

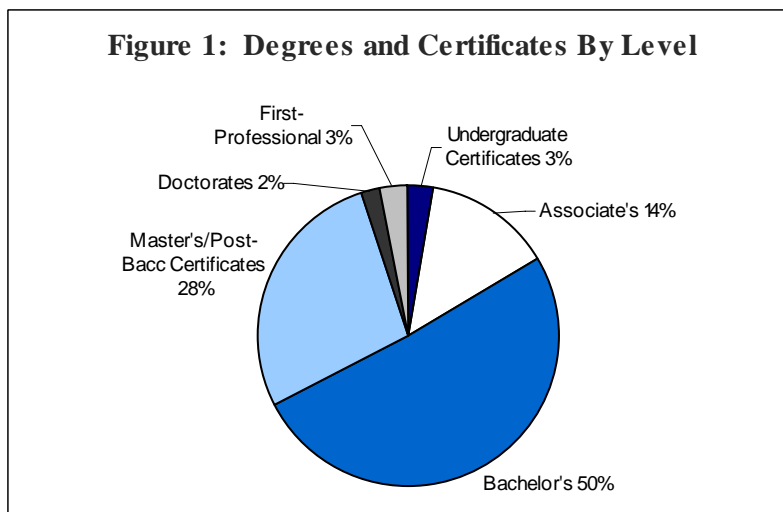


## 2005-06

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

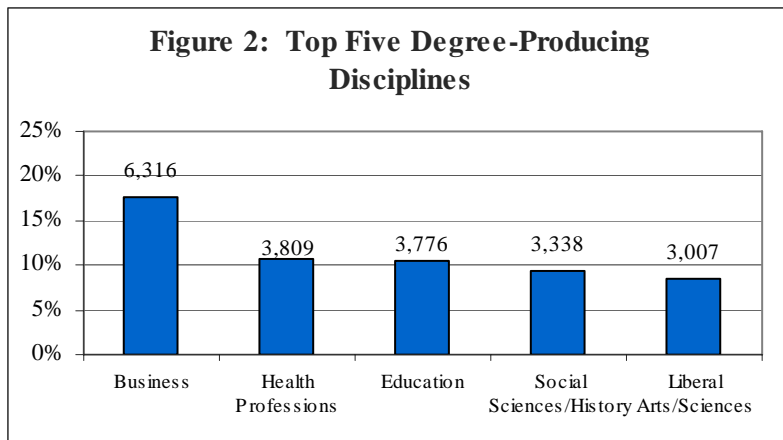
- Connecticut colleges and universities awarded 35,694 degrees and certificates in 2005-06, up 3.2 percent over 2004-05 for the fifth consecutive year of growth. The cumulative increase since 2000-01 is 20 percent. Over the last decade, degrees have risen 25 percent, roughly reflecting the increase in full-time equivalent (FTE) enrollment over this period.
- Baccalaureate degrees were a majority (50.4%) of all awards in 2005-06 for only the second time in the last 13 years. (They were 50.1% of degrees in 2003-04, slipped to 48.7% in 2004-05 and regained the majority in 2005-06.) The second and third most commonly awarded degrees were at the master's (27%) and associate's (14%) level, respectively (see Figure 1).

- Degree levels with increases this year were doctorates, bachelor's and first-professional, up 7.6 percent, 6.9 percent and 3.9 percent, respectively. Associate's degrees, however, were down less than 0.8 percent and master's declined 2.4 percent.

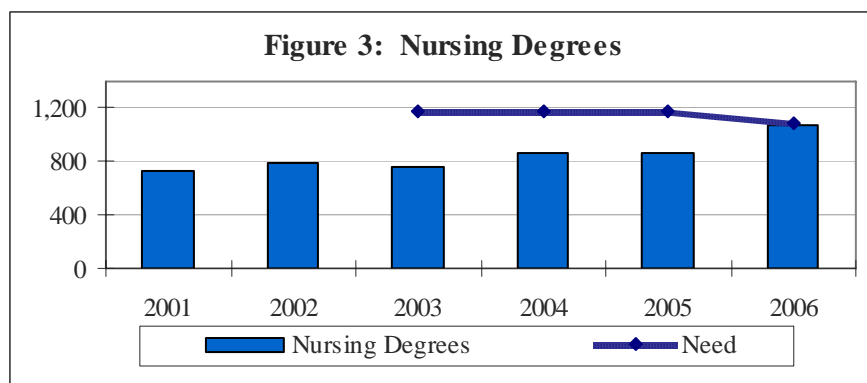


- The number of minority students earning degrees rose 8.5 percent or more than double the statewide 3.2 percent increase. Degrees earned by African Americans and Hispanics/Latinos were up 9.8 percent and 9.1 percent, respectively. Minority students earned 17.5 percent of all awards in 2005-06, up from 12.6 percent 10 years ago (1995-96).
- The number of non-resident alien (international) students earning degrees fell by 5.4 percent.
- Women earned more than 60 percent (60.3%) of all degrees in 2005-06, up from 57 percent a decade ago. This year was the first time that women earned a majority of first-professional degrees (51%) and the second year that they earned both more than half of doctoral degrees (also 51% in 2005-06) and more than two-thirds of combined associate's degrees and undergraduate certificates (68% in 2005-06).

- Once again, the top five degree-producing disciplines were business, health professions, education, social sciences and history, and liberal arts and sciences (Figure 2). These five fields comprise 57 percent of all degrees in 2005-06. All but business saw gains this year.



- Public colleges and universities awarded 18,514 degrees in 2005-06, up 4.8 percent over 2004-05. Independent institutions granted 17,180 degrees, up 1.0 percent over last year. The public sector this year produced 51.9 percent of all awards, a majority for the second consecutive year.
- Degrees across the health professions rose significantly (up 8%) to 3,811 in 2005-06, in a third year of robust growth since a drop in 2002-03. Nursing degrees increased 25 percent, largely due to the first degrees awarded by Goodwin College, falling just shy of annual need projected by the Connecticut Department of Labor (Figure 3).



- Fewer degrees (3,373, down 4% over 2004-05) were awarded across four fields important to Connecticut’s industry “clusters,” fueled entirely by a 21 percent drop in computer science. Growth in the other three fields was tepid ranging from one to three percent, but the five-year increases were healthy — engineering is up 48 percent, biological sciences increased 21 percent and physical sciences rose nine percent between 2002 and 2006.
- Performance among the 28 largest institutions (i.e., those awarding at least 500 degrees in the last two years and representing 94 percent of the total degrees over that period) varied greatly:
  - ⇒ Three experienced greater than a 10 percent annual increase in 2005-06: Charter Oak State College (up 34%), Connecticut College (up 12%) and Gateway Community College (up 11%).
  - ⇒ Three encountered greater than six percent decreases in 2005-06: Rensselaer at Hartford (down 11%) and both Norwalk and Three Rivers Community Colleges (down 7%).
- Forty-three percent (1,581) of the teacher preparation awards were in the 10 critical shortage areas identified last year by the State Department of Education (see Table 7). That share is higher than last year, but results mostly from two new areas added to the shortage list this year.

## 2005-06

### DEGREES CONFERRED BY CONNECTICUT INSTITUTIONS OF HIGHER EDUCATION

#### INTRODUCTION

This report analyzes the numbers and types of degrees conferred by Connecticut institutions of higher education in 2005-06 and compares it to previous years and statewide needs. These figures reflect the degrees awarded between July 1, 2005 and June 30, 2006. 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 35,694 degrees in 2005-06, an increase of 1,112 (3.2%) over the 2004-05 total of 34,582. A full list of degrees by institution and level appears in Appendix A.

