with the intent of not either immediately practicing that profession or doing so in Connecticut. Those three hurdles alone (passing, practice and in-state) probably exceed the so-called surplus of 84.
- This year's "surplus" production does not counteract all of the years of underproduction of nurses. Between 2000 and 2005, degree production averaged 792 a year while the estimated annual need (at least as of the end of that period) was 1,181, yielding a six-year cumulative catch-up of more than 2,300.

Registered nurses are the fourth fastest growing occupation in annual job openings — behind retail salespersons, cashiers and waiters and waitresses, where many openings result from rapid turnover rather than underlying growth in the number of jobs. It is the only one of the top 12 jobs in annual job openings that has any higher education prerequisite. (Position #13 is accountants and auditors.)

## TEACHER PREPARATION

The total of 3,621 students in 2007 who received credentials that could lead to state teacher certification (Table 7) is down 1.6 percent from the 2006 total. This year's total is up only nine percent

over 2001, which was the first year with reliable data. Twenty-two percent of all awards went to men; nine percent of all awards went to known racial/ethnic minorities.

Seventeen Connecticut institutions awarded teacher preparation credentials in 2007. The three largest producers (providing 51% of the statewide total) were Southern Connecticut State University (801 credentials), Central Connecticut State University (635) and Sacred Heart (418). Southern by itself contributed more than one-fifth of the state total.

The next three largest producers are University of Connecticut (344 awards), University of Bridgeport (303) and the state’s Alternate Route to Certification (268). These three institutions added another 25 percent to the statewide total. The other 11 institutions provided the remaining 24 percent of awards.

The six institutions in the public sector (University of Connecticut, the four campuses of CSU and the Alternate Route to Certification) combined provided 64 percent of the teacher preparation credentials and the 11 independent colleges provided the other 36 percent. This 64 percent share for the public institutions in teacher preparation credentials is much larger than its 52 percent share among all degrees and certificates.

The teacher preparation credentials by broad field were:

	<u>Number</u>	<u>Share of Total</u>
Elementary Education	975	27%
Secondary Academic Subjects	807	22%
Special Subjects, K-12	665	18%
Administrative, Pre K-12	432	12%
Special Education	345	10%
School Counselor/Psychologist	239	7%
Early Childhood Education	95	3%
Middle Grades 4-8	63	2%
<b>Total</b>	<b>3,621</b>	<b>100%</b>

Among the 851 credentials in secondary or middle school with an academic subject (19 middle grade awards listed no such subject), the most popular disciplines were history/social studies (229 credentials or 27% of the academic subjects), English (194 awards or 23%) and mathematics (162 awards or 19%). Credentials across all math/science fields (i.e., adding in biology, general science, chemistry, earth science and physics to the already noted math awards) totaled 356 or 42 percent of credentials with a listed subject.

With the 473 awards in special subject areas (grades K-12) added, two more fields came in at over 90 awards — physical education (102) and music (91). The science awards still totaled 356, but fell to 28 percent out of the new total of 1,261 across all subjects.

Unfortunately, only 43 percent (1,548 of the total 3,621 awards) were in the 11 teacher shortage areas identified in 2006-07 by the Connecticut Department of Education. (The shortage areas, based on hiring reports from all public schools in the prior year, become the current year’s priority areas.)

The five shortage areas with the most awards (i.e., intermediate administrator, special education 1-12, science 7-12, English 7-12 and Math 7-12) combined were an overwhelming majority (83%) of total shortage area awards. The other six priority areas provided the other 17 percent.

In addition to the 1,581 awards that exactly met the definition of the shortage areas, there were 63 other awards that partially overlapped with the grades 7-12 academic subjects — i.e., grades 4-8 or K-12 credentials.

**TABLE 7**  
**TEACHER PREPARATION CREDENTIALS IN TEACHER SHORTAGE AREAS:**  
**CONNECTICUT COLLEGES AND UNIVERSITIES AND**  
**THE ALTERNATE ROUTE TO CERTIFICATION PROGRAM (ARC)**

Shortage Areas/Grade Level	Number of Credentials
Intermediate Administrator	421
Comprehensive Special Ed, 1-12	345
Science 7-12	185
English 7-12	184
Math, 7-12	150
Music, PreK-12	91
World Languages, 7-12	48
Speech & Language Pathology	47
Library Media Specialist	39
Technology Education, PreK-12	38
Bilingual, PreK-12*	0
<b>Total</b>	<b>1,548</b>
Total in all Areas	3,621
<b>Percent in Shortage Areas</b>	<b>43%</b>

\*No new credentials were awarded in Bilingual Education because of a new Connecticut Department of Education requirement of dual certification — i.e., in both language and subject area. No Connecticut institution offered that dual certification during the last three years (2005 to 2007), but some colleges have revamped their programs to reflect the statutory change and may produce awards next year.

## INSTITUTIONAL PERFORMANCE

Appendix A lists 2007 totals by institutions and level and the highlights section of this report identified the colleges with the three largest increases and three largest decreases in degrees between 2006 and 2007. That comparison was based upon only the 29 colleges awarding at least 500 degrees over the last two years, which represent 95 percent of statewide total degrees.

We can replicate that exercise for those same 29 colleges over a five-year period (2002 to 2007) to get a better sense of the medium-term trends in degree production.

## Largest Five-Year Gains/Losses, 2002 to 2007

<b>Largest % Increases</b>		<b>Largest Decreases OR Smallest Increases</b>	
Charter Oak State College	57%	Fairfield University	3%
Albertus Magnus College	45%	Wesleyan University	1%
University of Connecticut	43%	Gibbs College	0.4%
Asnuntuck Community College	32%	Sacred Heart University	-10%
Quinnipiac University	31%	Rensselaer At Hartford	-45%

Note that the large statewide increase between 2002 and 2007 (i.e., 18%) meant that the right-hand column contains a mix of both decreases and the smallest increases.

