

Overview of Engineering Faculty Resources

W. Kent Fuchs

Engineering College Council

October 29, 2002

Notes on Recent Developments

- > Graduate Student Unionization
- > Search for Cornell President
- > Status of Computer Science and CIS
- > Workforce Planning
- > Biomedical Engineering Program – leadership, hiring, and facilities
- > Duffield Hall
- > Engineering Fundraising Priorities
- > Job Market for Students
- > Strategic Planning

Outline

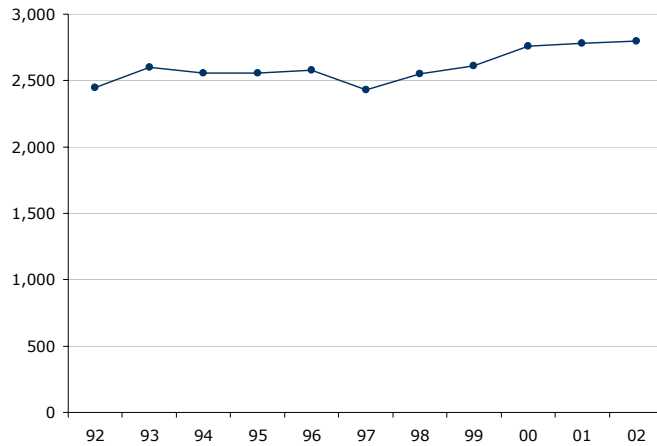
- > Objectives for Strategic Planning Process
- > Undergraduate Enrollment and Diversity
- > Faculty Size and Diversity
- > Teaching
- > Budget
- > Facilities
- > Gifts and Development
- > Rankings
- > Benchmarking
- > Discussion

Strategic Planning

- > College Objectives
 - > Focus on people, programs, infrastructure
 - > Develop College plan by Summer 2003
 - > Influence fundraising priorities and next capital campaign
- > Departments and Schools
 - > Draft of plans by Spring 2003
 - > Influence
 - Curriculum, accreditation
 - Faculty hiring and diversity
 - Investments in facilities
 - Allocation of faculty positions
- > Engineering College Council
 - > Morning: overview of College resources and status
 - > Afternoon: overview of department and school strengths, weaknesses, opportunities, and resources.
 - > Your input in all phases is important.



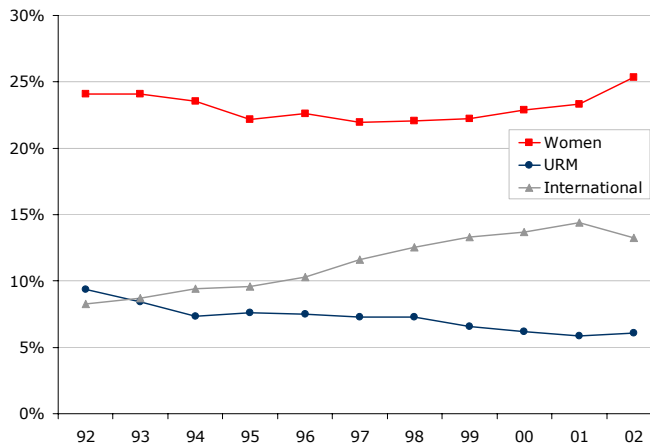
Undergraduate Enrollment



College of Engineering



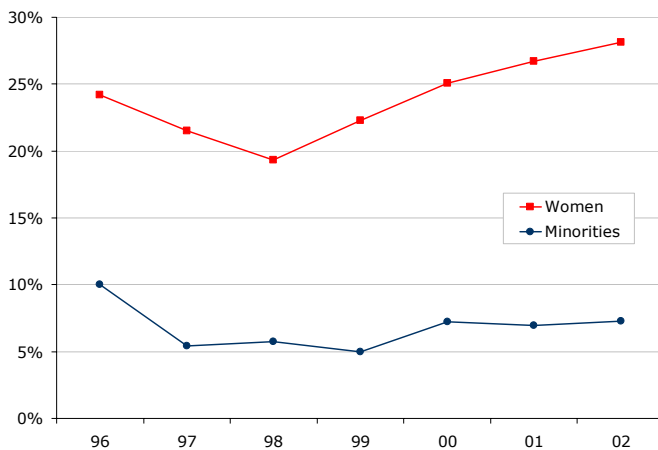
Undergraduate Women, Minorities and International



