PART III. Universitywide Indicators with Campus Comparisons

Section 6. Graduate and Professional Degree Student Profile

Goals
Graduate students are essential to the University’s success. They fuel the research enterprise, make it possible to attract world-class faculty and play an important role in undergraduate instruction. UC’s post-graduate programs also play a crucial role in helping to meet the state’s growing need for a highly educated and professional workforce.

Accordingly, in the coming decade, the University of California seeks, via a variety of means, to increase the proportion of graduate and professional school students, recruiting a diverse population from among the most talented individuals nationally and worldwide, encouraging their integration into campus communities and the completion of their degrees.

Measures
UC categorizes its graduate students into two types: graduate academic and professional degree students. Graduate academic students (here simply labeled graduate students) are in both master’s and doctoral programs in the sciences, social sciences, humanities and engineering. Graduate professional degree students (here simply labeled professional degree students) are in programs that lead to a professional degree, such as a J.D. (law), M.D. (medicine), or M.B.A. (business). The indicators displayed in this section show the size and diversity of graduate and professional school enrollment, types of degrees awarded, student outcomes and financial support measures for both graduate and professional degree students.

Most of the indicators in this section are separated into graduate and professional degree programs based on the common distinction used by the U.S. Department of Education’s Integrated Postsecondary Education Data System (IPEDS). However, graduate and professional degree student measures and definitions vary across institutions and fields of study considerably more than those for undergraduates. Moreover, measures of graduate student characteristics and outcomes typically vary considerably by discipline, with broad categories often masking underlying variation. Future editions of this report will include additional indicators about graduate and professional degree student quality, access, affordability and success.
In Fall 2006, the 10 UC campuses enrolled about 46,000 students in their graduate and professional programs.

Graduate and professional enrollment at UC represented 22 percent of total enrollment in Fall 2006 compared to 26 percent at the AAU public and 48 percent at the AAU private institutions.
6.1 (continued) Graduate and Professional Degree Enrollment – UC and Comparison Institutions, Fall 2006

UC and Comparison Institutions

[Bar chart showing the percentage of student body for undergraduate and graduate & professional degrees for various institutions including UC Berkeley, UC Davis, UC Irvine, UC Los Angeles, UC Merced, UC Riverside, UC San Diego, UC Santa Barbara, UC Santa Cruz, UC U of Illinois, UC U of Michigan, UC SUNY at Buffalo, UC U of Virginia, UC Harvard, UC MIT, UC Stanford, and UC Yale.]
Since the mid-1960s, undergraduate enrollment has grown nearly three times faster than graduate and professional enrollment. As a result, the proportion of graduate and professional degree students has dropped from about one-third of all enrollments to 22 percent in Fall 2008.

Undergraduate enrollment has represented over three-quarters of all UC enrollment since 2000.
6.2 (continued) Graduate and Professional and Undergraduate Enrollment, Fall 2000 to 2008

Berkeley

Davis

Irvine

Los Angeles

Merced

Riverside

San Diego

San Francisco

Santa Barbara

Santa Cruz

UC Annual Accountability Report May 2009 121
White students constituted 43 percent of UC’s graduate and professional degree enrollment in fall 2006 compared to 57 percent at the AAU publics and 46 percent at the AAU privates.

UC enrolled a larger share of Chicano/Latino students in its graduate and professional degree programs in Fall 2006 than either the AAU public or AAU private institutions, but a smaller share of African-American students.

In Fall 2006, international students comprised 16 percent of graduate and professional degree students at UC compared to 7 percent at the AAU public institutions and 11 percent at the AAU private institutions.
6.3 (continued) Graduate and Professional Degree Enrollment by Race/Ethnicity – UC and Comparison Institutions, Fall 2006

UC and Comparison Institutions

[Bar chart showing enrollment by race/ethnicity for various UC and comparison institutions. Each bar is divided into segments representing different racial and ethnic groups.]
The proportion of graduate and professional degree students by race/ethnicity varies across academic disciplines. For example, underrepresented students (Chicano/Latino, African-American and American Indian) comprised 5 percent of all students in engineering/computer sciences in Fall 2008 and 16 percent in professional fields.