Statewide degree production shows a strong upward trend over the 10 years since the nadir of 28,462 in 1996 (Table 1). (There were slight declines — less than 0.5% — in 1998 and 2001.) Total degrees increased 25 percent between 1995-96 and 2005-06, with bachelor's degrees (up 30%) and master's (up 29%) showing above average growth, and associate's (up 5%) and doctorates (up 9%) seeing more modest growth.

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

Number	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
Undergraduate Certificates	823	824	772	1,098	1,253	1,140	1,046	1,056	1,086	952	978
Associate's	4,789	4,842	4,500	4,654	4,385	4,391	4,469	4,727	4,807	5,059	5,018
Bachelor's	13,814	13,946	14,102	14,430	14,548	14,137	14,819	16,038	16,857	16,836	18,001
Post-Baccalaureate Certificates	31	33	31	32	2	76	139	117	200	210	315
Master's	7,408	7,592	7,742	8,024	7,951	8,367	8,434	8,904	9,068	9,828	9,593
Doctorates	676	667	686	629	667	614	599	649	692	683	735
First-Professional	921	955	884	845	951	962	992	1,008	949	1,014	1,054
<b>Total</b>	<b>28,462</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>

% of Total	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
Undergraduate Certificates	3%	3%	3%	4%	4%	4%	3%	3%	3%	3%	3%
Associate's	17%	17%	16%	16%	15%	15%	15%	15%	14%	15%	14%
Bachelor's	49%	48%	49%	49%	49%	48%	49%	49%	50%	49%	50%
Post-Baccalaureate Certificates	0.1%	0.1%	0.1%	0.1%	0.01%	0.3%	0.5%	0.4%	0.6%	0.6%	0.9%
Master's	26%	26%	27%	27%	27%	28%	28%	27%	27%	28%	27%
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>

Baccalaureate degrees were a majority (50.4%) of all awards in 2005-06 for only the second time in the last 13 years. Associate's, bachelor's and master's degrees combined account for 91 percent of all awards this year, reflecting a steady share for the last 24 years.

The relative share of associate's degrees (21% in 1985 to 14% in 2006) and master's (21% then to 27% now) has changed over the last two decades. Twenty-one years ago, total associate's degrees

essentially equaled the total number of master's degrees (5,800 compared to 5,828); this year, associate's are only about half of master's degrees (5,018 compared to 9,593). The change in associate's degrees in Connecticut between 1985 and 2006 differed most from the national change in associate's degrees between 1985 and 2004 (the last year of national data) in these areas:

- Total associate's degrees (13% decline in our state; 55% increase for the U.S.)
- Liberal Arts and General Studies associates (down 9% in state; up 124% nationally.)
- Visual and Performing Arts (up 630% in state; up 89% nationally.)
- Engineering Technology (down 81% in state; down 35% nationally.)

Connecticut's comparative underproduction of associate's degrees, particularly in engineering technology, does not bode well for the State's supply of skilled labor.

### DEGREES AWARDED BY SECTOR

The public sector (including the U.S. Coast Guard Academy) awarded 51.9 percent of all degrees in 2006, up from 50.8 percent last year (see Table 2). The independent sector awarded a majority of degrees in the six years between 1999 and 2004.

The public sector regained its majority of degrees in 2005 and kept it in 2006 because of a marked difference in growth rates — the public sector increased 5.7 percent in 2005 and 4.8 percent this year, while the independents were down slightly (0.1%) in 2005 and up a modest 1.0 percent this year. The public-vs.-independent differential was even greater in bachelor's degree production — the publics saw a 14.3 percent increase over the last two years and the independents registered a 0.6 percent decline.

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

	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
<b>Public Institutions</b>											
Undergraduate certificates	751	751	722	681	646	674	716	783	782	721	793
Associate's	3,915	3,885	3,547	3,700	3,355	3,260	3,349	3,503	3,556	3,795	3,747
Bachelor's	7,201	7,031	6,896	6,881	6,975	6,898	7,116	7,934	8,359	8,722	9,556
Post-Baccalaureate certificates								37	54	81	75
Master's	2,773	2,979	2,937	3,034	2,871	3,154	2,843	3,248	3,244	3,603	3,578
Doctoral	239	254	253	227	275	234	221	237	257	261	443
First-Professional	312	324	307	296	339	331	379	341	356	402	327
<b>Subtotal</b>	<b>15,191</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>Independent Institutions</b>											
Undergraduate certificates	72	73	50	417	607	466	330	273	304	231	185
Associate's	874	957	953	954	1,030	1,131	1,120	1,224	1,251	1,264	1,271
Bachelor's	6,613	6,915	7,206	7,549	7,573	7,239	7,703	8,104	8,498	8,114	8,445
Post-Baccalaureate certificates		31	33	31	32	2	76	102	63	119	135
Master's	4,635	4,613	4,805	4,990	5,080	5,213	5,591	5,656	5,824	6,225	6,015
Doctoral	437	413	433	402	392	380	378	412	435	422	611
First-Professional	609	631	577	549	612	631	613	667	593	612	408
<b>Subtotal</b>	<b>13,271</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>All Institutions</b>											
Undergraduate certificates	823	824	772	1,098	1,253	1,140	1,046	1,056	1,086	952	978
Associate's	4,789	4,842	4,500	4,654	4,385	4,391	4,469	4,727	4,807	5,059	5,018
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<b>Grand Total</b>	<b>28,462</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>

The overall 51.9 percent share for the publics varies greatly by level — i.e., the publics represent more than three-fourths (76%) of associate’s degrees and undergraduate certificates, a slight majority (53%) of bachelor’s degrees, but just less than two-fifths (38%) of all post-baccalaureate (including first-professional) awards. The public sector’s share of both baccalaureate and post-baccalaureate awards has remained relatively stable over the last decade, but its share of associate’s and undergraduate certificates fell from 83 percent to this year’s 76 percent.

**DEGREES AWARDED TO MINORITY STUDENTS**

Minority students earned 6,262 degrees in 2006 or 8.5 percent more than in 2005, with their growth rate almost quadrupling the 2.2 percent growth among students not classified as minorities (see Table 3). The largest percentage growth in minority degrees was among African Americans (up 9.8%) and Hispanics/Latinos (up 9.1%). The number of degrees awarded to minorities has consistently grown over the last two decades, with one small 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
1995-96	1,462	987	1,050	75	3,574	22,404	1,674	810	28,462
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

1 Year Change	9.8%	9.1%	5.8%	3.9%	8.5%	2.4%	-5.4%	6.7%	3.2%
Change, 1996 to 2006	86%	98%	38%	79%	75%	9%	29%	253%	25%

Percent of Total	7.6%	5.5%	4.1%	0.4%	17.5%	68.4%	6.0%	8.0%	100.0%
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**Reference groups:**

CT Adult Population, 2005*	8.5%	9.5%	3.2%	0.2%	21.4%	77.8%	n.a.	0.8%	100.0%
Percent of Total Fall 2005 CT Collegiate Enrollment	9.7%	7.5%	4.1%	0.4%	21.7%	66.5%	3.7%	8.1%	100.0%

\*Population 18 years and older

The minority share of total degrees has generally risen over the last two decades. Minority students earned 17.5 percent of all awards in 2006, compared to 6.9 percent in 1985 and 12.6 percent 10 years ago.

Although the number of minority degrees has grown steadily, their share lags behind their representation in two larger groups — Connecticut adults (those aged 18 and older in 2005 based on U.S. Census Bureau estimates) and college students enrolled in-state in fall 2005 (the start of the 2005-06 academic year that produced these degrees).

The 17.5 percent share for minorities among 2006 degree recipients compares to a 21.4 percent minority share in the state’s adult population, with some groups doing better than others. Asian Americans comprised 4.1 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 — 7.6 percent of degrees vs. 8.5 percent of adult population for African Americans, 5.5 percent of degrees vs. 9.5 percent of adult population for Hispanics/Latinos. This has improved over time given that minorities were 6.9 percent of all degrees in 1985 and 12.6 percent of all degrees in 1996, compared to their 17.5 percent in 2006.