### **CONCLUSION**

The continued growth in total degrees awarded obviously is good news for the state. However, three disturbing trends warrant particular attention to ensure that Connecticut has the supply and quality of workers that it needs.

While the number of degrees earned by minority students has grown steadily, Hispanics/Latinos and to a lesser extent African Americans remain underrepresented among degree recipients. As these minority populations continue to grow as a percentage of the state's adult population, it is imperative that we work to close this achievement gap by improving retention, transfer and four-year degree completions for Hispanics/Latinos and African Americans.

Second, the state also needs to increase the number of associate's degree recipients, particularly in high-demand areas such as health and technology. There are numerous job opportunities for highly-skilled graduates with two-year degrees, provided those degrees are in the right fields.

Finally, colleges and universities must produce greater numbers of teachers in shortage areas identified by the State Department of Education.

## GLOSSARY & USAGE

### A. USAGE

All references to “degrees” apply to degrees, certificates and other formal awards from a college or university. The 36,045 degrees in 2007 were reported under one major; an additional 1,178 double or multiple majors were associated with those degrees, but are counted only when looking at degrees in specific priority areas.

### B. DEGREE LEVELS

The “master’s” column in the Appendix tables on degrees by level includes both traditional master’s degrees and post-masters certificates — e.g., Yale’s Master’s of Philosophy (M.Phil.) degrees, Sixth-Year Certificates (SYC) and some Certificates of Advanced Study (CAS). The 9,426 “master’s” listed in the tables for 2006-07 comprise 8,531 master’s degrees and 895 post-master’s certificates.

### C. FIRST-PROFESSIONAL DEGREES

These are doctorate degrees in medical fields (broadly defined to include dentists, pharmacy, osteopaths, etc.) or degrees required for becoming a lawyer or being ordained for the clergy.

### D. TEACHER PREPARATION CREDENTIALS

The data on teacher (or, more broadly defined, educator) preparation have only moderate overlap with the degrees data in education. Information on teacher preparation is collected separately from the 17 institutions authorized to issue teacher-preparation credentials — 16 colleges and the Alternate Route to Certification (ARC) program.

Many teacher preparation credentials do not appear in the degrees data. Connecticut requires that teachers of academic subjects have a degree in that field rather than in education. An aspiring new biology teacher thus would have a bachelor’s degree in biology and an additional teacher preparation credential that eventually allows the state to certify him or her as a biology teacher.

The former is a degree that is included in our data tables; the latter officially is neither a degree nor a certificate and is not included in the education discipline.

Another mismatch between the education and teacher preparation totals is that many education degrees (e.g., teacher assistants/aides and degrees in the higher education field) do not show up in the teacher preparation data because they are not preparing teachers. Finally, many of those receiving teacher preparation credentials may already be certified teachers.

### E. RACE/ETHNICITY DATA

The Federal government requires colleges to report graduates in one of seven demographic groups (Table 3). Five groups actually are races or ethnicities — American Indian or Alaskan Native, Asian or Pacific Islander, Black non-Hispanic, Hispanic, and White non-Hispanic. The last two groups are not race/ethnicities — i.e., “race/ethnicity unknown” (e.g., bi- or multi-racial, Hispanic ethnicity and racial minority or other races) or “non-resident alien” (i.e., international students here on a student visa who also could be of any race/ethnicity).

Since we began collecting detailed data in 1983, the total across the last two ambiguous groups has always been more than those of Latinos or Asians or American Indians; since 1987, it has also been more than African Americans. The ambiguous total twice (in 1990 and 1992) exceeded the minority degree recipients across all four groups. Starting in 2002, degree recipients in the two ambiguous groups returned to being close (80%-95%) to total minority degree recipients.

The share of graduates with no race/ethnicity reported in 2007 was 14.1 percent reflecting both the 8.4 percent for race/ethnicity explicitly unknown and the 5.7 percent for non-resident aliens, who instead are counted by citizenship status and not race/ethnicity. Degree recipients this year were 6,369 minorities (17.7%), 24,601 whites (68.3%) and 5,075 ambiguous (14.1%), meaning that minority students are 17.7 percent of all graduates and 20.6 percent of graduates with a known race/ethnicity. In this report, we use the conservative minimum share of 17.7 percent minority, which is correct only in the unlikely event that no ambiguous degree recipient was in one of those four minority groups.

#### **F. TRENDS IN DISCIPLINE: TWO CHANGES MADE FOR 2005**

The 2005 completions data introduced two major changes that effect analysis by discipline.

The first is a change in the codes that defines the disciplines under which programs and degrees are counted. Under the new Federal Classification of Instructional Programs (CIP) codes that were implemented in 2005, some disciplines were folded into others or split into two or more disciplines. This created a challenge to maintain the historical continuity of data comparisons, although every attempt was made to migrate data to the post-2005 data categories for trend analysis purposes.

The second change is actually an unalloyed benefit in our ability to track degrees awarded in high priority fields. In 2001, the Federal government began collecting data on the second, third, etc., majors associated with a degree, which are mostly bachelor's degrees. We thus now have seven years of multiple-major reports, so data on degrees in high priority disciplines (i.e., Tables 5 and 6) include any degree recipient completing that major, rather than only degree recipients whose first major is in that priority area as in years before 2001. For example, if state policy makers are concerned with materials engineering, we now have counts on the graduates receiving that degree even if that person completed a double major in dance and materials engineering.

