



USC Viterbi School of Engineering

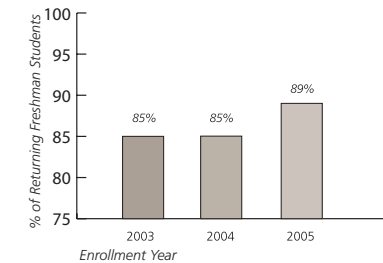
Students

DEGREES AWARDED IN 2007

B.S.	480
M.S.	1,140
Ph.D.	142

UNDERGRADUATE PROGRAM

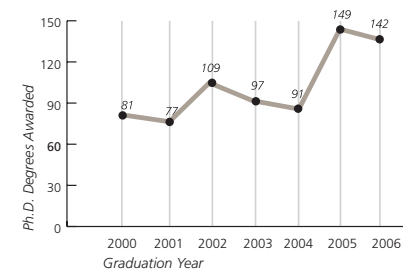
- High freshman selectivity in the Viterbi School, with only 11 percent of all applicants enrolled.
- In Fall 2006, 15.26% of Viterbi undergraduates were underrepresented minorities (Hispanic, Native American and African American).
- Viterbi has 24% female undergraduates versus the 17% national average.
- In Fall 2006, the freshman class return rate to engineering was 89%.



- Since 2000, the average SAT scores (Math and Critical Reading/Verbal) of freshmen entering the Viterbi School have risen by 76 points.
- In Fall 2006, the range of SAT scores of entering freshmen was 2000 at the 25th percentile to 2190 at the 75th percentile.

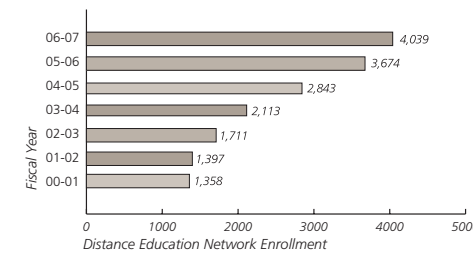
Ph.D. PROGRAM

- 1 in 10 applicants is admitted into the Ph.D. program.
- 20% of the Viterbi School's Ph.D. students are women.



DISTANCE EDUCATION NETWORK

- The Distance Education Network (DEN) is the largest e-learning professional engineering program of any leading research university, and offers more than 30 Master of Science degrees.
- 20% of DEN enrollment is female.
- DEN enrollment has increased by 336% since 2000.



Faculty Distinctions

American Academy of Arts and Sciences	5
National Academy of Engineering	28
National Academy of Sciences	4
NSF Presidential Early Career Awards for Scientists and Engineers (PECASE)	7
Presidential/NSF Young Investigators/CAREER Awards	43
Shannon Award	4
Turing Award	1

- The Viterbi School includes 49 endowed chairs and professorships.
- One-third of the Viterbi School's faculty are Fellows of professional organizations.



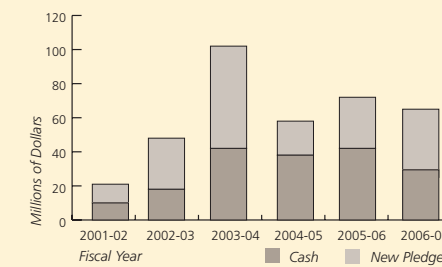
Fundraising Highlights

DESTINATION: THE FUTURE

The Viterbi School's ambitious \$300-million fundraising initiative is helping to establish a substantial endowment to enhance academic programs, teaching, faculty research, student scholarships and other priorities of the school.

- Current total: \$270 million after 72 months of the 84-month initiative.
- 62.5% of funds raised to date are endowment gifts.

Cash and Pledges by Fiscal Year



MAJOR ALUMNI GIFTS

Viterbi School Naming:

- USC Andrew and Erna Viterbi School of Engineering

Department Naming:

- Daniel J. Epstein Department of Industrial and Systems Engineering
- Mork Family Department of Chemical Engineering and Materials Science
- Ming Hsieh Department of Electrical Engineering

Named Institutes:

- Mark & Mary Stevens Institute of Technology Commercialization*
- Klein Institute for Undergraduate Engineering Life

* Now the USC Stevens Institute of Innovation

The Dean's Report is available online at:

viterbi.usc.edu/deansreport

USC Viterbi School of Engineering

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VITERBI.USC.EDU



2007 THE DEAN'S REPORT



Message From the Dean

I invite you to take a quick look at the University of Southern California Andrew and Erna Viterbi School of Engineering.

We have dynamic educational programs geared to our rapidly changing times, a creative and much-honored faculty, an impressive array of national research resources and a diverse student body that grows more talented every year.

Breathtaking technological advances have profoundly transformed society, culture and life across the globe, and there has never in history been a more exciting time to be an engineer.