More distressing is the 17.5 percent share of degrees awarded to minority students compared to their 21.7 percent share among Connecticut college students in fall 2005. African Americans (7.6% of degrees vs. 9.7% of enrollments) and Hispanic/Latinos (5.5% and 7.5%, 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, clearly too many African Americans and Hispanic/Latinos are not reaching to degree completion.

Finally, the third largest percentage gain in degrees by race/ethnicity in 2006 is those with race/ethnicity unknown. The number of these individuals increased 6.7 percent over 2005 and represent 8.0 percent of all degree recipients this year — more than any of the four minority categories. This is disturbing because as the number of students with race/ethnicity “unknown” or “unreported” grows (there were none as late as 1989), our ability to accurately report on the enrollment and success of underrepresented groups is diminished.

#### DEGREES AWARDED TO WOMEN

Women earned just over 60 percent of all degrees in 2006 (Table 4). They captured a majority of degrees at every level, and for the first time were more than half of first-professional degrees. This is the second consecutive year that women received a majority of doctoral degrees and 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 enrollments.

**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	Doctorate	First-Professional	Total
1984-85	57.6%	51.7%	50.8%	36.4%	36.0%	<b>52.0%</b>
1995-96	67.0%	55.2%	57.4%	40.8%	40.8%	<b>57.3%</b>
2001-02	64.5%	57.9%	58.9%	43.1%	47.5%	<b>58.7%</b>
2002-03	64.6%	58.3%	60.1%	48.7%	47.1%	<b>59.4%</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>

The gender imbalance is more pronounced in two of the minority communities. The 60.3 percent female share among all 2006 college graduates compares to 66.9 percent among African Americans (or more than two women for every man), 64.2 percent among Hispanics/Latinos, and 60.8 percent among whites, and is less pronounced among non-resident aliens (48.2% female), Asian Americans (55.8%) and those with unknown race/ethnicity (57.6%). Throughout 23 years of completions data, the share of females among white students has always been higher than the share of females among all non-white students combined.

### **DEGREES AWARDED TO NON-RESIDENT ALIENS**

Degrees awarded to non-resident aliens (international students here on a student visa) fell to 2,158 in 2006 (down 5.4%, also in Table 3) after more than tripling over the previous two decades.

This decrease reflects the reduced availability of student visas after the attacks on September 11, 2001 and a steady decrease in non-resident alien enrollments since the peak year of 2002. (Their enrollment declined 12% between fall 2002 and fall 2005.)

The previous two years saw growth in degrees awarded to non-resident alien, despite their drop in enrollment over that period. Given that non-resident aliens are more heavily represented in graduate enrollment, we assume that doctoral students were rushing to complete their degrees, out of fear that student visas and other restrictions on travel might tighten further. In effect, the increase in non-resident alien degrees in 2004 and 2005 were primarily a displacement — i.e., degrees that normally would be awarded over the next few years instead being accelerated into those two years. Now that the decline has started, we expect it to continue for at least the near future.

### **TOP FIVE DISCIPLINES**

The Appendix includes a description of two recent methodological changes in reporting data by discipline. Despite the changes described there, the top five degree-producing disciplines in 2006 continue to be the same as those for the last 19 years. In descending order, the top five in 2006 were business, health professions, education, social sciences and history, and liberal arts and sciences (see Figure 2). The only change in the ranking this year was health professions and education trading second and third place.

A total of 20,246 students received degrees in these 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 program and industry workforce needs, except in fields involving state licensure.) Across the four fields combined, the 3,373 awards in 2006 represent a four percent decline from last year and a modest 15 percent increase over the last five years.

- **Engineering** is the only major success in the medium-term (up 48% over the last five years), albeit with only two percent growth in 2006. The longer-term view, however, is less favorable because the 1,080 awards for 2005 are less than the total for each available year between 1983 and 1990 and the peak of 1,486 in 1985.
- **Biological sciences** also saw tepid growth (3%) to 1,134 awards in 2006. It is, however, in its fourth straight year of gain with a cumulative 21 percent increase. (It also beat — albeit barely — the previous record peak in 1996.) This is a discipline with many new programs due to the CIP code changes, so its growth in the last two years could be mostly due to definitional changes, rather than “true” growth.
- **Physical sciences** (e.g., chemistry, physics, astronomy and geology) with 465 awards is only five more than its 2005 total, but is a distinct improvement over its 21-year low in 2004 when it produced only 373 awards. Over the last five years, these sciences combined saw only a nine percent growth in degrees.
- **Computer science** was down 21 percent in 2006 in its third year of decline that has produced a cumulative 31 percent drop since its peak year in 2003. There is both a pessimistic and optimistic interpretation of this marked drop.

The pessimistic view is that the decline during the last two 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 when the 1990 version of the CIP codes was created in the late 1980s or were in their very nascent days. Those added options starting in 2005 could have absorbed degrees that formerly were classified under communications technology, engineering technology and business. (That hypothesis could also explain part of the drop in business degrees in both 2005 and 2006, making that field the only of the top five disciplines to see a drop in either year.)

The more optimistic interpretation is that the recent decline 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 show up in those fields.

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

	2002	2003	2004	2005	2006	1-Year Change	2002-06 Change
Biological Sciences	938	1,015	1,046	1,100	1,134	3%	21%
Computer Science	844	1,013	897	881	694	-21%	-18%
Engineering	728	822	931	1,062	1,080	2%	48%
Physical Sciences	425	426	373	460	465	1%	9%
Total	2,935	3,276	3,247	3,503	3,373	-4%	15%

### HEALTH AND NURSING PROFESSIONS

Degrees in health fields saw above average growth of eight percent to 3,811 in 2006 and are up 27 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**

	2002	2003	2004	2005	2006	1-Year Change	2002-06 Change
All of Health Professions	2,990	2,974	3,231	3,532	3,811	8%	27%
Nursing Degrees*	795	753	866	862	1,076	25%	35%

\*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.

Degrees in nursing saw an even larger growth of 25 percent in 2006, partially because Goodwin College awarded the first degrees from its new nursing program. Goodwin produced 108 degrees in its first year and expects continued growth for the near future. (Note that the new Goodwin program provided almost exactly both 10% of statewide production in 2006 and half of the 210 increase in degrees between 2005 and 2006.) The medium term picture also is positive with a 35 percent increase over the last five years.

This year's supply of 1,076 falls just shy of the projected annual job openings (1,081) for registered nurses in forecasts produced by the Connecticut Department of Labor. Registered nurses is the fourth fastest growing occupation in annual job openings — behind retail salespersons, cashiers and waiters and waitresses, where many of the openings occur more because of rapid turnover rather than underlying growth in the number of jobs. It is the only one of the top 12 jobs for annual job openings that has any higher education prerequisite. (Position #13 is accountants and auditors.)

### TEACHER PREPARATION

A total of 3,679 students received credentials that could lead to state teacher certification (Table 7), up one percent from the 2005 total. This year's total is up 10 percent over 2001, which was the first year with reliable data. Twenty-four percent of all awards went to men; nine percent of all awards went to known minorities.

Sixteen Connecticut institutions offer teacher preparation credentials. The three largest producers (providing 49% of the statewide total) are all in the public sector — Southern Connecticut State University (752 awards), Central Connecticut State University (654) and University of Connecticut, Storrs (383). Southern by itself provides more than one-fifth of the state total.

The next three largest producers are two independent universities (Sacred Heart with 381 awards and University of Bridgeport with 301) and the state-run Alternate Route to Certification with 268 awards. These three added another 26 percent of State total. The other 10 institutions provide the remaining 26 percent of awards.