Unfortunately, other potential historical inconsistencies could not easily be remedied — e.g., the Health Professions CIP group. Many alternative health programs were added (e.g., massage was shifted from the personal services group to the health group), and many programs were deleted (e.g. separate programs in medical basic sciences — for example, medical microbiology — were cut) and consolidated into the Biological Sciences CIP group.

Appendix A  
**Degrees and Certificates Granted by Colleges and Universities in  
Connecticut**  
2006-07

Public Institutions	Undergrad Certificates	Associate's	Bachelor's	Post-Bacc Certificates	Master's	Doctoral	First Professional	Total
University of Connecticut								
Storrs	0	22	4,354	45	1,512	339	270	6,542
UConn Health Center	0	0	0	0	0	0	112	112
Connecticut State University								
Central	0	0	1,572	47	632	17	0	2,268
Eastern	0	8	840	0	113	0	0	961
Southern	0	1	1,356	0	934	5	0	2,296
Western	0	10	717	0	220	0	0	947
Community Technical Colleges								
Asnuntuck	120	155	0	0	0	0	0	275
Capital	28	277	0	0	0	0	0	305
Gateway	107	453	0	0	0	0	0	560
Housatonic	34	350	0	0	0	0	0	384
Manchester	111	556	0	0	0	0	0	667
Middlesex	19	201	0	0	0	0	0	220
Naugatuck	74	490	0	0	0	0	0	564
Northwestern	32	134	0	0	0	0	0	166
Norwalk	83	430	0	0	0	0	0	513
Quinebaug Valley	50	170	0	0	0	0	0	220
Three Rivers	52	388	0	0	0	0	0	440
Tunxis	110	235	0	0	0	0	0	345
Charter Oak State College								
Charter Oak State College	0	60	531	0	0	0	0	591
<b>Total, State Institutions</b>	820	3,940	9,370	92	3,411	361	382	18,376
United States Coast Guard								
U.S. Coast Guard Academy	0	0	230	0	0	0	0	230
<b>Total, Public Institutions</b>	820	3,940	9,600	92	3,411	361	382	18,606
<b>Total, Public Institutions</b>	820	3,940	9,600	92	3,411	361	382	18,606

Appendix A  
**Degrees and Certificates Granted by Colleges and Universities in  
Connecticut**  
2006-07

Independent Institutions	Undergrad Certificates	Associate's	Bachelor's	Post-Bacc Certificates	Master's	Doctoral	First Professional	Total
<b>National Independent</b>								
Connecticut College	0	0	491	0	0	0	0	491
Trinity College	0	0	514	0	39	0	0	553
Wesleyan University	0	0	735	0	83	13	0	831
Yale University	0	0	1,371	0	1,780	360	353	3,864
<b>Regional Independent</b>								
Albertus Magnus College	2	153	445	19	267	0	0	886
Briarwood College	9	103	1	0	0	0	0	113
Fairfield University	0	6	860	0	354	0	0	1,220
Graduate Institute, The	0	0	0	0	108	0	0	108
Hartford Seminary	0	0	0	11	18	6	0	35
Holy Apostles College and Semina	0	0	4	3	32	0	7	46
Lyme Academy College of Fine Ar	11	0	16	1	0	0	0	28
Mitchell College	0	64	113	0	0	0	0	177
Paier College of Art	15	1	37	0	0	0	0	53
Post University	9	39	188	0	0	0	0	236
Quinnipiac University	0	4	1,310	3	470	0	190	1,977
Rensselaer at Hartford	0	0	0	25	244	0	0	269
Sacred Heart University	0	39	779	0	561	34	0	1,413
St. Basil College	0	0	3	0	0	0	0	3
St. Joseph College	0	0	218	0	177	0	0	395
University of Bridgeport	8	31	273	0	648	24	24	1,008
University of Hartford	16	175	1,016	0	503	36	0	1,746
University of New Haven	50	47	539	91	731	0	0	1,458
<b>Two-Year Independent</b>								
Clemens College	2	15	0	0	0	0	0	17
Gibbs College	24	225	0	0	0	0	0	249
Goodwin College	31	154	0	0	0	0	0	185
St. Vincent's College	5	73	0	0	0	0	0	78
<b>Total, Independent Institutions</b>	182	1,129	8,913	153	6,015	473	574	17,439
<b>Total, All Institutions</b>	1,002	5,069	18,513	245	9,426	834	956	36,045

Appendix B  
**Degrees and Certificates by Level and Race/Ethnicity**  
**Connecticut Colleges and Universities**  
2006-07