The proportion of underrepresented students has increased slightly since 2000, from 9.7 percent to 10.6 percent of the total.

Enrollment of new international students has fluctuated over the past few years in response to the changing climate for international student recruitment and the ability of departments to fund the higher costs associated with international students. Unlike domestic graduate students, international students continue to pay non-resident tuition after their first year.
6.4 (continued) Graduate and Professional Degree Enrollment by Race/Ethnicity, Fall 2000 to 2008

UC Annual Accountability Report    May 2009  125
Women made up 48 percent of UC’s graduate and professional enrollment in Fall 2006 compared to 51 percent at the AAU public institutions and 48 percent at the AAU private institutions.

Source: IPEDS Enrollment Survey.
6.5 (continued) Graduate and Professional Degree Enrollment by Gender – UC and Comparison Institutions, Fall 2006
The proportion of graduate and professional degree students by gender varies across academic disciplines. For example, about 25 percent of graduate students in engineering/computer science are women compared to about 60 percent in the health professions.
6.6 (continued) Graduate and Professional Degree Enrollment by Gender, Fall 2000 to 2008
Indicators 6.7
Geographic Origin of New Graduate and Professional Degree Students, Fall 2008

Universitywide

<table>
<thead>
<tr>
<th>Origin</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>California Resident</td>
<td>56%</td>
</tr>
<tr>
<td>Other U.S.</td>
<td>26%</td>
</tr>
<tr>
<td>International</td>
<td>18%</td>
</tr>
</tbody>
</table>

Source: UCOP Corporate System.

- Graduate and professional degree students who are U.S. (but not California) residents can meet California residency requirements after their first year of study in California. Since most of these students become in-state residents in their second year, focusing on newly enrolled graduate and professional degree students produces a more accurate representation of their geographic origin.

- Reflecting the University’s goal of drawing top academic talent from across the nation and the world, new academic graduate students are more geographically diverse than undergraduate students.
6.7 (continued) Geographic Origin of New Graduate and Professional Degree Students, Fall 2008

Berkeley

- CA Resident: 45%
- Other U.S.: 34%
- International: 21%

Davis

- CA Resident: 67%
- Other U.S.: 18%
- International: 15%

Irvine

- CA Resident: 63%
- Other U.S.: 16%
- International: 21%

Los Angeles

- CA Resident: 51%
- Other U.S.: 32%
- International: 17%

Merced

- CA Resident: 45%
- Other U.S.: 6%
- International: 49%

Riverside

- CA Resident: 60%
- Other U.S.: 13%
- International: 27%

San Diego

- CA Resident: 63%
- Other U.S.: 19%
- International: 18%

San Francisco

- CA Resident: 72%
- Other U.S.: 26%
- International: 2%

Santa Barbara

- CA Resident: 53%
- Other U.S.: 29%
- International: 18%

Santa Cruz

- CA Resident: 63%
- Other U.S.: 21%
- International: 16%
UC awarded almost 55,000 undergraduate, graduate and professional degrees in 2006-07, about 24 percent of which were at the graduate and professional levels. In contrast, about 30 percent of degrees at the AAU public institutions and 53 percent at the AAU private institutions were at the graduate and professional levels.

Source: IPEDS Completions Survey.
6.8 (continued) Graduate, Professional and Undergraduate Degrees Awarded – UC and Comparison Institutions, 2006-07

UC and Comparison Institutions

[Diagram showing percentage of degrees awarded by UC and comparison institutions, with categories for Undergraduate, Professional, and Graduate degrees.]
The 10 UC campuses awarded 7,300 graduate degrees in 2006-07, including 3,200 doctoral degrees and 4,100 master’s degrees.

Over 60 percent of UC’s graduate degrees were awarded in STEM fields, which include life and physical sciences, technology, engineering and mathematics.

Nearly two-thirds of all UC doctoral degrees were in STEM fields. These constitute nearly 70 percent of all STEM Ph.D.’s awarded in California.