College of Engineering



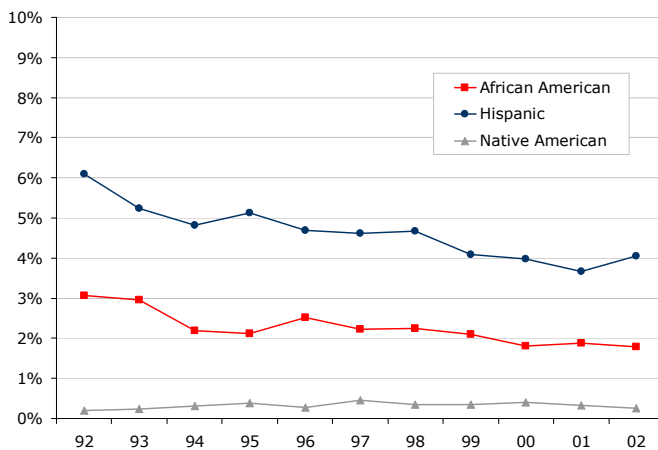
First Year Undergraduate Women and Minorities



College of Engineering



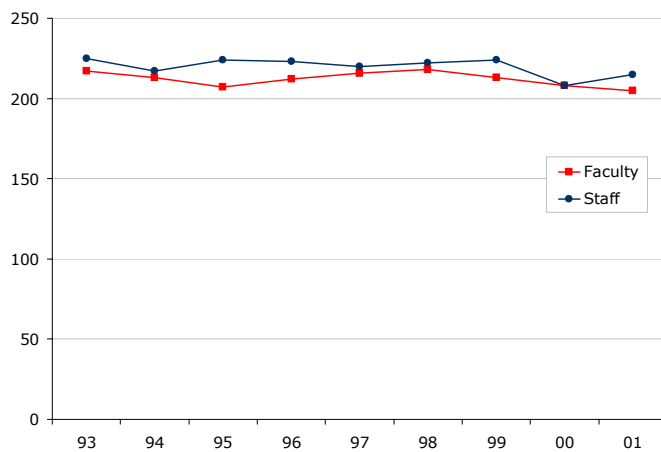
Undergraduate URM Ethnicity



College of Engineering



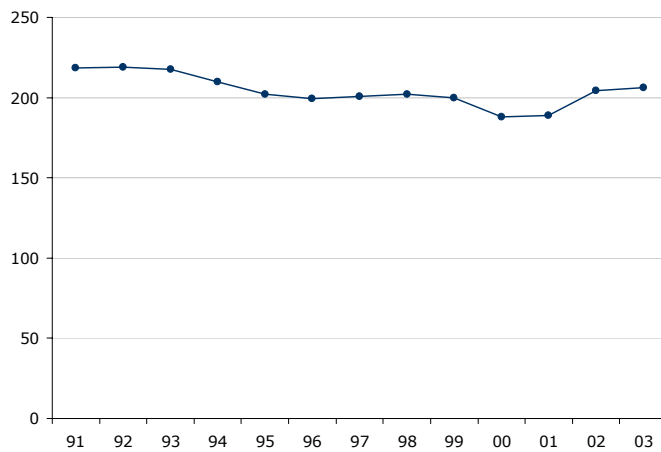
Faculty and Staff Headcount



College of Engineering

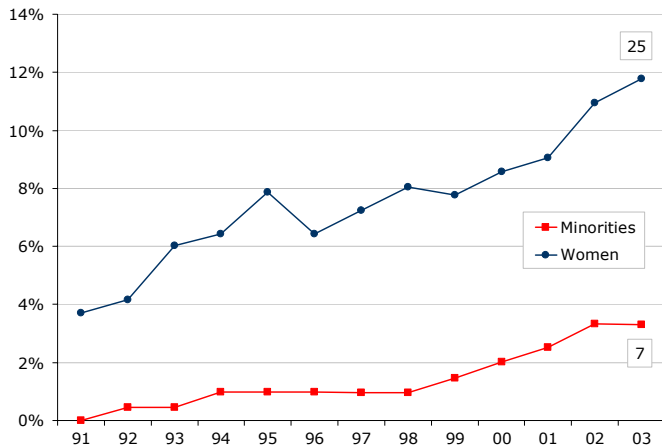


Faculty FTE

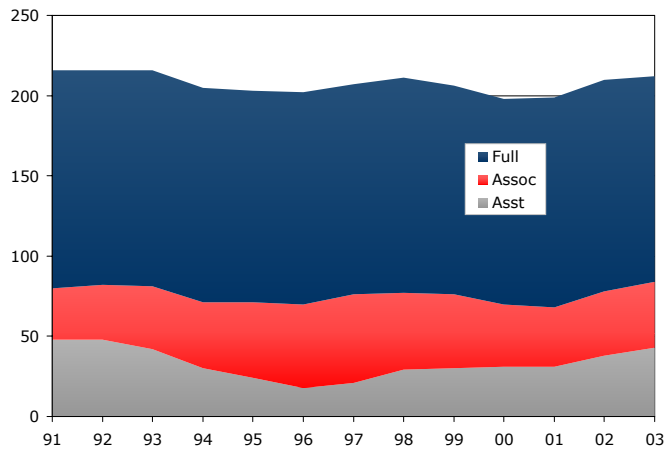


College of Engineering

Faculty Diversity

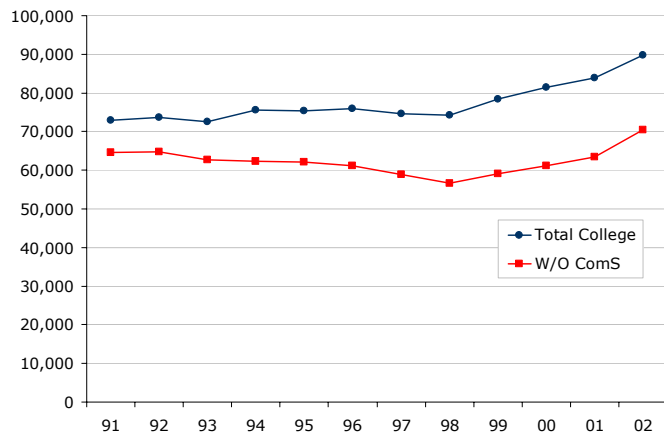


Faculty by Rank