The teacher preparation credentials by broad field were:

	<u>Number</u>	<u>Share of Total</u>
Elementary Education	1,026	28%
Special Subjects, K-12	862	23%
Secondary Academic Subjects	783	21%
Administrative, Pre K-12	388	11%
School Counselor	224	6%
Special Education	222	6%
Early Childhood Education	100	3%
Middle Grades 4-8	74	2%
<b>Total</b>	<b>3,679</b>	<b>100%</b>

Among the 833 awards in secondary and middle school with an academic subject (24 middle grade awards listed no subject), the most popular disciplines were history/social studies (210 awards or 25% of the academic subjects), mathematics (194 awards or 23% of the subjects) and English (174 awards or 21%). Awards across all math and science fields (i.e., including biology, general science chemistry, earth science and physics) totaled 369 or 28 percent of awards with a listed subject.

With the 473 awards in special subjects (grades K-12) added, three more subjects came in at over 90 awards — music (127), physical education (118) and art (99). The science awards still totaled 369, but fell to 28 percent of the total of 1,306 across all subjects.

Unfortunately, only 43 percent (1,581 out of the total 3,679 awards) were in the 10 teacher shortage areas identified during 2005-06 by the Connecticut Department of Education. The shortage areas with the most awards were:

- Intermediate administrator (339 awards)
- Remedial reading, Grades 1-12 (235)
- Comprehensive special education, Grades 1-12 (222)

In addition to the 1,581 awards that exactly met the shortage area criteria, there were 43 other awards that partially overlapped with the grades 7-12 academic subjects — i.e., grades 4-8 or K-12 certification.

**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	339
Remedial Reading, 1-12	235
Comprehensive Special Ed, 1-12	222
Science 7-12*	189
Math, 7-12*	180
English 7-12*	163
Music, PreK-12	126
Speech & Language Pathology	73
World Languages, 7-12*	54
Bilingual, PreK-12**	0
<b>Total</b>	<b>1,581</b>
Total in all Areas	3,679
<b>Percent in Shortage Areas</b>	<b>43%</b>

\*There were another 14 awards in math, 11 each in both English and science that were at the 4-8 grade levels and 7 awards in world language at the K-12 level that intersect with, but are not identical to, the priority areas. All 43 awards were from the Alternate Route to Certification.

\*\*No new credentials were awarded in bilingual education because of a new CT Dept. of Education requirement of dual certification — i.e., in both language and subject area. No CT institution offered that dual certification in either 2004-05 or 2005-06, but two colleges have revamped their programs to reflect the statutory change and may produce awards this year.

The 1,581 awards in the shortage areas in 2006 appears to be a major increase (i.e., 47%) over the 1,074 awards in the high priority areas that were used in 2005. The increase, however, is largely an artifact of what fields were added to or removed from the shortage areas in each year and an increase from nine to 10 in the number of priority areas. (Priority areas are based on hiring-process data in the school districts from the previous year.) In the fields that were on the priority list in both years, the awards were 1,032 in 2005 and 1,007 in 2006 — i.e., a 2 percent drop, rather than a 47 percent increase.

The priority area included in the 2005 list, but excluded from this year's list was technology education which had 44 awards last year. The two priority areas added to the list for 2006 were intermediate administrators (339 awards in 2006) and remedial reading & language arts (235 awards.) Deleting a field that made 44 awards and adding two fields with a combined 574 awards alone yields a net gain of 530 awards.

#### **INSTITUTIONAL PERFORMANCE**

Appendix A lists totals by institutions and level for 2006. Comparing 2006 to 2005, and based only on the 28 colleges awarding at least 500 degrees over the last two years (they represent 94% of statewide total degrees), the five largest annual percentage increases and declines are:

Largest One-Year Gains/Losses, 2005 to 2006

<b>Largest % Increases</b>		<b>Largest % Decreases</b>	
Charter Oak State College	34.2%	Rensselaer At Hartford	-10.5%
Connecticut College	12.0%	Three Rivers Community College	-6.7%
Gateway Community College	10.8%	Norwalk Community College	-6.5%
Trinity College	9.4%	Sacred Heart University	-5.7%
Western CT State University	8.7%	Housatonic Community College	-4.3%

Replicating that exercise over a five-year period (2001 to 2006) and using the same filtering criteria yields this list:

Largest Five-Year Changes, 2001 to 2006

<b>Largest % Increases</b>		<b>Largest Decreases OR Smallest Increases</b>	
Charter Oak State College	81%	Rensselaer At Hartford	-43%
Quinnipiac University	57%	Three Rivers Community College	-20%
Gibbs College	47%	Fairfield University	5%
Gateway Community College	40%	Connecticut College	6%
Central CT State University	40%	Southern CT State University	7%

Note that the large statewide increase between 2001 and 2006 (i.e., 20%) meant that the right-hand column contains a mix of both the largest decreases and the smallest increases.

**CONCLUSION**

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

While the number of degrees to 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 Connecticut works close this achievement gap by improving retention, transfer and four-year degree completions for Hispanics/Latinos and African Americans.

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.

Third, the number of nursing degrees, although coming close to projected annual job openings this year, still represents a long-term supply of nurses that falls short of the long-term demand for them. Creative partnerships between the Department of Higher Education, colleges and private industry have helped to significantly increase the number of nurses, but these efforts need to continue. An increase in the number of men entering nursing (especially from veterans

who performed medical functions while serving in the military) also could narrow or close that long-term shortage problem.

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

## GLOSSARY & USAGE

### A. USAGE

All references to “degrees” are meant to apply to degrees, certificates and other formal awards from a college or university. The 35,694 degrees in 2005 were reported under one major/field; an additional 1,220 double/multiple majors were associated with those degrees, but are counted only when looking at degrees in specific priority areas.

### B. DEGREE LEVELS

The tables showing degrees by level have the “master’s” category, which includes both master’s degrees and post-master’s certificates — e.g., Sixth-Year Certificates (SYC), Yale’s Master’s of Philosophy (M.Phil.) degrees and many Certificates of Advanced Study (CAS). The 9,593 “master’s” listed in the tables for 2005-06 comprise 8,684 master’s degrees and 909 post-master’s certificates.

### C. FIRST-PROFESSIONAL DEGREES

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

### D. TEACHER PREPARATION CREDENTIALS

The teacher preparation data has surprisingly little overlap with the degrees data in education. Information on teacher preparation is collected separately from the 16 institutions authorized to issue teacher preparation credentials — 15 colleges and our Alternate Route to Certification (ARC) program.

Many teacher preparation credentials do not appear in the degrees data. Connecticut generally 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.

Conversely, many degrees in education do not show up in the teacher preparation data because they are not preparing teachers. Examples include teacher assistants/aides, degrees in the higher education sector within education and many programs for school administrators who must already be certified teachers to enroll in the program.

Finally, many of those receiving teacher preparation credentials may already be certified teachers.

### E. RACE/ETHNICITY DATA

The Federal government requires colleges to report students and graduates in one of seven racial/ethnic groups (Table 3). Five groups actually are race 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” (which could be bi- or multi-racial, Hispanic ethnicity and racial minority, other races, etc.) 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 data in 1983, the total in those last two ambiguous categories has always been more than those of Latinos, Asians or American Indians; since 1987, it has been more than African Americans. Those two ambiguous categories twice (in 1990 and 1992) exceeded the total minority degree recipients across all four categories, and the degree recipients in the ambiguous categories have ranged between 80 percent and 93 percent of the total minority degree recipients in each year from 2003 to 2006.

