



A BRIEF OVERVIEW OF GRADUATE EDUCATION IN ECONOMICS

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Who is going and coming?

- **SOME GENERAL INFORMATION ABOUT WHO IS GOING TO GRADUATE SCHOOL AND WHEN**



GRADUATE ADMISSION BY FIELD

Table 1.15

Graduate Admissions Applications by Field and Degree Level, Fall 2007

| Major Field | Total Master's | | | Total Doctoral | | | Total | | |
|-----------------------------------|----------------|-----------------------|------------|----------------|-----------------------|------------|------------------|-----------------------|------------|
| | Applications | Accepted Applications | | Applications | Accepted Applications | | Applications | Accepted Applications | |
| Total | 917,010 | 504,613 | 55% | 489,390 | 123,197 | 25% | 1,406,400 | 627,810 | 45% |
| Biological Sciences* | 30,895 | 14,199 | 46% | 62,440 | 12,977 | 21% | 93,335 | 27,176 | 29% |
| Business | 155,784 | 78,719 | 51% | 16,490 | 2,526 | 15% | 172,274 | 81,245 | 47% |
| Education | 115,163 | 85,862 | 75% | 22,240 | 10,299 | 46% | 137,403 | 96,161 | 70% |
| Engineering | 105,897 | 50,055 | 47% | 76,525 | 20,718 | 27% | 182,422 | 70,773 | 39% |
| Health Sciences | 76,728 | 39,248 | 51% | 23,622 | 8,701 | 37% | 100,350 | 47,949 | 48% |
| Humanities & Arts | 85,136 | 33,578 | 39% | 59,775 | 12,255 | 21% | 144,911 | 45,833 | 32% |
| Physical Sciences | 64,229 | 30,893 | 48% | 86,991 | 22,761 | 26% | 151,220 | 53,654 | 35% |
| Public Administration and Service | 39,613 | 27,150 | 69% | 3,402 | 1,138 | 33% | 43,033 | 28,288 | 66% |
| Social Sciences | 69,334 | 40,257 | 58% | 98,369 | 17,948 | 18% | 167,703 | 58,205 | 35% |
| Other Fields** | 71,531 | 42,380 | 59% | 15,115 | 4,113 | 27% | 86,646 | 46,493 | 54% |

NOTE: Because not all institutions responded to all items, detail variables may not sum to total. Percentages are based on total of known acceptance status.

*"Biological Sciences" includes agriculture.

**The category "Other Fields" includes architecture, communications, home economics, library sciences, and religion.

Source: CGS/GRE Survey of Graduate Enrollment and Degrees.



MAJOR FIELD RECIPIENTS (1977-2007)

TABLE 2. Major field of study of doctorate recipients for selected years, 1977–2007

| Field of study | 1977 | | 1982 | | 1987 | | 1992 | | 1997 | | 2002 | | 2007 | |
|---|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|
| | Count | Percent | Count | Percent | Count | Percent | Count | Percent | Count | Percent | Count | Percent | Count | Percent |
| Social sciences | 6,260 | 19.7 | 6,026 | 19.4 | 5,988 | 18.5 | 6,481 | 16.7 | 7,285 | 17.1 | 6,826 | 17.1 | 7,191 | 15.0 |
| Anthropology | 385 | 1.2 | 333 | 1.1 | 352 | 1.1 | 320 | 0.8 | 434 | 1.0 | 496 | 1.2 | 509 | 1.1 |
| Economics | 837 | 2.6 | 761 | 2.4 | 821 | 2.5 | 910 | 2.3 | 1,030 | 2.4 | 908 | 2.3 | 993 | 2.1 |
| Political science/international relations | 900 | 2.8 | 727 | 2.3 | 685 | 2.1 | 855 | 2.2 | 997 | 2.3 | 882 | 2.2 | 933 | 1.9 |
| Psychology | 2,990 | 9.4 | 3,158 | 10.2 | 3,172 | 9.8 | 3,262 | 8.4 | 3,557 | 8.4 | 3,206 | 8.0 | 3,294 | 6.9 |
| Sociology | 725 | 2.3 | 568 | 1.8 | 423 | 1.3 | 495 | 1.3 | 577 | 1.4 | 547 | 1.4 | 576 | 1.2 |
| Other social sciences | 423 | 1.3 | 479 | 1.5 | 535 | 1.7 | 639 | 1.6 | 690 | 1.6 | 787 | 2.0 | 886 | 1.8 |