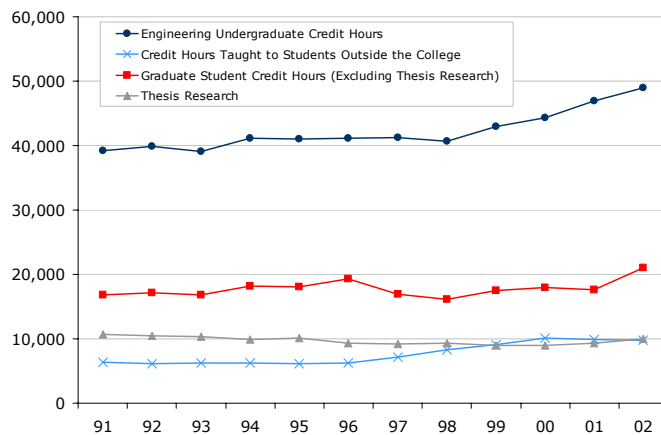
Credit Hours Taught



College of Engineering

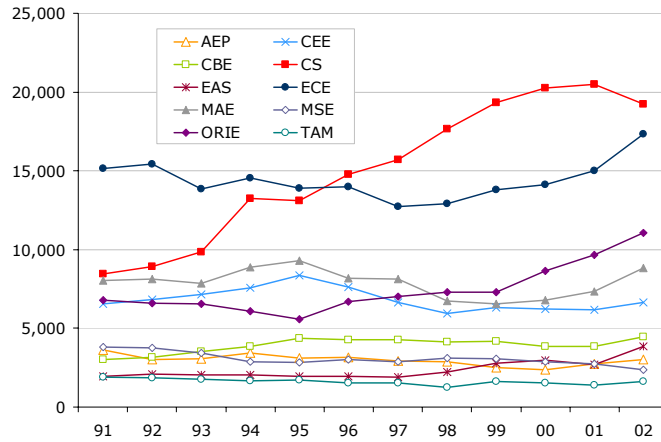


Breakdown of Credit Hours Taught in Engineering

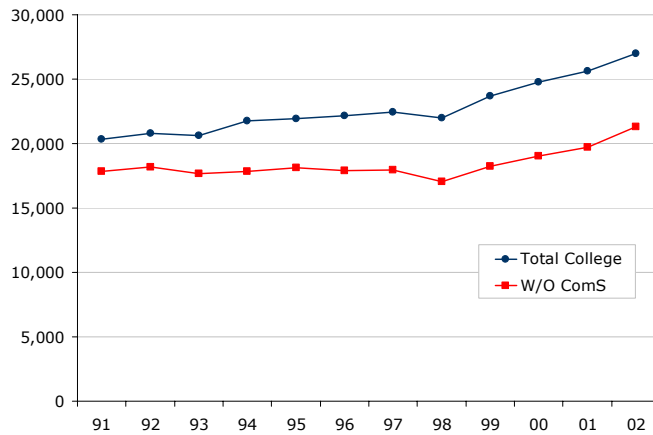


College of Engineering

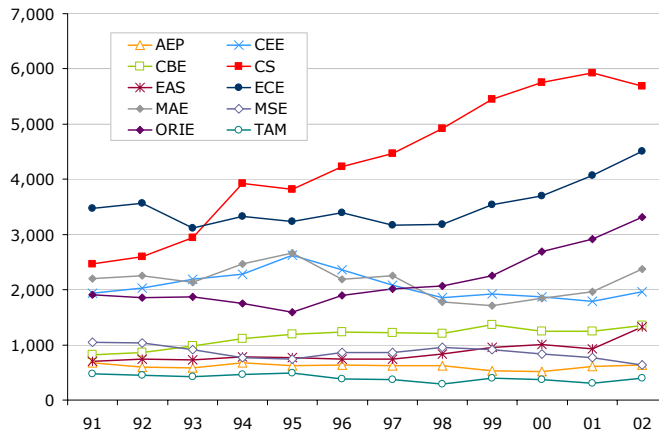
Credit Hours by Course Department



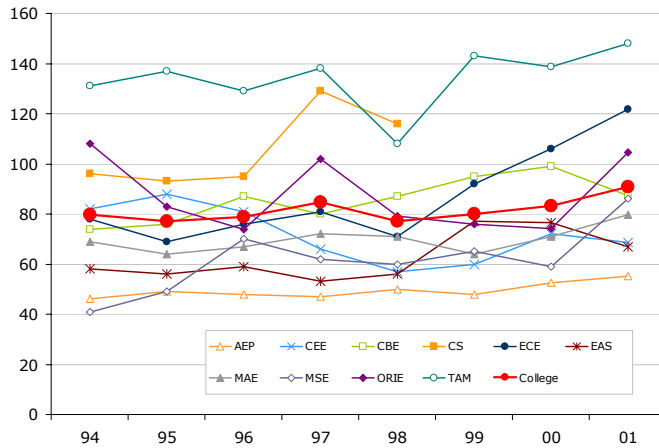
Course Enrollment



Course Enrollments by Department Code



Students Taught Per Faculty



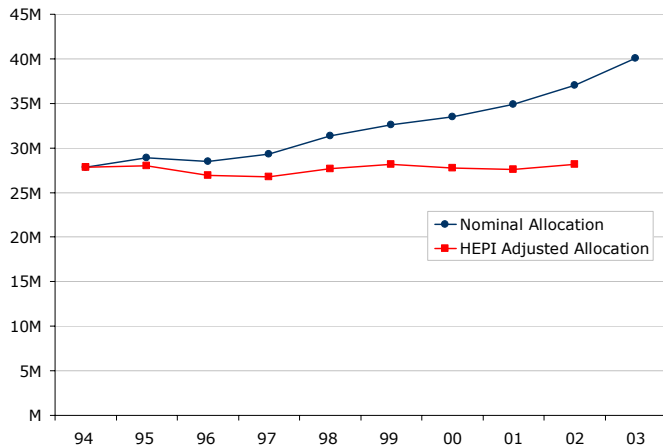
Student to Faculty Ratio

	Undergrad Enrollment	Graduate Enrollment	Faculty Headcount	Undergrad to Faculty Ratio	Total Student to Faculty Ratio
Engineering	2809	1084	213	13.2	18.3
Arts & Sciences	4417	1159	516	8.6	10.8
CALS	3061	973	385	8.0	10.5

Impact of Student to Faculty Ratio and Class Size on Cornell's Overall Ranking – US News Sept 2002

	Cornell Rank	Rank w/o Engineering	Percent of Rating Score
Overall	14		
Classes Under 20	38	20	6%
Classes Over 50	46	15	2%
Student/Faculty	36	30	1%

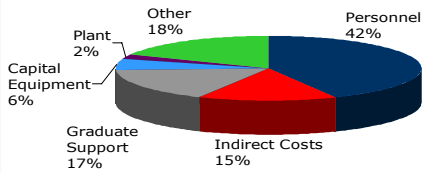
Engineering Budget - University Allocation