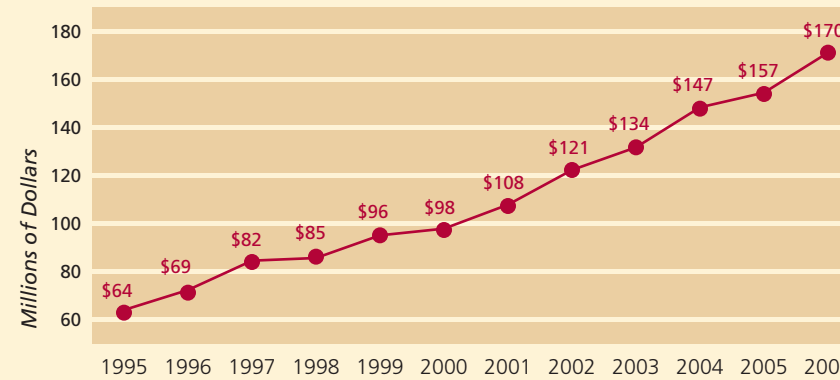
We continue to strive to be first at USC, a leader in the nation, with constantly rising quality and excellence in all of our endeavors.

Yannis C. Yortsos
Dean
USC Viterbi School of Engineering

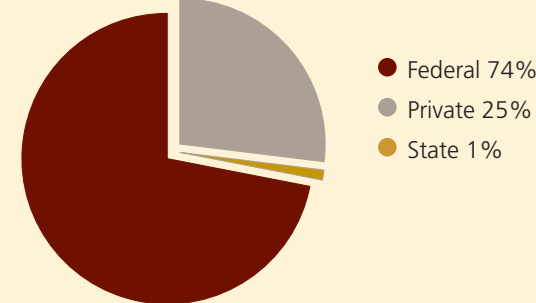
Research at Viterbi

With a strong research portfolio, the Viterbi School is consistently ranked among the top in the nation in total research volume and in the amount of funded research per faculty member.

Research Support



Research Funding Sources



More than 45 research centers and labs operate within the Viterbi School of Engineering, including the following:

NATIONAL RESEARCH CENTERS

- **Biomimetic MicroElectronic Systems (BMES)** NSF Engineering Research Center to develop biology-based microelectronic systems to treat blindness, paralysis and central nervous system impairments.
- **Integrated Media Systems Center (IMSC)** NSF Engineering Research Center in multimedia and the Internet.
- **Center for Risk and Economic Analysis of Terrorism Events (CREATE)** The Department of Homeland Security's first University Center of Excellence to address the risks and economic consequences of terrorist threats at home and abroad.
- **The National Center for Metropolitan Transportation Research (METTRANS)** A U.S. Department of Transportation University Transportation Center, operated jointly by USC and Cal State University, Long Beach.

INFORMATION SCIENCES INSTITUTE (ISI)

A world leader in research and development of advanced computer and communication technologies, actively engaged in a broad spectrum of information-processing research, and a major contributor to the nation's information technology knowledge base.

- One of the incubators of the Internet.
- Specializes in key areas of computer science, including artificial intelligence, very large scale integration (VLSI), compilers, cybersecurity and educational technology.
- MOSIS, now in its 26th year, plays a critical role in new chip designs through low-cost prototype fabrication for commercial firms, government agencies, and research and educational institutions worldwide.

AFFILIATED CENTERS

The Viterbi School works closely with specialized research centers in bioengineering, virtual computer technologies and technology innovation.

- **Alfred E. Mann Institute for Biomedical Engineering (AMI)**
- **Institute for Creative Technologies (ICT)**
- **USC Stevens Institute for Innovation**

CORPORATE RESEARCH PARTNERSHIPS

- **Aerospace Institute for Engineering Research (AIER)** A collaboration funded by Airbus and Korean Airlines to promote research in aerospace industry.
- **Center for Interactive Smart Oilfield Technologies (CiSOFT)** A USC-Chevron collaboration to develop information technologies for oilfield operations.
- **Pratt & Whitney Institute for Collaborative Engineering (PWICE)** A collaboration funded by Pratt & Whitney and Korean Airlines to promote research in aerospace technology.

Viterbi School at a Glance

FOUNDED: USC engineering began in 1905

STUDENT POPULATION: Approximately 1,800 undergraduate students and 3,500 graduate students from 110 countries.

FACULTY: 166 tenured and tenure-track faculty, with 49 endowed chairs and professorships.

ACADEMIC DEPARTMENTS: 8

ALUMNI: More than 30,000

CENTERS: Awarded two National Science Foundation (NSF) Engineering Research Centers (ERC); first University Center of Excellence funded by the U.S. Department of Homeland Security; home to the Information Sciences Institute.

ANNUAL RESEARCH SUPPORT: Approximately \$170 million, with more than 45 research centers and institutes.

RANKING: Consistently ranked among top 10 engineering programs.

DISTANCE EDUCATION NETWORK: The nation's largest e-learning professional engineering program.

Departments & Chairs

Aerospace and Mechanical Engineering
Michael E. Kassner

Astronautics and Space Technology Division
Daniel Erwin

Biomedical Engineering
Michael C.K. Khoo

Mork Family Department of Chemical Engineering and Materials Science
Theodore Tsotsis

Civil and Environmental Engineering
Jean-Pierre Bardet

Computer Science
Ramesh Govindan

Ming Hsieh Department of Electrical Engineering
P. Daniel Dapkus, electrophysics chair; Alexander A. "Sandy" Sawchuk, systems chair

Daniel J. Epstein Department of Industrial and Systems Engineering
James E. Moore, II

Special Programs

- Aviation Safety & Security
- Information Technology
- Petroleum Engineering
- Systems Architecting & Engineering

COVER ART: Impressionistic-style ceiling art in the Viterbi Museum in Tutor Hall was painted by Italian artist Sandro Chia and presented to the Viterbi School in 2005.