	<b>Black Non- Hispanic</b>	<b>Hispanic</b>	<b>Asian or Pacific Islander</b>	<b>American Indian or Alaskan Native</b>	<b>White Non- Hispanic</b>	<b>Non- Resident Alien</b>	<b>Other</b>	<b>Total</b>
<b><u>Certificate &lt; 1 Year</u></b>								
Agriculture, Agriculture Operations, and Related Sciences	0	0	0	0	11	0	1	12
Architecture and Related Services	0	0	0	0	6	0	0	6
Area, Ethnic, Cultural, and Gender Studies	0	0	0	0	0	0	0	0
Biological and Biomedical Sciences	0	0	0	0	0	0	0	0
Business, Management, Marketing, and Related Support Services	30	25	14	0	177	3	8	257
Communication, Journalism, and Related Programs	0	1	0	0	3	0	0	4
Communications Technologies/Technicians and Support Services	0	1	0	0	1	0	0	2
Computer and Information Sciences and Support Services	1	5	0	0	14	2	1	23
Education	0	1	0	0	1	0	0	2
Engineering Technologies/Technicians	11	8	14	0	64	0	5	102
English Language and Literature/Letters	0	0	0	0	0	0	0	0
Family and Consumer Sciences/Human Sciences	16	15	2	0	70	1	5	109
Foreign languages, literatures, and Linguistics	1	0	0	0	0	0	0	1
Health Professions and Related Clinical Sciences	24	12	3	2	118	2	4	165
Legal Professions and Studies	9	2	2	0	42	0	4	59
Liberal Arts and Sciences, General Studies and Humanities	1	0	1	0	6	0	1	9
Library Science	0	0	0	1	4	0	0	5
Mechanic and Repair Technologies/Technicians	1	5	1	0	5	1	4	17
Multi/Interdisciplinary Studies	0	0	0	0	0	0	1	1
Natural Resources and Conservation	0	0	0	0	0	0	0	0
Parks, Recreation, Leisure, and Fitness Studies	0	0	0	0	3	0	0	3
Personal and Culinary Services	1	0	4	0	9	1	1	16
Physical Sciences	0	0	0	0	0	0	0	0
Public Administration and Social Service Professions	5	5	1	0	4	0	2	17
Security and Protective Services	3	10	0	0	69	1	2	85
Social Sciences	0	0	0	0	4	0	0	4
Transportation and Materials Moving	0	0	0	0	0	0	0	0
Visual and Performing Arts	0	2	1	1	27	1	3	35
<b>Total Certificate &lt; 1 Year Degrees</b>	<b>103</b>	<b>92</b>	<b>43</b>	<b>4</b>	<b>638</b>	<b>12</b>	<b>42</b>	<b>934</b>
<b><u>Certificate &gt; 1 Year</u></b>								
Biological and Biomedical Sciences	0	0	0	0	0	0	0	0
Business, Management, Marketing, and Related Support Services	0	0	0	0	4	1	1	6
Computer and Information Sciences and Support Services	0	0	0	0	5	0	0	5
Engineering	0	0	0	0	0	0	0	0
Engineering Technologies/Technicians	0	1	0	0	0	0	0	1
Family and Consumer Sciences/Human Sciences	0	0	0	0	0	0	0	0
Health Professions and Related Clinical Sciences	3	4	0	0	25	0	1	33
Public Administration and Social Service Professions	0	0	0	0	0	0	0	0
Visual and Performing Arts	1	3	0	0	17	1	1	23
<b>Total Certificate &gt; 1 Year Degrees</b>	<b>4</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>51</b>	<b>2</b>	<b>3</b>	<b>68</b>

Appendix B (Continued)  
**Degrees and Certificates by Level and Race/Ethnicity**  
**Connecticut Colleges and Universities**  
2006-07

	<b>Black Non- Hispanic</b>	<b>Hispanic</b>	<b>Asian or Pacific Islander</b>	<b>American Indian or Alaskan Native</b>	<b>White Non- Hispanic</b>	<b>Non- Resident Alien</b>	<b>Other</b>	<b>Total</b>
<b><u>Associate</u></b>								
Agriculture, Agriculture Operations, and Related Sciences	0	1	0	0	28	0	1	30
Architecture and Related Services	0	0	0	0	0	0	0	0
Biological and Biomedical Sciences	0	0	0	0	2	0	0	2
Business, Management, Marketing, and Related Support Services	171	122	33	6	627	56	56	1,071
Communication, Journalism, and Related Programs	1	3	0	0	22	3	1	30
Communications Technologies/Technicians and Support Services	0	0	0	0	12	0	1	13
Computer and Information Sciences and Support Services	13	16	2	0	35	0	4	70
Education	3	2	3	0	15	1	1	25
Engineering	2	7	2	0	11	1	0	23
Engineering Technologies/Technicians	10	18	4	0	120	6	15	173
Family and Consumer Sciences/Human Sciences	33	40	3	1	138	9	12	236
Foreign languages, literatures, and Linguistics	2	0	0	0	4	0	0	6
Health Professions and Related Clinical Sciences	141	72	29	2	761	10	41	1,056
Legal Professions and Studies	9	3	1	0	40	3	2	58
Liberal Arts and Sciences, General Studies and Humanities	257	118	38	9	1,161	27	87	1,697
Mathematics and Statistics	1	0	0	0	0	0	1	2
Mechanic and Repair Technologies/Technicians	0	0	0	0	4	0	0	4
Natural Resources and Conservation	1	1	0	0	3	0	0	5
Parks, Recreation, Leisure, and Fitness Studies	3	1	0	0	21	1	0	26
Personal and Culinary Services	1	2	0	0	18	0	2	23
Philosophy and Religious Studies	0	0	0	0	0	0	0	0
Physical Sciences	0	0	0	0	0	0	0	0
Psychology	0	1	0	0	5	0	0	6
Public Administration and Social Service Professions	17	15	0	0	15	0	3	50
Science Technologies/Technicians	0	1	0	1	7	0	0	9
Security and Protective Services	21	27	3	0	152	0	8	211
Social Sciences	1	0	0	0	3	0	0	4
Transportation and Materials Moving	0	0	0	0	3	0	0	3
Visual and Performing Arts	29	24	2	1	152	6	22	236
<b>Total Associate Degrees</b>	<b>716</b>	<b>474</b>	<b>120</b>	<b>20</b>	<b>3,359</b>	<b>123</b>	<b>257</b>	<b>5,069</b>

Appendix B (Continued)  
**Degrees and Certificates by Level and Race/Ethnicity**  
**Connecticut Colleges and Universities**

