Strategic Plan 2010 for UIC
College of Engineering

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UIC College of Engineering

- Six departments
- 114 faculty members

Students
- 1,684 undergraduates, 387 B.S. graduates
- 422 Ph.D., 35 Ph.D. graduates
- 438 M.S., 300 M.S. graduates

- 16,000 alumni
- $21 million in research
How to Improve UIC Engineering

- Size of school matters
- Strategic areas of excellence
- Cross-disciplinary research
- Strong ties to industry
- High-visibility collaborative projects
- UIC Engineering poised to be strong
- Leverage location of Chicago
Strategic Plan Outline

- Faculty
- Research
- Undergraduate Program
- Graduate Program
- ...
- Financial Plan

Within each issue
- Where we are
- Specific goals and objectives for 2010
- Action Plan (what we want to do in next five years)
Faculty Status

- 114 Faculty, 11 women and minority
- 40 Fellows of Societies
- 21 NSF Career Award, NYI, PYI Awardees

Faculty Distribution

- BioE: 33, 27%
- ChE: 12, 10%
- CS: 8, 7%
- CME: 21, 17%
- MIE: 14, 12%
- ECE: 33, 27%
Faculty Action Plan

- Increase faculty size from 114 to 130 faculty
  - Strategic areas of excellence
- Recruit excellent faculty
  - NAE members
- Increase standards for promotions
- Salaries and other incentives
- Teaching and research loads
- Diversity of faculty
- Endowed chairs and professorships
Research Program

- Research expenditures: $21 million for 2004
- 365 journal and 373 conference publications
- 422 Ph.D. students, 35 Ph.D. graduates in 2004

UIC COE FY04 Grant Exp By Dept
(In Thousands)

- 31% $6,387
- 14% $3,004
- 12% $2,612
- 9% $1,899
- 12% $2,590
- 3% $713
- 17% $3,604
- 31% $6,387

Legend:
- ADMIN
- BIOE
- CHE
- CS
- ECE
- CME
- MIE
- ERC
Research Action Plan

- Increase the quality of publications
- Increase research funding
- Organize research into interdisciplinary areas
- Submit large collaborative research proposals
- Increased interactions with industry
- Increase number of Ph.D. students
- Incentives to faculty for increased research
- Seed funding for new projects
- Cost sharing for research projects
- Larger startup funding for new faculty hires
- Increased ICR return
Undergraduate Program

- 1684 total undergraduate students
- 387 B.S. graduates in 2004
- Average ACT score 25.8
- 20% minority students, 30% women

UG Enrollment AY04-05 by Departments

- ECE, 657, 40%
- MIE, 354, 21%
- CHE, 70, 4%
- CS, 220, 13%
- CME, 192, 11%
- BIOE, 191, 11%
Undergraduate Action Plan

- Increase student enrollment
- Increase average freshman ACT score
- Better recruiting strategies
- Modern undergraduate curriculum
- Undergraduate research
- Exciting instructional labs
- Student internship and career services
- Diversity of students
- Raise funding for undergraduate scholarships
Space Plans

- Current space 250,000 sq. ft.
  - 114 faculty, $21 million research, 1700 undergrads, 900 grads
- Need 400,000 sq. ft.
  - 130 faculty, $40 million research, 1900 undergrads, 1000 grads
- New engineering building of 150,000 sq. ft.
  - Institute for Nano and Biotechnology
- Cost $45 million
Alumni and Corporate Fund
Raising Plan

$50 million Capital Campaign

- Endowed chairs and professorships
- Graduate fellowships
- Undergraduate scholarships
- Research funds
- New building
- Gifts in kind
Accomplishments in 2004-05

Faculty Recruiting
- Dr. Subrata Chakrabarti hired as Professor of Civil and Mechanical Engineering departments
  - First National Academy of Engineering member hired
- Seven new faculty joined in 2004-05

Faculty Awards and Honors
- Two additional Fellows of Societies
- Two additional NSF CAREER or Young Investigator Awards
- Two faculty named Richard and Loan Hill Professors
Accomplishments (Research)

- Received $5.5 million award from the Air Force

- NSF Engineering Research Center Proposals
  - Bio-therapeutics
  - Multimedia Mobile Communications
  - Cyber-Transportation
  - Alternate and Renewable Energy Systems
  - Metropolitan Security
Conclusions

- UIC Engineering poised to become strong
- Recruit, promote, retain the best faculty
- Train our students for the 21st century
- Form interdisciplinary, collaborative centers of research excellence
- Strong ties to industry
- Leverage location of Chicago effectively