Source: IPEDS Completions Survey.
6.9 (continued) Graduate Degrees Awarded by Discipline – UC and Comparison Institutions, 2006-07

UC and Comparison Institutions

UC Annual Accountability Report    May 2009
Completion of a Ph.D. requires intensive study and original research and scholarship that makes a significant contribution to knowledge. In the lab sciences, this typically includes publication of research papers in scientific journals. In other fields, it generally requires completion of a book-length dissertation.

Overall, 57 percent of students who began doctoral studies between Fall 1992 and Fall 1994 had completed their Ph.D.’s 10 years later.

Over half of those who left without completing the Ph.D. did complete a master’s degree. Put another way, over three-quarters of all students who began doctoral study at UC completed at least one graduate degree (master’s or doctoral).

Data for all AAU institutions are not available; however, data from the Council of Graduate School’s Ph.D. Completion Project suggest that doctoral completion rates at UC are similar to those at similar institutions (see www.phdcompletion.org/quantitative/book1_quant.asp).

A separate analysis of UC students in professional master’s programs found that over 90 percent business (MBA) and law (JD) students completed their degree programs.

Note: Data include Ed.D. students.
6.10 (continued) 10-Year Ph.D. Completion Rates, Students Entering in Fall 1992 to Fall 1994

[Bar charts showing completion rates for different fields and university locations.]

UC Annual Accountability Report May 2009 137
Indicator 6.11
Time to Degree for Ph.D. Students – UC and Comparison Institutions, 2003-04 to 2005-06

On average, UC doctoral students took about the same amount of time to complete their degrees as students at other AAU research universities.

Ph.D. students in the arts and humanities take longer to complete their degrees than Ph.D. students in other fields. This may be due to the additional time humanities students spend as teaching assistants, the more individual nature of humanities dissertation research or the fact that these students more often interrupt their studies for financial or other reasons.

Note: Data shown are for median elapsed time to degree; data include Ed.D. students.
6.11 (continued) Time to Degree for Ph.D. Students – UC and Comparison Institutions, 2003-04 to 2005-06

[Graphs showing time to degree for Ph.D. students in different fields: All Fields, Arts & Humanities, Social Sciences & Psychology, Life Sciences, Physical Sciences, Engineering & Computer Science for Berkeley, Davis, Irvine, Los Angeles, Riverside, San Diego, San Francisco, Santa Barbara, Santa Cruz, U of Illinois, U of Michigan, SUNY at Buffalo, U of Virginia, Harvard, MIT, Stanford, Yale.]
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Overall, the time it takes UC doctoral students to complete their degrees has fallen from 6.3 years for those graduating in 1998-2000 to 5.8 years for those graduating in 2005-07.

Recent humanities Ph.D.’s are the one exception to this trend; they took about 6 months longer to complete their degrees than those who graduated 10 years earlier.

Note: Data shown are for median elapsed time to degree; data include Ed.D. students.
Indicator 6.13
Plans at Time of Ph.D. Completion, 2005-06

Universitywide

- Postdoctoral training is an integral part of the training of Ph.D. students in the sciences.
- Students who earn University of California doctoral degrees enter the labor market quickly. Seventy percent had already accepted an employment offer or were entering postdoctoral training at the time they completed their Ph.D.'s. Only 2 percent were not planning to work or study immediately after earning their degrees.
- Most new UC Ph.D.'s plan to remain in California for work or postdoctoral training.

Note: Data include Ed.D. degree recipients.
6.13 (continued) Plans at Time of Ph.D. Completion, 2005-06

(Merced opened in 2005 and had awarded very few graduate degrees as of Spring 2006.)
Indicator 6.14
Average Net Stipend Offered to Ph.D. Students Admitted to UC Compared to Their First-Choice Non-UC Schools, 2004 and 2007

Source: University of California Graduate Student Support Survey.

- Net stipend is the amount of competitive (non-need-based) aid that students have to live on after tuition and fees are covered. It is calculated by subtracting total fees and tuition from a student’s total gift and assistantship support.

- The competitiveness of UC’s per capita graduate net stipend offers varies by campus and by academic field.

- In 2007, the UC per capita net stipend offer was $1,000 lower than that of competing institutions. This represented an improvement over the $1,500 competitiveness gap that existed between UC and competing institutions in 2004.