2006-07

	<b>Black Non- Hispanic</b>	<b>Hispanic</b>	<b>Asian or Pacific Islander</b>	<b>American Indian or Alaskan Native</b>	<b>White Non- Hispanic</b>	<b>Non- Resident Alien</b>	<b>Other</b>	<b>Total</b>
<b><u>Bachelor's</u></b>								
Agriculture, Agriculture Operations, and Related Sciences	6	2	5	0	104	1	6	124
Architecture and Related Services	2	3	8	0	52	0	4	69
Area, Ethnic, Cultural, and Gender Studies	21	19	21	0	155	8	32	256
Biological and Biomedical Sciences	47	47	108	2	520	32	61	817
Business, Management, Marketing, and Related Support Services	283	186	125	11	2,236	97	231	3,169
Communication, Journalism, and Related Programs	54	54	20	2	820	8	93	1,051
Computer and Information Sciences and Support Services	16	13	20	1	157	12	24	243
Education	17	19	8	2	577	5	34	662
Engineering	32	25	49	1	414	24	60	605
Engineering Technologies/Technicians	15	7	6	1	124	7	14	174
English Language and Literature/Letters	40	33	37	0	707	8	104	929
Family and Consumer Sciences/Human Sciences	24	13	10	0	198	2	19	266
Foreign languages, literatures, and Linguistics	9	43	10	1	146	6	20	235
Health Professions and Related Clinical Sciences	71	41	83	3	935	11	129	1,273
History	28	31	24	2	538	14	76	713
Legal Professions and Studies	9	3	1	0	26	0	1	40
Liberal Arts and Sciences, General Studies and Humanities	132	88	36	13	879	26	110	1,284
Library Science	0	1	0	0	4	0	1	6
Mathematics and Statistics	7	3	8	0	154	9	20	201
Multi/Interdisciplinary Studies	18	18	23	2	220	17	29	327
Natural Resources and Conservation	2	4	1	0	39	3	8	57
Parks, Recreation, Leisure, and Fitness Studies	7	4	0	0	66	1	6	84
Personal and Culinary Services	0	0	0	0	0	0	0	0
Philosophy and Religious Studies	3	12	11	1	106	6	23	162
Physical Sciences	16	10	22	1	204	14	11	278
Psychology	118	70	55	5	1,159	21	114	1,542
Public Administration and Social Service Professions	48	18	3	0	120	2	20	211
Science Technologies/Technicians	1	0	0	0	0	0	1	2
Security and Protective Services	39	29	4	4	359	1	27	463
Social Sciences	180	128	134	12	1,489	110	202	2,255
Theology and Religious Vocations	0	0	0	0	0	0	0	0
Transportation and Materials Moving	0	0	0	0	1	0	0	1
Visual and Performing Arts	39	51	42	5	741	28	108	1,014
<b>Total Bachelor's Degrees</b>	<b>1,284</b>	<b>975</b>	<b>874</b>	<b>69</b>	<b>13,250</b>	<b>473</b>	<b>1,588</b>	<b>18,513</b>

Appendix B (Continued)  
**Degrees and Certificates by Level and Race/Ethnicity**  
**Connecticut Colleges and Universities**  
2006-07

	<b>Black Non- Hispanic</b>	<b>Hispanic</b>	<b>Asian or Pacific Islander</b>	<b>American Indian or Alaskan Native</b>	<b>White Non- Hispanic</b>	<b>Non- Resident Alien</b>	<b>Other</b>	<b>Total</b>
<b><u>Post-Baccalaureate Certificates</u></b>								
Area, Ethnic, Cultural, and Gender Studies	0	0	0	0	0	0	0	0
Biological and Biomedical Sciences	0	1	1	0	1	1	1	5
Business, Management, Marketing, and Related Support Services	8	3	1	0	34	2	5	53
Computer and Information Sciences and Support Services	0	0	2	0	11	2	4	19
Education	1	4	0	0	45	0	8	58
Engineering	1	0	0	0	10	0	0	11
Engineering Technologies/Technicians	0	0	0	0	0	0	0	0
English Language and Literature/Letters	0	0	0	0	1	0	0	1
Family and Consumer Sciences/Human Sciences	0	0	0	0	0	0	0	0
Health Professions and Related Clinical Sciences	1	0	1	0	6	0	0	8
History	0	0	0	0	2	0	0	2
Legal Professions and Studies	0	0	0	0	9	2	0	11
Mathematics and Statistics	0	0	0	0	4	1	0	5
Multi/Interdisciplinary Studies	0	0	0	0	0	0	0	0
Natural Resources and Conservation	0	0	0	0	3	0	0	3
Parks, Recreation, Leisure, and Fitness Studies	0	0	0	0	0	0	0	0
Philosophy and Religious Studies	1	0	0	0	3	1	0	5
Psychology	0	0	0	0	4	0	0	4
Public Administration and Social Service Professions	1	0	0	0	9	0	0	10
Security and Protective Services	1	0	2	0	31	0	6	40
Social Sciences	0	0	0	0	0	0	0	0
Theology and Religious Vocations	0	2	1	0	4	2	0	9
Visual and Performing Arts	0	0	0	0	1	0	0	1
<b>Total Post-Baccalaureate Certificates</b>	<b>14</b>	<b>10</b>	<b>8</b>	<b>0</b>	<b>178</b>	<b>11</b>	<b>24</b>	<b>245</b>

Appendix B (Continued)  
**Degrees and Certificates by Level and Race/Ethnicity**  
**Connecticut Colleges and Universities**  
2006-07