Degree recipients in 2005 are 6,262 minorities, 24,413 whites, and 5,019 ambiguous. The minority students represent 17.5 percent of all degree recipients and 20.4 percent of degree recipients with a known race/ethnicity. In this report, we use the conservative minimum share of 17.5 percent minority, which is correct only in the unlikely event that no ambiguous degree recipient was in one of those four minority race/ethnicities.

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

The 2005 degrees completion data included 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 awarded 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 pre-2005 data categories for trend analysis purposes. Two such adjustments are worth noting here:

- The CIP group for business in 2005 absorbed the former CIP group for marketing and distribution, so that the 2005 data on business includes those re-assigned programs. To make the historical data comparable, marketing degrees were added into the pre-2005 data for business, as more narrowly defined then.
- The CIP group for social sciences and history was divided into a CIP group for social sciences and one for history. To make the historical data comparable, the 2005 history data were folded into the 2005 social sciences data.

The overall result of the CIP changes is that for the short-term, we cannot be sure that an increase or decrease in degrees in a broad field represents “real” growth or decline, or instead reflects growth or decline resulting from shifting CIP codes in some disciplines.

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 six years of multiple majors 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 previous years.

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 into 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**  
2005-06

Public Institutions	Undergrad Certificates	Associate's	Bachelor's	Post-Bacc Certificates	Master's	Doctoral	First Professional	Total
University of Connecticut								
Storrs	0	24	4,231	32	1,487	307	322	6,403
UConn Health Center	0	0	0	0	0	0	121	121
Connecticut State University								
Central	0	0	1,563	38	724	18	0	2,343
Eastern	0	8	890	0	102	0	0	1,000
Southern	0	5	1,287	0	1,026	2	0	2,320
Western	0	9	731	0	239	0	0	979
Community Technical Colleges								
Asnuntuck	95	131	0	0	0	0	0	226
Capital	35	291	0	0	0	0	0	326
Gateway	124	462	0	0	0	0	0	586
Housatonic	38	336	0	0	0	0	0	374
Manchester	124	508	0	0	0	0	0	632
Middlesex	17	183	0	0	0	0	0	200
Naugatuck	81	452	0	0	0	0	0	533
Northwestern	32	110	0	0	0	0	0	142
Norwalk	78	411	0	0	0	0	0	489
Quinebaug Valley	43	158	0	0	0	0	0	201
Three Rivers	42	332	0	0	0	0	0	374
Tunxis	84	272	0	0	0	0	0	356
State Technical College								
Charter Oak State College	0	55	643	0	0	0	0	698
<b>Total, State Institutions</b>	793	3,747	9,345	70	3,578	327	443	18,303
United States Coast Guard								
U.S. Coast Guard Academy	0	0	211	0	0	0	0	211
<b>Total, Public Institutions</b>	793	3,747	9,556	70	3,578	327	443	18,514
<b>Total, Public Institutions</b>	793	3,747	9,556	70	3,578	327	443	18,514

Appendix A  
**Degrees and Certificates Granted by Colleges and Universities in  
Connecticut  
2005-06**

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	468	0	9	0	0	477
Trinity College	0	0	531	0	30	0	0	561
Wesleyan University	0	0	747	0	97	10	0	854
Yale University	0	0	1,332	0	1,871	318	367	3,888
<b>Regional Independent</b>								
Albertus Magnus College	3	150	373	0	244	0	0	770
Fairfield University	0	2	824	0	348	0	0	1,174
Graduate Institute, The	0	0	0	0	72	0	0	72
Hartford Seminary	0	0	0	9	13	0	0	22
Holy Apostles College and Semina	0	0	6	4	21	0	9	40
Lyme Academy College of Fine Ar	0	0	11	1	0	0	0	12
Mitchell College	0	60	65	0	0	0	0	125
Paier College of Art	15	2	48	0	0	0	0	65
Post University	0	37	195	0	0	0	0	232
Quinnipiac University	0	4	1,232	5	502	0	197	1,940
Rensselaer at Hartford	0	0	0	26	289	0	0	315
Sacred Heart University	0	41	750	0	570	0	0	1,361
St. Basil College	0	0	2	0	0	0	0	2
St. Joseph College	0	0	231	0	154	0	0	385
St. Thomas Seminary	9	0	0	0	0	0	0	9
University of Bridgeport	0	30	223	0	614	22	38	927
University of Hartford	15	155	980	1	485	57	0	1,693
University of New Haven	50	32	427	199	696	1	0	1,405
<b>Two-Year Independent</b>								
Briarwood College	8	117	0	0	0	0	0	125
Gibbs College	35	370	0	0	0	0	0	405
Goodwin College	46	162	0	0	0	0	0	208
International College of Hospitality	4	25	0	0	0	0	0	29
St. Vincent's College	0	84	0	0	0	0	0	84
<b>Total, Independent Institutions</b>	185	1,271	8,445	245	6,015	408	611	17,180
<b>Total, All Institutions</b>	978	5,018	18,001	315	9,593	735	1,054	35,694

Appendix B  
**Degrees and Certificates by Level and Race/Ethnicity**  
**Connecticut Colleges and Universities**  
2005-06

	<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	13	1	3	17
Architecture and Related Services	0	0	0	0	5	1	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	20	26	5	1	157	4	9	222
Communication, Journalism, and Related Programs	0	0	0	0	0	0	0	0
Communications Technologies/Technicians and Support Services	1	0	0	0	3	0	0	4
Computer and Information Sciences and Support Services	5	4	2	0	24	6	0	41
Education	1	0	0	0	2	0	0	3
Engineering Technologies/Technicians	9	8	4	1	91	1	9	123
English Language and Literature/Letters	0	0	0	0	0	0	0	0
Family and Consumer Sciences/Human Sciences	14	10	2	0	57	2	6	91
Foreign languages, literatures, and Linguistics	0	0	0	0	1	0	0	1
Health Professions and Related Clinical Sciences	34	14	2	1	119	1	7	178
Legal Professions and Studies	5	3	0	0	33	0	7	48
Liberal Arts and Sciences, General Studies and Humanities	0	0	1	0	8	0	0	9
Library Science	0	0	0	0	7	0	0	7
Mechanic and Repair Technologies/Technicians	2	4	3	0	9	0	1	19
Multi/Interdisciplinary Studies	1	0	0	0	2	0	0	3
Natural Resources and Conservation	0	0	0	0	0	0	0	0
Parks, Recreation, Leisure, and Fitness Studies	1	0	0	0	3	0	1	5
Personal and Culinary Services	2	0	0	0	9	0	1	12
Physical Sciences	0	0	0	0	0	0	0	0
Public Administration and Social Service Professions	3	1	0	0	5	0	4	13
Security and Protective Services	9	6	2	0	70	0	0	87
Social Sciences	0	0	0	0	2	0	0	2
Transportation and Materials Moving	0	0	0	0	0	0	0	0
Visual and Performing Arts	0	2	1	0	16	0	3	22
<b>Total Certificate &lt; 1 Year Degrees</b>	<b>107</b>	<b>78</b>	<b>22</b>	<b>3</b>	<b>636</b>	<b>16</b>	<b>51</b>	<b>913</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	1	0	0	0	1	3	0	5
Computer and Information Sciences and Support Services	0	0	0	0	3	0	0	3
Engineering	0	0	0	0	0	0	0	0
Engineering Technologies/Technicians	0	1	0	0	2	0	1	4
Family and Consumer Sciences/Human Sciences	0	0	0	0	0	0	0	0
Health Professions and Related Clinical Sciences	1	1	0	0	21	0	0	23
Philosophy and Religious Studies	0	1	0	0	8	0	0	9
Public Administration and Social Service Professions	0	0	0	0	0	0	0	0
Visual and Performing Arts	1	5	2	0	13	0	0	21
<b>Total Certificate &gt; 1 Year Degrees</b>	<b>3</b>	<b>8</b>	<b>2</b>	<b>0</b>	<b>48</b>	<b>3</b>	<b>1</b>	<b>65</b>