- The high cost of living in many California communities compared to other parts of the country can exacerbate the net stipend competitiveness gap between the UC campuses and non-UC schools in many cases.

Note: Figures are in constant inflation-adjusted 2007 dollars; data include Ed.D. students.
6.14 (continued) Average Net Stipend Offered to Ph.D. Students Admitted to UC Compared to Their First-Choice Non-UC Schools, 2004 and 2007

Note: Figures are in constant inflation-adjusted 2007 dollars; data include Ed.D. students.
Indicator 6.15
Average Net Stipend of Ph.D. Students, 1998-99 to 2007-08

Source: UCOP Student Financial Aid Office.

- The average net stipend increased 18 percent in inflation-adjusted terms between 1998-99 and 2007-08.

Note: Figures are in constant inflation-adjusted 2007 dollars; data include Ed.D. students.
6.15 (continued) Average Net Stipend of Ph.D. Students, 1998-99 to 2007-08

Berkeley

Davis

Irvine

Los Angeles

Merced

Riverside

San Diego

San Francisco

Santa Barbara

Santa Cruz
The 10 UC campuses produced almost 5,700 degrees in professional fields in 2006-07.

The largest share of UC’s graduate professional degrees were awarded in business (32 percent), followed by education (19 percent), law (14 percent) and medicine (11 percent). These proportions were relatively similar across both the public and private AAU institutions.

Note: “Other Health” includes all health science fields other than medicine, such as dentistry, nursing, optometry, pharmacy, public health and veterinary medicine. “Other Professional” includes interdisciplinary and multidisciplinary fields, as well as fields such as architecture, communications, divinity, library and information science, public policy and social welfare.
6.16 (continued) Professional Degrees Awarded by Discipline – UC and Comparison Institutions, 2006-07

UC and Comparison Institutions

- Berkeley
- Davis
- Irvine
- Los Angeles
- Merced
- Riverside
- San Diego
- Santa Barbara
- Santa Cruz
- U of Illinois
- U of Michigan
- SUNY at Buffalo
- U of Virginia
- Harvard
- MIT
- Stanford
- Yale

Categories:
- Other Professional
- Education
- Business
- Other Health
- Medicine
- Law

Percentage distribution by discipline.
The United States Medical Licensing Examination is the examination for medical licensure in the U.S. and is sponsored by the Federation of State Medical Boards and the National Board of Medical Examiners.

The Step 1 examination assesses whether a student can apply concepts of science to the practice of medicine, with emphasis on the principles underlying health, disease and modes of therapy.

The Step 2 examination assesses whether a student can apply medical knowledge and skills to patient care, and emphasizes health promotion and disease prevention.

There are two components of the Step 2 examination: Clinical Knowledge (CK) and Clinical Skills (CS). Step 2 CK uses the multiple-choice examination format to test clinical knowledge. Step 2 CS uses standardized patients to test the ability of students and graduates to gather information from patients, perform physical examinations and communicate their findings to patients and colleagues.

Note: Data represent overall pass rates (students can take the MLE exams multiple times if they do not pass).
6.17 (continued) United States Medical Licensing Examination Pass Rates, 2000-01 to 2007-08

Note: The “Step 2CS" examination began in 2004-05. National data are not currently available for 2007-08.
The percent of professional degree students who graduate with debt varies by discipline.

The recent increase in the percent of students in the “Other Non-Health” category who graduate with debt may reflect the recent introduction of professional degree fees in Public Policy and Pacific International Affairs.
Recent increases in borrowing among professional degree program students reflect a combination of factors, including increases to professional degree fees that have occurred since 2002-03 and increased access to, and awareness of, federal student loan programs.

In general, higher levels of student borrowing are found in disciplines with high levels of potential earnings (e.g., law, medicine, dentistry and optometry) and/or access to federal, regional or institutional loan repayment assistance programs.

Student indebtedness is one of several affordability indicators that is considered by the Regents as they review multiyear fee plans submitted by the University’s professional degree programs.

Note: Figures are in constant inflation-adjusted 2007 dollars.