	<b>Black Non- Hispanic</b>	<b>Hispanic</b>	<b>Asian or Pacific Islander</b>	<b>American Indian or Alaskan Native</b>	<b>White Non- Hispanic</b>	<b>Non- Resident Alien</b>	<b>Other</b>	<b>Total</b>
<b><u>Master's</u></b>								
Agriculture, Agriculture Operations, and Related Sciences	0	0	1	0	7	7	0	15
Architecture and Related Services	0	1	12	0	44	20	1	78
Area, Ethnic, Cultural, and Gender Studies	9	2	5	1	39	11	10	77
Biological and Biomedical Sciences	9	17	27	2	161	38	24	278
Business, Management, Marketing, and Related Support Services	163	68	116	7	1,119	251	253	1,977
Communication, Journalism, and Related Programs	3	1	1	1	38	7	6	57
Computer and Information Sciences and Support Services	5	5	23	2	84	90	12	221
Education	128	89	26	1	2,303	54	216	2,817
Engineering	8	17	14	1	116	205	31	392
Engineering Technologies/Technicians	4	0	5	0	25	4	5	43
English Language and Literature/Letters	1	3	0	0	75	1	13	93
Family and Consumer Sciences/Human Sciences	5	5	2	0	58	9	2	81
Foreign languages, literatures, and Linguistics	1	5	3	0	44	31	16	100
Health Professions and Related Clinical Sciences	56	36	63	4	667	59	87	972
History	2	7	4	0	70	9	26	118
Legal Professions and Studies	1	1	0	0	8	45	5	60
Liberal Arts and Sciences, General Studies and Humanities	1	1	1	0	43	0	15	61
Library Science	5	1	2	0	71	1	19	99
Mathematics and Statistics	2	1	3	0	41	48	7	102
Multi/Interdisciplinary Studies	3	4	0	0	20	3	1	31
Natural Resources and Conservation	4	4	3	1	92	35	6	145
Parks, Recreation, Leisure, and Fitness Studies	2	0	0	0	18	1	4	25
Philosophy and Religious Studies	8	2	5	0	100	6	3	124
Physical Sciences	0	3	9	0	78	33	14	137
Psychology	14	7	5	0	184	26	40	276
Public Administration and Social Service Professions	32	27	1	2	158	4	22	246
Security and Protective Services	13	6	2	2	106	3	19	151
Social Sciences	3	9	5	0	105	82	19	223
Theology and Religious Vocations	2	3	4	0	76	11	3	99
Visual and Performing Arts	12	8	22	2	189	64	31	328
<b>Total Master's Degrees</b>	<b>496</b>	<b>333</b>	<b>364</b>	<b>26</b>	<b>6,139</b>	<b>1,158</b>	<b>910</b>	<b>9,426</b>

Appendix B (Continued)  
**Degrees and Certificates by Level and Race/Ethnicity**  
**Connecticut Colleges and Universities**  
2006-07

	<b>Black Non- Hispanic</b>	<b>Hispanic</b>	<b>Asian or Pacific Islander</b>	<b>American Indian or Alaskan Native</b>	<b>White Non- Hispanic</b>	<b>Non- Resident Alien</b>	<b>Other</b>	<b>Total</b>
<b><u>Doctoral</u></b>								
Agriculture, Agriculture Operations, and Related Sciences	0	0	0	0	6	14	0	20
Area, Ethnic, Cultural, and Gender Studies	4	0	0	0	6	0	1	11
Biological and Biomedical Sciences	5	4	14	0	59	39	20	141
Business, Management, Marketing, and Related Support Services	0	0	2	0	4	11	1	18
Computer and Information Sciences and Support Services	0	0	1	0	2	5	0	8
Education	3	3	2	0	52	5	7	72
Engineering	0	0	0	0	20	42	10	72
English Language and Literature/Letters	0	0	0	1	14	1	4	20
Family and Consumer Sciences/Human Sciences	0	0	0	0	5	1	1	7
Foreign languages, literatures, and Linguistics	0	0	0	0	9	14	10	33
Health Professions and Related Clinical Sciences	1	2	6	0	57	8	2	76
History	0	1	1	0	7	3	11	23
Legal Professions and Studies	0	0	0	0	3	6	0	9
Mathematics and Statistics	0	0	0	0	6	18	4	28
Multi/Interdisciplinary Studies	0	1	1	0	7	5	0	14
Natural Resources and Conservation	0	0	1	0	9	3	2	15
Philosophy and Religious Studies	1	0	3	0	8	1	0	13
Physical Sciences	0	0	1	0	25	44	6	76
Psychology	2	2	2	1	34	8	25	74
Public Administration and Social Service Professions	0	0	0	0	1	0	0	1
Social Sciences	3	1	2	2	24	22	8	62
Theology and Religious Vocations	3	0	0	0	3	0	0	6
Visual and Performing Arts	0	0	0	0	22	5	8	35
<b>Total Doctoral Degrees</b>	<b>22</b>	<b>14</b>	<b>36</b>	<b>4</b>	<b>383</b>	<b>255</b>	<b>120</b>	<b>834</b>
<b><u>First-Professional</u></b>								
Health Professions and Related Clinical Sciences	22	48	45	23	150	12	12	312
Legal Professions and Studies	36	33	37	3	393	10	52	564
Theology and Religious Vocations	1	1	7	0	60	5	6	80
<b>Total First-Professional Degrees</b>	<b>59</b>	<b>82</b>	<b>89</b>	<b>26</b>	<b>603</b>	<b>27</b>	<b>70</b>	<b>956</b>

Appendix C  
**Degrees and Certificates by Level, Discipline and Gender of Recipient**  
**Connecticut Colleges and Universities**  
2006-07