Appendix B (Continued)  
**Degrees and Certificates by Level and Race/Ethnicity**  
**Connecticut Colleges and Universities**  
2005-06

	<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	0	0	0	32	1	1	34
Architecture and Related Services	0	0	0	0	1	0	0	1
Biological and Biomedical Sciences	0	0	0	0	2	0	1	3
Business, Management, Marketing, and Related Support Services	204	163	36	3	624	60	46	1,136
Communication, Journalism, and Related Programs	3	3	0	0	14	1	1	22
Communications Technologies/Technicians and Support Services	1	0	0	0	16	0	2	19
Computer and Information Sciences and Support Services	23	31	7	1	65	3	4	134
Education	2	1	0	0	10	0	0	13
Engineering	3	0	3	0	21	0	3	30
Engineering Technologies/Technicians	14	15	1	1	121	0	17	169
Family and Consumer Sciences/Human Sciences	39	32	3	0	133	6	10	223
Foreign languages, literatures, and Linguistics	0	0	0	0	2	0	0	2
Health Professions and Related Clinical Sciences	140	68	24	6	694	19	41	992
Legal Professions and Studies	6	9	1	0	37	1	2	56
Liberal Arts and Sciences, General Studies and Humanities	244	157	26	13	1,044	31	89	1,604
Mathematics and Statistics	1	0	0	0	2	0	0	3
Mechanic and Repair Technologies/Technicians	1	0	0	0	3	0	1	5
Natural Resources and Conservation	0	0	0	0	7	0	0	7
Parks, Recreation, Leisure, and Fitness Studies	2	0	0	0	15	1	0	18
Personal and Culinary Services	3	1	0	0	18	0	3	25
Philosophy and Religious Studies	0	0	0	0	0	0	0	0
Physical Sciences	0	0	0	0	6	0	0	6
Psychology	1	1	0	0	2	0	2	6
Public Administration and Social Service Professions	13	12	0	0	5	1	1	32
Science Technologies/Technicians	0	0	0	0	3	0	0	3
Security and Protective Services	24	25	3	0	141	0	6	199
Social Sciences	1	0	0	0	3	0	1	5
Transportation and Materials Moving	0	0	0	0	1	0	0	1
Visual and Performing Arts	46	40	6	2	168	1	7	270
<b>Total Associate Degrees</b>	<b>771</b>	<b>558</b>	<b>110</b>	<b>26</b>	<b>3,190</b>	<b>125</b>	<b>238</b>	<b>5,018</b>

Appendix B (Continued)  
**Degrees and Certificates by Level and Race/Ethnicity**  
**Connecticut Colleges and Universities**  
2005-06

	<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	3	5	1	1	115	1	5	131
Architecture and Related Services	5	2	8	0	53	3	4	75
Area, Ethnic, Cultural, and Gender Studies	30	18	21	3	149	8	44	273
Biological and Biomedical Sciences	39	37	84	5	472	25	59	721
Business, Management, Marketing, and Related Support Services	250	167	157	14	2,148	99	166	3,001
Communication, Journalism, and Related Programs	69	36	16	4	816	8	68	1,017
Computer and Information Sciences and Support Services	10	6	27	1	196	20	14	274
Construction Trades	0	0	0	0	17	1	2	20
Education	13	25	8	1	598	3	51	699
Engineering	23	19	40	2	367	27	32	510
Engineering Technologies/Technicians	6	11	5	1	112	3	13	151
English Language and Literature/Letters	35	21	41	4	713	6	94	914
Family and Consumer Sciences/Human Sciences	19	13	6	0	210	4	23	275
Foreign languages, literatures, and Linguistics	5	52	6	1	125	8	20	217
Health Professions and Related Clinical Sciences	69	63	48	2	892	10	86	1,170
History	23	29	31	1	525	12	55	676
Legal Professions and Studies	6	2	2	0	34	0	2	46
Liberal Arts and Sciences, General Studies and Humanities	135	90	29	16	899	35	120	1,324
Library Science	0	1	0	0	6	0	0	7
Mathematics and Statistics	6	9	9	1	167	9	19	220
Multi/Interdisciplinary Studies	18	16	27	1	241	52	44	399
Natural Resources and Conservation	1	1	1	1	38	0	13	55
Parks, Recreation, Leisure, and Fitness Studies	2	1	0	0	72	1	5	81
Personal and Culinary Services	0	0	0	0	0	0	0	0
Philosophy and Religious Studies	3	8	11	0	106	4	21	153
Physical Sciences	9	8	13	1	166	12	28	237
Psychology	107	91	56	5	1,175	20	103	1,557
Public Administration and Social Service Professions	45	19	4	0	135	1	10	214
Science Technologies/Technicians	0	0	0	0	0	1	0	1
Security and Protective Services	22	20	5	1	299	4	22	373
Social Sciences	180	120	128	12	1,497	103	178	2,218
Theology and Religious Vocations	0	0	0	0	0	0	0	0
Transportation and Materials Moving	0	0	0	0	0	0	1	1
Visual and Performing Arts	60	34	36	5	716	37	103	991
<b>Total Bachelor's Degrees</b>	<b>1,193</b>	<b>924</b>	<b>820</b>	<b>83</b>	<b>13,059</b>	<b>517</b>	<b>1,405</b>	<b>18,001</b>

Appendix B (Continued)  
**Degrees and Certificates by Level and Race/Ethnicity**  
**Connecticut Colleges and Universities**  
2005-06

	<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	0	0	0	2	0	3	5
Business, Management, Marketing, and Related Support Services	0	3	2	0	42	6	4	57
Computer and Information Sciences and Support Services	0	0	2	0	8	0	2	12
Education	1	0	0	0	18	1	2	22
Engineering	0	3	0	0	14	0	3	20
Engineering Technologies/Technicians	0	0	0	0	0	0	0	0
English Language and Literature/Letters	0	0	0	0	3	0	0	3
Family and Consumer Sciences/Human Sciences	0	0	0	0	0	0	0	0
Health Professions and Related Clinical Sciences	0	0	0	0	7	1	2	10
History	0	0	0	0	2	0	0	2
Legal Professions and Studies	0	0	2	0	2	2	0	6
Mathematics and Statistics	0	0	0	0	9	0	1	10
Multi/Interdisciplinary Studies	0	0	0	0	0	0	0	0
Natural Resources and Conservation	3	0	0	0	9	3	0	15
Parks, Recreation, Leisure, and Fitness Studies	0	0	0	0	0	0	0	0
Philosophy and Religious Studies	1	0	0	0	4	0	0	5
Psychology	0	3	0	0	9	0	3	15
Public Administration and Social Service Professions	0	3	0	0	19	0	0	22
Security and Protective Services	4	0	3	0	77	6	12	102
Social Sciences	0	0	0	0	0	0	0	0
Theology and Religious Vocations	0	0	0	0	6	2	0	8
Visual and Performing Arts	0	0	0	0	1	0	0	1
<b>Total Post-Baccalaureate Certificates</b>	<b>9</b>	<b>12</b>	<b>9</b>	<b>0</b>	<b>232</b>	<b>21</b>	<b>32</b>	<b>315</b>

Appendix B (Continued)  
**Degrees and Certificates by Level and Race/Ethnicity**  
**Connecticut Colleges and Universities**  
2005-06