Total Expenditures

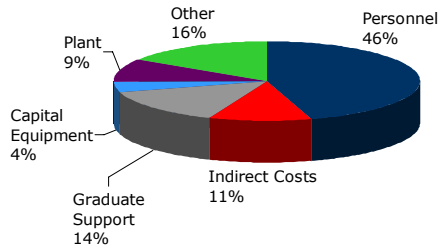
94-95

Total Expenditures: \$90.0M
Sponsored Research: \$51.1M



01-02

Total Expenditures: \$130.5M
Sponsored Research: \$57.1M



Facilities



Olin Hall
 - CBE, Student Svcs
 Built: 1941
 Sq. Ft: 129,664
 Net: 74,165
 Partial Central HVAC
 East Wing Renovated '89



Hi Voltage Lab
 - Storage
 Built: 1953
 Sq. Ft: 16,622
 Net: 14,709



Kimball Hall
 - TAM
 Built: 1953
 Sq. Ft: 30,143
 Net: 18,646
 No HVAC
 1st Floor Labs Renovated '93



Phillips Hall
 - ECE
 Built: 1954
 Sq. Ft: 88,540
 Net: 56,735
 Partial Renovation
 with Duffield



Thurston Hall
 -CEE, MSE, TAM
 Built: 1953
 Sq. Ft: 53,010
 Net: 35,724
 Partial Central HVAC
 Labs on 3rd & 4th floor
 renovated '95



Knight Lab
 - CNF
 Built: 1954
 Sq. Ft: 16,469
 To be demolished '04

Facilities



Carpenter Hall
 - Engr Admin, Career Svcs,
 & Library
 Built: 1957
 Sq. Ft: 50,577
 Net: 43,034



Hollister Hall
 - CEE, Admissions
 Built: 1959
 Sq. Ft: 155,288
 Net: 71,735
 No Central HVAC
 McManus Lounge '99
 DeFrees Lab '84



Upson Hall
 - CS, MAE
 Built: 1958
 Sq. Ft: 156,859
 Net: 101,401
 Partial Central HVAC
 4th & 5th floor added '87
 Automotive lab added '95



Bard Hall
 - MSE
 Built: 1963
 Sq. Ft: 49,366
 Net: 22,994
 Phased HVAC in process



Grumman Hall
 - MAE
 Built: 1958
 Sq. Ft: 16,289
 Net: 12,831
 No Central HVAC



Ward Laboratory
 - Formerly NE
 Built: 1963
 Sq. Ft: 26,030
 Reallocation in process

Facilities



Snee Hall

- EAS
 Built: 1984
 Sq. Ft: 74,599
 Net: 40,061



Rhodes Hall

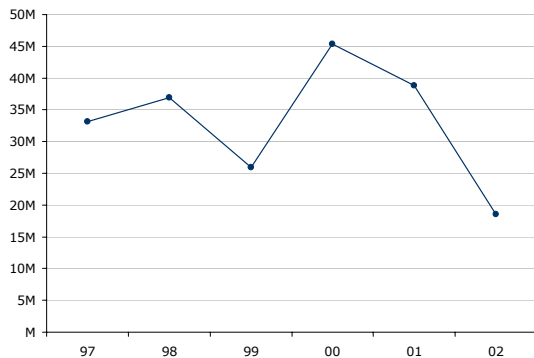
- CIT, CS, ECE, MAE, ORIE, TC
 Built: 1990
 Sq. Ft: 214,505
 Net: 189,318



Duffield Hall

- CNF, NBTC and others
 Anticipated in 2004
 Sq. Ft: 150,930
 Net: about 106,000

New Gifts and Commitments



1997-01

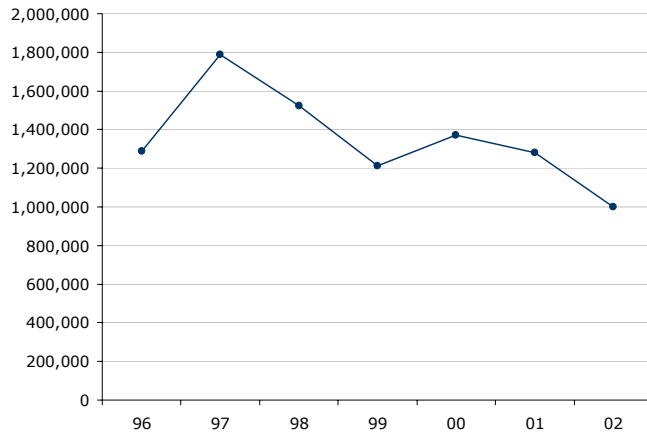
Duffield Hall campaign begun
 (David Duffield gives \$20M)