DEMOGRAPHICS OF DOCTORATE RECIPIENTS

TABLE 8. Percentage of doctorate recipients who attended community college, broad field of study, sex, and citizenship status, 2007

| Demographic characteristic | All doctorates | Life sciences ^a | Physical sciences ^b | Social sciences ^c | Engineering | Education | Humanities | Other fields |
|------------------------------|----------------|----------------------------|--------------------------------|------------------------------|-------------|-----------|------------|--------------|
| All doctorate recipients | 13.8 | 15.0 | 9.4 | 10.2 | 6.4 | 23.8 | 13.3 | 14.2 |
| Sex | | | | | | | | |
| Male | 12.3 | 15.0 | 9.3 | 10.7 | 6.4 | 23.7 | 14.5 | 11.8 |
| Female | 15.6 | 15.0 | 9.6 | 10.0 | 6.7 | 23.8 | 12.1 | 16.5 |
| Citizenship status | | | | | | | | |
| U.S. citizen | 21.0 | 21.7 | 18.3 | 21.1 | 18.0 | 26.5 | 18.1 | 22.0 |
| Non-U.S., permanent resident | 6.8 | 6.3 | 7.0 | 8.6 | 3.6 | 10.7 | 5.5 | 8.4 |
| Non-U.S., temporary visa | 1.9 | 2.0 | 1.2 | 2.1 | 1.5 | 5.4 | 3.6 | 2.4 |

^a Includes agricultural sciences/natural resources, biological/biomedical sciences and health sciences.

^b Includes mathematics and computer & information sciences.

^c Includes psychology.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2007 Survey of Earned Doctorates.



GRADUATE ENROLLMENT BY RACE/ETHNICITY

Table 1.7

Graduate Enrollment by Race/Ethnicity and Field of Study, Fall 2007 (U.S. Citizens and Permanent Residents Only)

| Major Field | Native American/ Alaska Native | | African American | | Asian/Pacific Islander | | Hispanic/ Latino | | White, Non-Hispanic | |
|------------------------------------|-----------------------------------|-------------|---------------------|-------------|---------------------------|-------------|---------------------|-------------|------------------------|-------------|
| | | | | | | | | | | |
| Total | 10,168 | 100% | 170,167 | 100% | 79,288 | 100% | 100,218 | 100% | 916,369 | 100% |
| Biological Sciences* | 343 | 5% | 3,013 | 3% | 4,435 | 7% | 2,856 | 4% | 37,739 | 5% |
| Business | 836 | 11% | 17,639 | 16% | 14,126 | 23% | 9,561 | 13% | 95,558 | 13% |
| Education | 2,226 | 30% | 38,616 | 34% | 8,245 | 13% | 22,008 | 31% | 208,701 | 29% |
| Engineering | 263 | 3% | 3,269 | 3% | 7,949 | 13% | 3,295 | 5% | 37,753 | 5% |
| Health Sciences | 781 | 10% | 10,613 | 9% | 7,569 | 12% | 5,339 | 7% | 79,067 | 11% |
| Humanities and Arts | 581 | 8% | 4,325 | 4% | 3,353 | 5% | 6,344 | 9% | 64,199 | 9% |
| Physical Sciences | 309 | 4% | 3,444 | 3% | 5,744 | 9% | 3,185 | 5% | 42,941 | 6% |
| Public Administration and Services | 574 | 8% | 10,389 | 9% | 1,885 | 3% | 4,925 | 7% | 32,940 | 5% |
| Social Sciences | 953 | 13% | 13,722 | 12% | 5,432 | 9% | 8,784 | 12% | 69,170 | 10% |
| Other Fields** | 672 | 9% | 8,439 | 7% | 3,695 | 6% | 5,431 | 8% | 59,147 | 8% |

NOTE: Because not all institutions responded to all items, detail variables may not sum to total. Percentages by race/ethnicity are based on total of known field.

Biological Sciences includes agriculture.

**The category "Other Fields" includes architecture, communications, home economics, library science, and religion.

Source: CGS/GRE Survey of Graduate Enrollment and Degrees.



WHERE CAN YOU GET INFORMATION ABOUT SCHOOLS?

- <http://www.vanderbilt.edu/AEA/gradstudents/Schools.htm>



THE FOUR COMPONENTS OF APPLYING TO GRADUATE SCHOOL

1. GRE/GMAT

- GRE quantitative score was 772 (out of a possible 800), and the average GRE verbal score was 562 (out of a possible 800) for the entering Ph.D. class of 2002.
- Among students in tier 1 schools*, the average was a combined 1360

* Tier 1 (ranked 1-6): Chicago, Harvard, MIT, Princeton, Stanford and Yale

- At the **University of Alabama** the combined average GRE was 1370. GMAT was 685.
- At **Middle Tennessee State University** the average GRE was 1100.



THE FOUR COMPONENTS OF APPLYING TO GRADUATE SCHOOL

2. **GPA/Classes taken**

- Math
- Logic

3. **Letters of Recommendation**

Be sure that the writer can talk about what you can do. Not just how nice you are.