	<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	0	0	8	9	1	18
Architecture and Related Services	0	2	4	0	50	8	4	68
Area, Ethnic, Cultural, and Gender Studies	7	4	4	1	56	9	7	88
Biological and Biomedical Sciences	12	7	18	1	151	39	27	255
Business, Management, Marketing, and Related Support Services	167	52	112	3	1,081	227	236	1,878
Communication, Journalism, and Related Programs	6	1	2	0	53	7	14	83
Computer and Information Sciences and Support Services	8	3	19	1	95	72	21	219
Education	145	85	32	6	2,375	106	228	2,977
Engineering	8	11	26	0	116	238	32	431
Engineering Technologies/Technicians	3	2	3	0	34	2	10	54
English Language and Literature/Letters	2	1	4	0	81	4	15	107
Family and Consumer Sciences/Human Sciences	2	1	1	0	59	12	7	82
Foreign languages, literatures, and Linguistics	1	10	0	0	42	34	10	97
Health Professions and Related Clinical Sciences	60	35	54	3	715	63	105	1,035
History	9	5	2	1	68	18	9	112
Legal Professions and Studies	2	2	2	0	14	39	3	62
Liberal Arts and Sciences, General Studies and Humanities	2	0	0	0	50	0	18	70
Library Science	0	0	5	0	73	0	19	97
Mathematics and Statistics	2	0	4	0	58	29	9	102
Multi/Interdisciplinary Studies	3	0	4	0	12	5	4	28
Natural Resources and Conservation	4	2	6	0	80	32	10	134
Parks, Recreation, Leisure, and Fitness Studies	1	0	1	0	11	1	1	15
Philosophy and Religious Studies	7	5	2	0	53	10	10	87
Physical Sciences	2	2	7	0	76	45	12	144
Psychology	10	10	6	0	162	15	40	243
Public Administration and Social Service Professions	42	19	8	0	172	5	20	266
Security and Protective Services	9	11	3	2	94	6	14	139
Social Sciences	20	8	14	1	93	78	25	239
Theology and Religious Vocations	7	1	2	1	64	14	7	96
Visual and Performing Arts	7	10	19	1	183	88	59	367
<b>Total Master's Degrees</b>	<b>548</b>	<b>289</b>	<b>364</b>	<b>21</b>	<b>6,179</b>	<b>1,215</b>	<b>977</b>	<b>9,593</b>

Appendix B (Continued)  
**Degrees and Certificates by Level and Race/Ethnicity**  
**Connecticut Colleges and Universities**  
2005-06

	<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	1	0	0	1	9	0	11
Area, Ethnic, Cultural, and Gender Studies	7	0	0	0	3	0	2	12
Biological and Biomedical Sciences	7	4	8	0	53	29	19	120
Business, Management, Marketing, and Related Support Services	0	1	1	0	4	8	3	17
Computer and Information Sciences and Support Services	0	0	1	0	1	2	1	5
Education	4	2	0	0	44	4	8	62
Engineering	1	4	3	0	9	58	3	78
English Language and Literature/Letters	1	0	0	0	10	2	3	16
Family and Consumer Sciences/Human Sciences	0	1	0	0	6	2	1	10
Foreign languages, literatures, and Linguistics	0	4	3	0	8	12	5	32
Health Professions and Related Clinical Sciences	3	0	5	0	30	9	6	53
History	2	0	1	0	14	4	9	30
Legal Professions and Studies	0	0	0	0	1	8	0	9
Mathematics and Statistics	0	0	0	0	4	8	2	14
Multi/Interdisciplinary Studies	0	1	0	0	13	4	2	20
Natural Resources and Conservation	0	1	0	0	11	5	1	18
Philosophy and Religious Studies	0	0	0	0	4	1	4	9
Physical Sciences	0	1	1	0	22	38	5	67
Psychology	1	2	3	0	37	11	19	73
Public Administration and Social Service Professions	0	0	0	0	0	0	0	0
Social Sciences	2	3	2	0	24	19	4	54
Theology and Religious Vocations	0	0	0	0	0	0	0	0
Visual and Performing Arts	0	1	0	0	14	5	5	25
<b>Total Doctoral Degrees</b>	<b>28</b>	<b>26</b>	<b>28</b>	<b>0</b>	<b>313</b>	<b>238</b>	<b>102</b>	<b>735</b>
<b><u>First-Professional</u></b>								
Health Professions and Related Clinical Sciences	25	12	45	0	231	10	25	348
Legal Professions and Studies	30	48	49	1	479	7	20	634
Theology and Religious Vocations	6	2	2	0	46	6	10	72
<b>Total First-Professional Degrees</b>	<b>61</b>	<b>62</b>	<b>96</b>	<b>1</b>	<b>756</b>	<b>23</b>	<b>55</b>	<b>1,054</b>

Appendix C  
**Degrees and Certificates by Level, Discipline and Gender of Recipient**  
**Connecticut Colleges and Universities**  
2005-06

<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	6	11	17
Architecture and Related Services	1	5	6
Area, Ethnic, Cultural, and Gender Studies	0	0	0
Biological and Biomedical Sciences	0	0	0
Business, Management, Marketing, and Related Support Services	46	176	222
Communication, Journalism, and Related Programs	0	0	0
Communications Technologies/Technicians and Support Services	4	0	4
Computer and Information Sciences and Support Services	23	18	41
Education	1	2	3
Engineering Technologies/Technicians	101	22	123
English Language and Literature/Letters	0	0	0
Family and Consumer Sciences/Human Sciences	13	78	91
Foreign languages, literatures, and Linguistics	1	0	1
Health Professions and Related Clinical Sciences	36	142	178
Legal Professions and Studies	7	41	48
Liberal Arts and Sciences, General Studies and Humanities	0	9	9
Library Science	0	7	7
Mechanic and Repair Technologies/Technicians	18	1	19
Multi/Interdisciplinary Studies	1	2	3
Natural Resources and Conservation	0	0	0
Parks, Recreation, Leisure, and Fitness Studies	1	4	5
Personal and Culinary Services	3	9	12
Physical Sciences	0	0	0
Public Administration and Social Service Professions	1	12	13
Security and Protective Services	41	46	87
Social Sciences	1	1	2
Transportation and Materials Moving	0	0	0
Visual and Performing Arts	10	12	22
<b>Total Certificate &lt; 1 Year Degrees</b>	<b>315</b>	<b>598</b>	<b>913</b>
<b><u>Certificate &gt; 1 Year</u></b>			
Biological and Biomedical Sciences	0	0	0
Business, Management, Marketing, and Related Support Services	0	5	5
Computer and Information Sciences and Support Services	2	1	3
Engineering	0	0	0
Engineering Technologies/Technicians	3	1	4
Family and Consumer Sciences/Human Sciences	0	0	0
Health Professions and Related Clinical Sciences	1	22	23
Philosophy and Religious Studies	9	0	9
Public Administration and Social Service Professions	0	0	0
Visual and Performing Arts	8	13	21
<b>Total Certificate &gt; 1 Year Degrees</b>	<b>23</b>	<b>42</b>	<b>65</b>

Appendix C (Continued)  
**Degrees and Certificates by Level, Discipline and Gender of Recipient**  
**Connecticut Colleges and Universities**  
2005-06