2001

University scholarship
 campaign



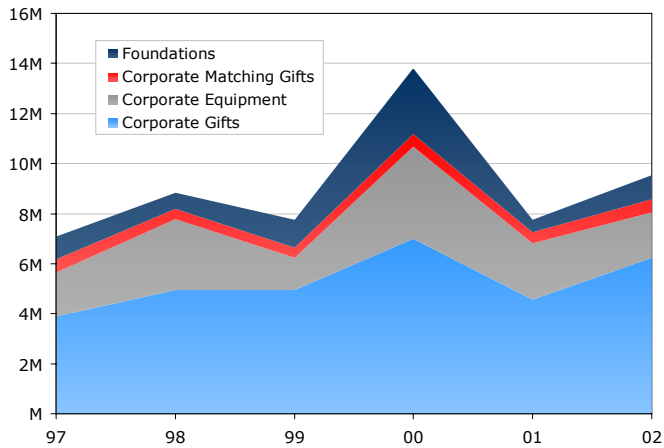
Unrestricted Gifts



College of Engineering

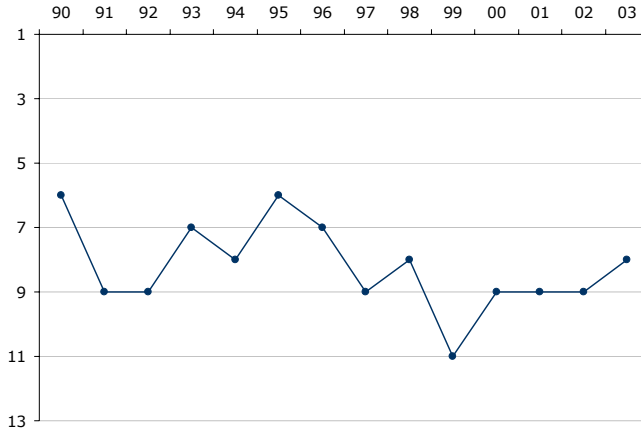


Corporate Donations

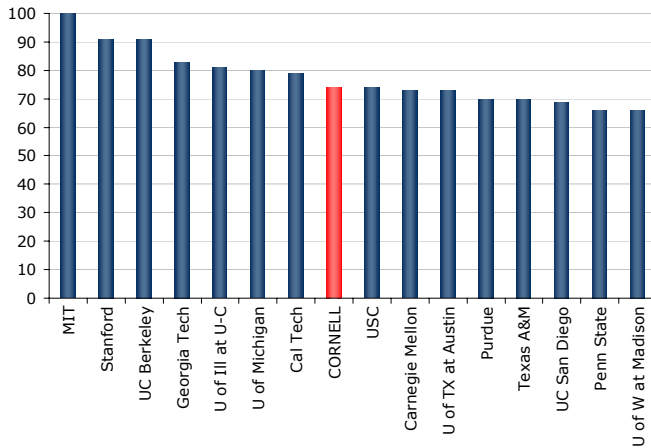


College of Engineering

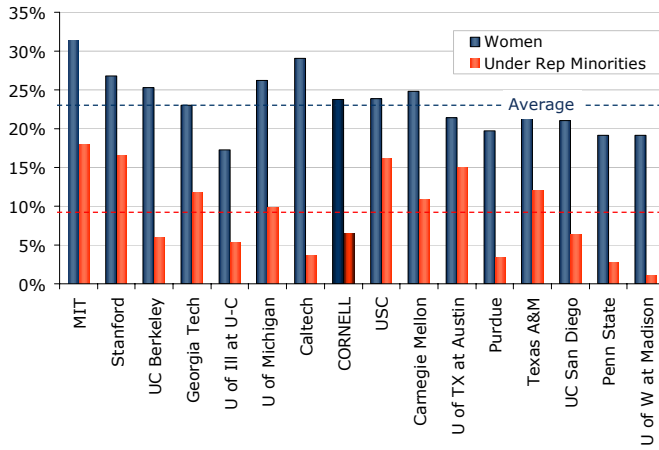
Cornell Engineering Graduate Rank in U.S. News