<b>Discipline</b>	<b>Men</b>	<b>Women</b>	<b>Total</b>
<b><u>Certificate &lt; 1 Year</u></b>			
Agriculture, Agriculture Operations, and Related Sciences	5	7	12
Architecture and Related Services	0	6	6
Area, Ethnic, Cultural, and Gender Studies	0	0	0
Biological and Biomedical Sciences	0	0	0
Business, Management, Marketing, and Related Support Services	63	194	257
Communication, Journalism, and Related Programs	3	1	4
Communications Technologies/Technicians and Support Services	2	0	2
Computer and Information Sciences and Support Services	16	7	23
Education	0	2	2
Engineering Technologies/Technicians	95	7	102
English Language and Literature/Letters	0	0	0
Family and Consumer Sciences/Human Sciences	12	97	109
Foreign languages, literatures, and Linguistics	0	1	1
Health Professions and Related Clinical Sciences	36	129	165
Legal Professions and Studies	15	44	59
Liberal Arts and Sciences, General Studies and Humanities	0	9	9
Library Science	0	5	5
Mechanic and Repair Technologies/Technicians	16	1	17
Multi/Interdisciplinary Studies	0	1	1
Natural Resources and Conservation	0	0	0
Parks, Recreation, Leisure, and Fitness Studies	1	2	3
Personal and Culinary Services	4	12	16
Physical Sciences	0	0	0
Public Administration and Social Service Professions	3	14	17
Security and Protective Services	36	49	85
Social Sciences	3	1	4
Transportation and Materials Moving	0	0	0
Visual and Performing Arts	13	22	35
<b>Total Certificate &lt; 1 Year Degrees</b>	<b>323</b>	<b>611</b>	<b>934</b>
<b><u>Certificate &gt; 1 Year</u></b>			
Biological and Biomedical Sciences	0	0	0
Business, Management, Marketing, and Related Support Services	2	4	6
Computer and Information Sciences and Support Services	4	1	5
Engineering	0	0	0
Engineering Technologies/Technicians	1	0	1
Family and Consumer Sciences/Human Sciences	0	0	0
Health Professions and Related Clinical Sciences	4	29	33
Public Administration and Social Service Professions	0	0	0
Visual and Performing Arts	10	13	23
<b>Total Certificate &gt; 1 Year Degrees</b>	<b>21</b>	<b>47</b>	<b>68</b>

Appendix C (Continued)  
**Degrees and Certificates by Level, Discipline and Gender of Recipient**  
**Connecticut Colleges and Universities**  
2006-07

<b>Discipline</b>	<b>Men</b>	<b>Women</b>	<b>Total</b>
<b><u>Associate</u></b>			
Agriculture, Agriculture Operations, and Related Sciences	12	18	30
Architecture and Related Services	0	0	0
Biological and Biomedical Sciences	2	0	2
Business, Management, Marketing, and Related Support Services	353	718	1,071
Communication, Journalism, and Related Programs	17	13	30
Communications Technologies/Technicians and Support Services	4	9	13
Computer and Information Sciences and Support Services	58	12	70
Education	8	17	25
Engineering	18	5	23
Engineering Technologies/Technicians	146	27	173
Family and Consumer Sciences/Human Sciences	22	214	236
Foreign languages, literatures, and Linguistics	1	5	6
Health Professions and Related Clinical Sciences	137	919	1,056
Legal Professions and Studies	5	53	58
Liberal Arts and Sciences, General Studies and Humanities	594	1,103	1,697
Mathematics and Statistics	1	1	2
Mechanic and Repair Technologies/Technicians	4	0	4
Natural Resources and Conservation	2	3	5
Parks, Recreation, Leisure, and Fitness Studies	14	12	26
Personal and Culinary Services	11	12	23
Philosophy and Religious Studies	0	0	0
Physical Sciences	0	0	0
Psychology	0	6	6
Public Administration and Social Service Professions	7	43	50
Science Technologies/Technicians	9	0	9
Security and Protective Services	113	98	211
Social Sciences	0	4	4
Transportation and Materials Moving	3	0	3
Visual and Performing Arts	110	126	236
<b>Total Associate Degrees</b>	<b>1,651</b>	<b>3,418</b>	<b>5,069</b>

Appendix C (Continued)  
**Degrees and Certificates by Level, Discipline and Gender of Recipient**  
**Connecticut Colleges and Universities**  
2006-07

<b>Discipline</b>	<b>Men</b>	<b>Women</b>	<b>Total</b>
<b><u>Bachelor's</u></b>			
Agriculture, Agriculture Operations, and Related Sciences	49	75	124
Architecture and Related Services	26	43	69
Area, Ethnic, Cultural, and Gender Studies	84	172	256
Biological and Biomedical Sciences	328	489	817
Business, Management, Marketing, and Related Support Services	1,636	1,533	3,169
Communication, Journalism, and Related Programs	408	643	1,051
Computer and Information Sciences and Support Services	206	37	243
Education	175	487	662
Engineering	505	100	605
Engineering Technologies/Technicians	155	19	174
English Language and Literature/Letters	271	658	929
Family and Consumer Sciences/Human Sciences	18	248	266
Foreign languages, literatures, and Linguistics	73	162	235
Health Professions and Related Clinical Sciences	200	1,073	1,273
History	393	320	713
Legal Professions and Studies	11	29	40
Liberal Arts and Sciences, General Studies and Humanities	470	814	1,284
Library Science	0	6	6
Mathematics and Statistics	100	101	201
Multi/Interdisciplinary Studies	130	197	327
Natural Resources and Conservation	36	21	57
Parks, Recreation, Leisure, and Fitness Studies	49	35	84
Personal and Culinary Services	0	0	0
Philosophy and Religious Studies	93	69	162
Physical Sciences	155	123	278
Psychology	311	1,231	1,542
Public Administration and Social Service Professions	24	187	211
Science Technologies/Technicians	1	1	2
Security and Protective Services	219	244	463
Social Sciences	1,212	1,043	2,255
Theology and Religious Vocations	0	0	0
Transportation and Materials Moving	1	0	1
Visual and Performing Arts	430	584	1,014
<b>Total Bachelor's Degrees</b>	<b>7,769</b>	<b>10,744</b>	<b>18,513</b>

