



Strategic Plan Status  
May 20, 2003

## **THE VISION FOR THE COLLEGE OF ENGINEERING**

To produce engineering graduates sought first by industry and investors for excelling in a rapidly changing, technology-driven world both as problem solving engineers and technology managers in existing companies, and as leaders in starting new, technology-based companies.

- We will accomplish our vision by transforming our faculty expectations, our approach to student mentoring, and by adjusting our structure and curricula to stimulate multidisciplinary learning experiences in order to align with the realities of the new economy.
- We will succeed by creating meaningful partnerships with industry and other colleges as well as the public sector to become as dynamic as the constituencies we serve.

### Strategy One

#### **ENHANCED EDUCATION**

Expose our students to a multidisciplinary learning environment by enhancing the traditional role of teaching excellence and mentoring by becoming a leader in the demonstration of technological innovation and personal creativity in the cross-disciplinary knowledge delivery and learning process.

<b>Today</b>	<b>Tomorrow</b>
<ul style="list-style-type: none"><li>• Lecture-based, paper-based</li><li>• Primarily one-way communication</li><li>• 22:1 student/faculty ratio, 100± faculty</li><li>• Outdated classrooms</li><li>• Emphasis on individual learning</li><li>• Curricula emphasize technical skills</li><li>• Research experience limited to graduate students</li></ul>	<ul style="list-style-type: none"><li>• Project-based, learning style-based</li><li>• High utilization of educational technologies, team learning</li><li>• 15:1 student/faculty ratio, 144± faculty</li><li>• Modern classrooms</li><li>• Curricula include leadership, entrepreneurship, communications skills, teamwork and a global perspective</li><li>• Research experience for graduate students and undergraduates</li></ul>

### Strategy Two

## RELEVANT RESEARCH

- Expand traditional research through leadership in the creation of new technologies and processes, industry partnerships in product development, and economic development through the spin-off of new technology-based ventures. A key emphasis for research will be placed on projects and companies located at OU's research park and other Oklahoma sites.
- Build upon OU's historic leadership in energy related research and development.

<b>Today</b>	<b>Tomorrow</b>
<ul style="list-style-type: none"><li>• <b>Curiosity driven, single investigator</b></li><li>• <b>Emphasis on publications, focus on federal funding</b></li><li>• <b>Marginal laboratory facilities</b></li><li>• <b>Faculty and graduate students</b></li><li>• <b>Little emphasis on economic development in Oklahoma</b></li><li>• <b>Lack of strategic focus</b></li></ul>	<ul style="list-style-type: none"><li>• <b>Balanced with market driven, multi-disciplinary research</b></li><li>• <b>Balanced with technology transfer and industry partnerships</b></li><li>• <b>Exceptional laboratory facilities</b></li><li>• <b>Faculty and <u>all</u> students encouraged to participate</b></li><li>• <b>Strong emphasis on entrepreneurship and economic development in Oklahoma</b></li><li>• <b>Exploitation of unique opportunities to lead.</b></li></ul>

### Strategy Three

## TOP STUDENTS

Attract the very best students by our leadership in producing graduates widely known for not only being in great demand for existing jobs, but for their understanding of, and unique preparation for, creating value and ultimately, jobs.

<b>Today</b>	<b>Tomorrow</b>
<ul style="list-style-type: none"><li>• <b>2,180 undergraduates, 531 graduate students</b></li><li>• <b>Focus on recruiting students with high academic standards</b></li><li>• <b>15% of students on scholarship, average scholarship &lt;\$1,000</b></li><li>• <b>Historic exporter of talent (Texas, California, etc.)</b></li><li>• <b>High international student enrollment at graduate level</b></li></ul>	<ul style="list-style-type: none"><li>• <b>2,400 undergraduates, 750 graduate students</b></li><li>• <b>Added focus on students with high leadership potential</b></li><li>• <b>30% of students on scholarship, average scholarship &gt;\$2,000</b></li><li>• <b>Added emphasis on retaining top talent in Oklahoma</b></li><li>• <b>Balanced U.S. National/international student enrollment at graduate level</b></li></ul>