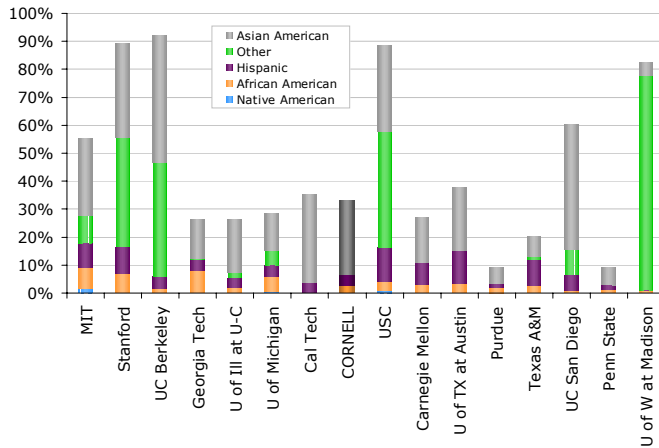
US News Graduate Engineering School Rankings Spring 2002



Women and Minority Undergraduates

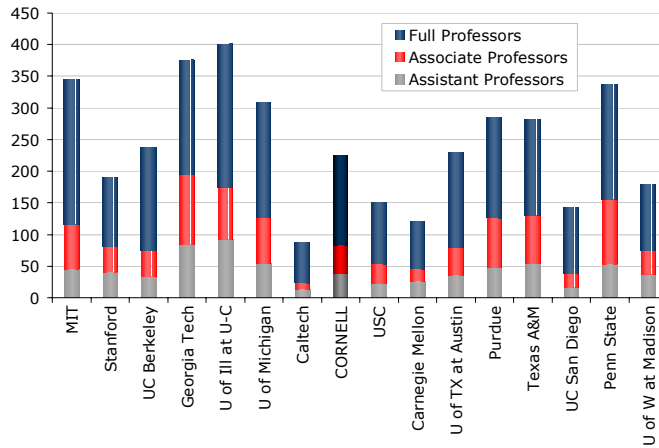


Undergraduate Ethnicity

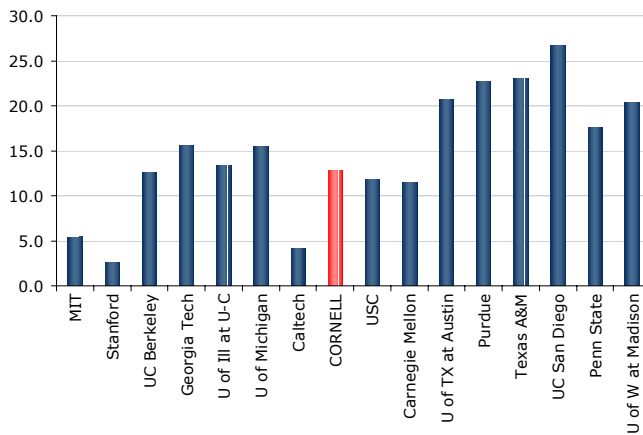




Engineering Faculty Distribution

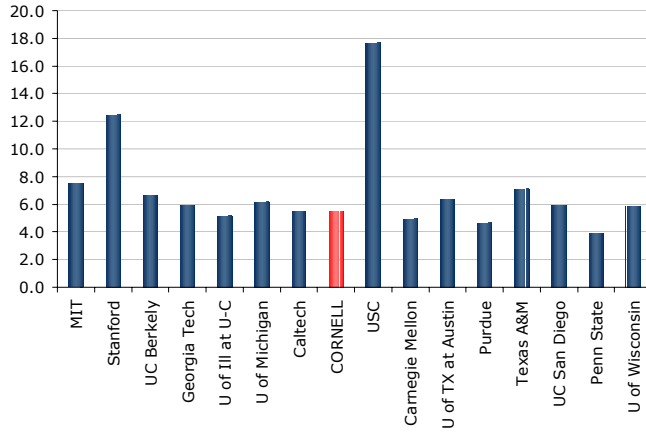


Undergrad Student to Faculty Ratio





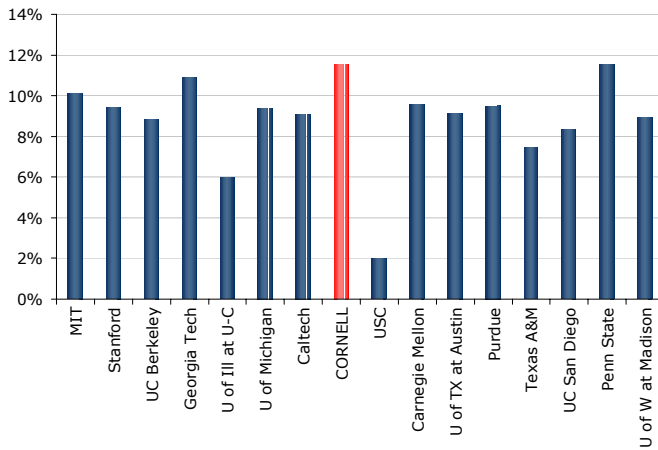