4. **Personal Statement**



TIMELINE

○ Months: May to September

- **Activities: Research and Begin Selecting Schools**
 - To decide which program is the best fit, potential students should examine their own qualifications (including their GRE scores, their GPA, and their mathematical preparation) as well as the methodological approach, fields of specialization, predominant ideology, size of program, program culture (cooperative, competitive, etc.), typical time-to-degree, required examinations, financial aid, emphasis on mathematics, job prospects, and location of the programs to which they apply.
 - For those who wish to pursue **academic careers**, the availability of training in teaching methods during graduate school may also be a consideration. **Some applicants find it useful to contact students at their target schools to find out about current students' perceptions and experiences in the program.** When choosing schools, it is typically not wise to go to a school because of a desire to work with one specific faculty member, since faculty tend to be fairly mobile during their careers.



TIMELINE

○ Month: September

- **Activities:** Practice for the GRE.
 - This could include using an on-line preparation website, a printed or electronic study guide (widely available at bookstores), or taking a specific course. The test is administered by Educational Testing Service, and their website (www.ets.org) provides extensive information on the GRE.

○ Month: October

- **Activities:** Practice for the GRE.
 - Contact individuals to solicit letters of recommendation. Potential factors to consider when soliciting letter writers are the degree to which he/she can assess your potential abilities in graduate school (including your mathematical background and your analytical skills) and his/her prestige. Non-native speakers may also want to have supplementary letters addressing written and verbal communication skills.



TIMELINE

- **Month: November**
 - **Activities:** Re-take the GRE, if needed, Prepare Applications and Statement of Purpose
- **Months: December to Early January**
 - **Activities:** Applications Generally Due
- **Months: February to April**
 - Acceptance Letters Received
- **Month: August**
 - Begin Graduate School



WHAT ABOUT FUNDING?

- The National Science Foundation awards funding through its Graduate Research Fellowship Program.
- Cornell offers information about various fellowships available to graduate students, and also provides a link to a searchable database of fellowships, scholarships, research grants, post doctorates, dissertation awards and internships called the “Fellowship Notebook”.
- EconPhD.net offers general information about applying to graduate school. For information specifically about funding, scroll down a bit to the section titled “How much funding could I get?”.



MORE FUNDING

- The University of Pennsylvania offers [Financial Aid Links](#) for graduate students.
- Duke University provides a [summary of the costs](#) associated with applying to and attending graduate school.
- The American Institute of Economic Research provides a description of their [fellowship program](#).



WHAT CAN YOU DO WITH A GRADUATE DEGREE IN ECONOMICS?

- Median earnings of economists by highest level of degree for persons of all ages observed in 2003 are given in the table below by gender.

| Highest Degree | Men | Women |
|----------------|----------|----------|
| BA | \$65,000 | \$49,000 |
| MA | \$80,000 | \$60,000 |
| PhD | \$96,000 | \$83,500 |

Source: Source: Nathan E. Bell, Nicole M. Di Fabio, and Lisa M. Frehill, "Salaries of Scientists, Engineers and Technicians: A Summary of Salary Surveys." The Commission on Professionals in Science and Technology (CPST: Washington, DC 2007) selected curricula from pages 41, 43, and 48.



PROFESSORS, TEACHERS AND RESEARCHERS OF ECONOMICS

- Look around....many professors are here



GOVERNMENT AND NOT-FOR-PROFITS

- Governments at every level hire economists to manage and evaluate their operations. The [Office of Personnel Management](#) (OPM) of the Federal government provides information about Federal employment opportunities. Their [USAJobs site](#) lists thousands of openings of all kinds in many locations across the country. Search on "economist" to find information about specific current opportunities. There are often openings for economists with BA, MA, and PhD degrees.
- The OPM website also gives general information about [Federal pay scales](#). BA economists with little experience are (to simplify a bit) at grade GS-7, with MAs at GS-9, and PhDs at GS-15.



GOVERNMENT AND NOT-FOR-PROFITS

- The Federal Reserve Board and its affiliated regional Federal Reserve Banks also hire economists and research assistants at various levels of education.
- Economists are valued in the Foreign Service and civil service in the State Department, and as analysts with the Central Intelligence Agency.
- International agencies of many kinds hire economists for a variety of roles. Additional languages, strong communication skills, experience with diverse cultures, and statistical skills are often important. The World Bank, for example, offers jobs for economists.



ECONOMIC CONSULTING

- Economics graduates with good analytic and communication skills find employment with consulting firms.
 - McKinsey & Company,
 - Boston Consulting Group,
 - Bain & Company, Accenture,
 - Charles Rivers Associates,
 - Mathematica Policy Research, and
 - NERA Economic Consulting.
- Analysts with consulting firms often work with data, develop models of specific markets, and provide testimony in public hearings and in lawsuits. Many consulting firms invite application for employment through their websites.



CORPORATE WORLD & THE MBA

- Although the economics major does not provide training for specific occupations, it provides the logical structure that pays off in understanding the big picture, the context for entering several fields in the corporate world. Its emphasis on logical thought and problem solving skills has universal value. Many employers seek to hire graduates with these skills.



CONCLUSIONS

- It's worth it on any level!!