Appendix C (Continued)  
**Degrees and Certificates by Level, Discipline and Gender of Recipient**  
**Connecticut Colleges and Universities**  
2006-07

<b>Discipline</b>	<b>Men</b>	<b>Women</b>	<b>Total</b>
<b><u>Post-Baccalaureate Certificates</u></b>			
Area, Ethnic, Cultural, and Gender Studies	0	0	0
Biological and Biomedical Sciences	2	3	5
Business, Management, Marketing, and Related Support Services	21	32	53
Computer and Information Sciences and Support Services	16	3	19
Education	7	51	58
Engineering	10	1	11
Engineering Technologies/Technicians	0	0	0
English Language and Literature/Letters	1	0	1
Family and Consumer Sciences/Human Sciences	0	0	0
Health Professions and Related Clinical Sciences	1	7	8
History	2	0	2
Legal Professions and Studies	5	6	11
Mathematics and Statistics	2	3	5
Multi/Interdisciplinary Studies	0	0	0
Natural Resources and Conservation	0	3	3
Parks, Recreation, Leisure, and Fitness Studies	0	0	0
Philosophy and Religious Studies	2	3	5
Psychology	1	3	4
Public Administration and Social Service Professions	3	7	10
Security and Protective Services	12	28	40
Social Sciences	0	0	0
Theology and Religious Vocations	5	4	9
Visual and Performing Arts	0	1	1
<b>Total Post-Baccalaureate Certificates</b>	<b>90</b>	<b>155</b>	<b>245</b>

Appendix C (Continued)  
**Degrees and Certificates by Level, Discipline and Gender of Recipient**  
**Connecticut Colleges and Universities**  
2006-07

<b>Discipline</b>	<b>Men</b>	<b>Women</b>	<b>Total</b>
<b><u>Master's</u></b>			
Agriculture, Agriculture Operations, and Related Sciences	5	10	15
Architecture and Related Services	46	32	78
Area, Ethnic, Cultural, and Gender Studies	16	61	77
Biological and Biomedical Sciences	118	160	278
Business, Management, Marketing, and Related Support Services	1,174	803	1,977
Communication, Journalism, and Related Programs	15	42	57
Computer and Information Sciences and Support Services	163	58	221
Education	622	2,195	2,817
Engineering	305	87	392
Engineering Technologies/Technicians	37	6	43
English Language and Literature/Letters	36	57	93
Family and Consumer Sciences/Human Sciences	19	62	81
Foreign languages, literatures, and Linguistics	39	61	100
Health Professions and Related Clinical Sciences	163	809	972
History	51	67	118
Legal Professions and Studies	29	31	60
Liberal Arts and Sciences, General Studies and Humanities	20	41	61
Library Science	19	80	99
Mathematics and Statistics	61	41	102
Multi/Interdisciplinary Studies	13	18	31
Natural Resources and Conservation	65	80	145
Parks, Recreation, Leisure, and Fitness Studies	13	12	25
Philosophy and Religious Studies	53	71	124
Physical Sciences	83	54	137
Psychology	65	211	276
Public Administration and Social Service Professions	53	193	246
Security and Protective Services	57	94	151
Social Sciences	115	108	223
Theology and Religious Vocations	66	33	99
Visual and Performing Arts	164	164	328
<b>Total Master's Degrees</b>	<b>3,685</b>	<b>5,741</b>	<b>9,426</b>

Appendix C (Continued)  
**Degrees and Certificates by Level, Discipline and Gender of Recipient**  
**Connecticut Colleges and Universities**  
2006-07

<b>Discipline</b>	<b>Men</b>	<b>Women</b>	<b>Total</b>
<b><u>Doctoral</u></b>			
Agriculture, Agriculture Operations, and Related Sciences	16	4	20
Area, Ethnic, Cultural, and Gender Studies	4	7	11
Biological and Biomedical Sciences	67	74	141
Business, Management, Marketing, and Related Support Services	15	3	18
Computer and Information Sciences and Support Services	8	0	8
Education	28	44	72
Engineering	52	20	72
English Language and Literature/Letters	10	10	20
Family and Consumer Sciences/Human Sciences	2	5	7
Foreign languages, literatures, and Linguistics	11	22	33
Health Professions and Related Clinical Sciences	24	52	76
History	14	9	23
Legal Professions and Studies	4	5	9
Mathematics and Statistics	21	7	28
Multi/Interdisciplinary Studies	4	10	14
Natural Resources and Conservation	10	5	15
Philosophy and Religious Studies	12	1	13
Physical Sciences	52	24	76
Psychology	17	57	74
Public Administration and Social Service Professions	0	1	1
Social Sciences	31	31	62
Theology and Religious Vocations	1	5	6
Visual and Performing Arts	22	13	35
<b>Total Doctoral Degrees</b>	<b>425</b>	<b>409</b>	<b>834</b>
<b><u>First-Professional</u></b>			
Health Professions and Related Clinical Sciences	126	186	312
Legal Professions and Studies	296	268	564
Theology and Religious Vocations	44	36	80
<b>Total First-Professional Degrees</b>	<b>466</b>	<b>490</b>	<b>956</b>