Graduate Student to Faculty Ratio



College of Engineering



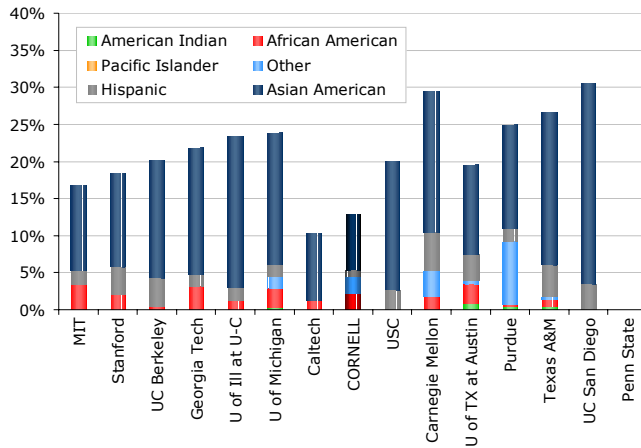
Female Faculty



College of Engineering



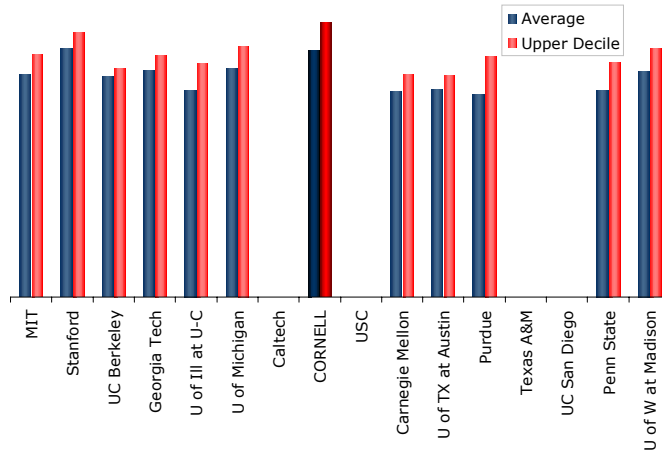
Faculty Ethnicity



College of Engineering

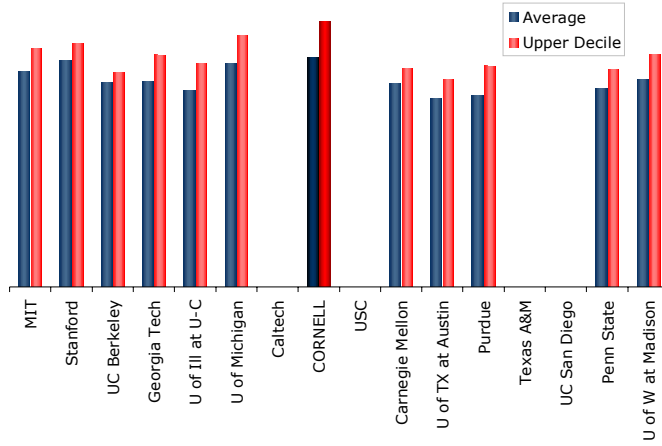


Assistant Professor Salaries

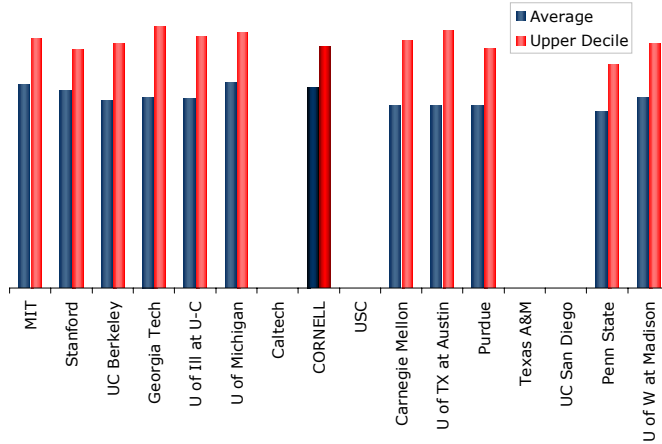


College of Engineering

Associate Professor Salaries



Full Professor Salaries



Discussion