<b>Discipline</b>	<b>Men</b>	<b>Women</b>	<b>Total</b>
<b><u>Associate</u></b>			
Agriculture, Agriculture Operations, and Related Sciences	16	18	34
Architecture and Related Services	0	1	1
Biological and Biomedical Sciences	2	1	3
Business, Management, Marketing, and Related Support Services	346	790	1,136
Communication, Journalism, and Related Programs	10	12	22
Communications Technologies/Technicians and Support Services	14	5	19
Computer and Information Sciences and Support Services	104	30	134
Education	4	9	13
Engineering	25	5	30
Engineering Technologies/Technicians	142	27	169
Family and Consumer Sciences/Human Sciences	24	199	223
Foreign languages, literatures, and Linguistics	0	2	2
Health Professions and Related Clinical Sciences	120	872	992
Legal Professions and Studies	2	54	56
Liberal Arts and Sciences, General Studies and Humanities	522	1,082	1,604
Mathematics and Statistics	0	3	3
Mechanic and Repair Technologies/Technicians	5	0	5
Natural Resources and Conservation	3	4	7
Parks, Recreation, Leisure, and Fitness Studies	10	8	18
Personal and Culinary Services	6	19	25
Philosophy and Religious Studies	0	0	0
Physical Sciences	2	4	6
Psychology	1	5	6
Public Administration and Social Service Professions	5	27	32
Science Technologies/Technicians	3	0	3
Security and Protective Services	111	88	199
Social Sciences	1	4	5
Transportation and Materials Moving	1	0	1
Visual and Performing Arts	112	158	270
<b>Total Associate Degrees</b>	<b>1,591</b>	<b>3,427</b>	<b>5,018</b>

Appendix C (Continued)  
**Degrees and Certificates by Level, Discipline and Gender of Recipient**  
**Connecticut Colleges and Universities**  
2005-06

<b>Discipline</b>	<b>Men</b>	<b>Women</b>	<b>Total</b>
<b><u>Bachelor's</u></b>			
Agriculture, Agriculture Operations, and Related Sciences	54	77	131
Architecture and Related Services	30	45	75
Area, Ethnic, Cultural, and Gender Studies	86	187	273
Biological and Biomedical Sciences	274	447	721
Business, Management, Marketing, and Related Support Services	1,617	1,384	3,001
Communication, Journalism, and Related Programs	372	645	1,017
Computer and Information Sciences and Support Services	225	49	274
Construction Trades	19	1	20
Education	182	517	699
Engineering	419	91	510
Engineering Technologies/Technicians	135	16	151
English Language and Literature/Letters	288	626	914
Family and Consumer Sciences/Human Sciences	27	248	275
Foreign languages, literatures, and Linguistics	61	156	217
Health Professions and Related Clinical Sciences	202	968	1,170
History	394	282	676
Legal Professions and Studies	9	37	46
Liberal Arts and Sciences, General Studies and Humanities	500	824	1,324
Library Science	1	6	7
Mathematics and Statistics	109	111	220
Multi/Interdisciplinary Studies	135	264	399
Natural Resources and Conservation	24	31	55
Parks, Recreation, Leisure, and Fitness Studies	39	42	81
Personal and Culinary Services	0	0	0
Philosophy and Religious Studies	83	70	153
Physical Sciences	136	101	237
Psychology	302	1,255	1,557
Public Administration and Social Service Professions	35	179	214
Science Technologies/Technicians	0	1	1
Security and Protective Services	196	177	373
Social Sciences	1,199	1,019	2,218
Theology and Religious Vocations	0	0	0
Transportation and Materials Moving	1	0	1
Visual and Performing Arts	429	562	991
<b>Total Bachelor's Degrees</b>	<b>7,583</b>	<b>10,418</b>	<b>18,001</b>

Appendix C (Continued)  
**Degrees and Certificates by Level, Discipline and Gender of Recipient**  
**Connecticut Colleges and Universities**  
2005-06

<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	0	5	5
Business, Management, Marketing, and Related Support Services	22	35	57
Computer and Information Sciences and Support Services	10	2	12
Education	2	20	22
Engineering	17	3	20
Engineering Technologies/Technicians	0	0	0
English Language and Literature/Letters	1	2	3
Family and Consumer Sciences/Human Sciences	0	0	0
Health Professions and Related Clinical Sciences	7	3	10
History	2	0	2
Legal Professions and Studies	3	3	6
Mathematics and Statistics	5	5	10
Multi/Interdisciplinary Studies	0	0	0
Natural Resources and Conservation	12	3	15
Parks, Recreation, Leisure, and Fitness Studies	0	0	0
Philosophy and Religious Studies	2	3	5
Psychology	6	9	15
Public Administration and Social Service Professions	0	22	22
Security and Protective Services	53	49	102
Social Sciences	0	0	0
Theology and Religious Vocations	6	2	8
Visual and Performing Arts	0	1	1
<b>Total Post-Baccalaureate Certificates</b>	<b>148</b>	<b>167</b>	<b>315</b>

Appendix C (Continued)  
**Degrees and Certificates by Level, Discipline and Gender of Recipient**  
**Connecticut Colleges and Universities**  
2005-06

<b>Discipline</b>	<b>Men</b>	<b>Women</b>	<b>Total</b>
<b><u>Master's</u></b>			
Agriculture, Agriculture Operations, and Related Sciences	12	6	18
Architecture and Related Services	41	27	68
Area, Ethnic, Cultural, and Gender Studies	23	65	88
Biological and Biomedical Sciences	117	138	255
Business, Management, Marketing, and Related Support Services	1,118	760	1,878
Communication, Journalism, and Related Programs	17	66	83
Computer and Information Sciences and Support Services	165	54	219
Education	626	2,351	2,977
Engineering	334	97	431
Engineering Technologies/Technicians	37	17	54
English Language and Literature/Letters	27	80	107
Family and Consumer Sciences/Human Sciences	17	65	82
Foreign languages, literatures, and Linguistics	39	58	97
Health Professions and Related Clinical Sciences	183	852	1,035
History	61	51	112
Legal Professions and Studies	35	27	62
Liberal Arts and Sciences, General Studies and Humanities	25	45	70
Library Science	15	82	97
Mathematics and Statistics	48	54	102
Multi/Interdisciplinary Studies	13	15	28
Natural Resources and Conservation	45	89	134
Parks, Recreation, Leisure, and Fitness Studies	8	7	15
Philosophy and Religious Studies	34	53	87
Physical Sciences	81	63	144
Psychology	50	193	243
Public Administration and Social Service Professions	55	211	266
Security and Protective Services	55	84	139
Social Sciences	132	107	239
Theology and Religious Vocations	65	31	96
Visual and Performing Arts	172	195	367
<b>Total Master's Degrees</b>	<b>3,650</b>	<b>5,943</b>	<b>9,593</b>

Appendix C (Continued)  
**Degrees and Certificates by Level, Discipline and Gender of Recipient**  
**Connecticut Colleges and Universities**  
2005-06

<b>Discipline</b>	<b>Men</b>	<b>Women</b>	<b>Total</b>
<b><u>Doctoral</u></b>			
Agriculture, Agriculture Operations, and Related Sciences	9	2	11
Area, Ethnic, Cultural, and Gender Studies	2	10	12
Biological and Biomedical Sciences	61	59	120
Business, Management, Marketing, and Related Support Services	5	12	17
Computer and Information Sciences and Support Services	5	0	5
Education	22	40	62
Engineering	56	22	78
English Language and Literature/Letters	6	10	16
Family and Consumer Sciences/Human Sciences	0	10	10
Foreign languages, literatures, and Linguistics	18	14	32
Health Professions and Related Clinical Sciences	11	42	53
History	15	15	30
Legal Professions and Studies	5	4	9
Mathematics and Statistics	10	4	14
Multi/Interdisciplinary Studies	11	9	20
Natural Resources and Conservation	10	8	18
Philosophy and Religious Studies	7	2	9
Physical Sciences	47	20	67
Psychology	14	59	73
Public Administration and Social Service Professions	0	0	0
Social Sciences	32	22	54
Theology and Religious Vocations	0	0	0
Visual and Performing Arts	13	12	25
<b>Total Doctoral Degrees</b>	<b>359</b>	<b>376</b>	<b>735</b>
<b><u>First-Professional</u></b>			
Health Professions and Related Clinical Sciences	165	183	348
Legal Professions and Studies	313	321	634
Theology and Religious Vocations	39	33	72
<b>Total First-Professional Degrees</b>	<b>517</b>	<b>537</b>	<b>1,054</b>