

STRATEGIC PLAN

*Erik Jonsson School of Engineering and Computer Science
The University of Texas at Dallas*

MISSION STATEMENT

The mission of the Erik Jonsson School of Engineering and Computer Science at The University of Texas at Dallas is to provide agile, world-class learning environments for tomorrow's technology leaders and innovators.

This means UTD is addressing the nation's critical shortage of engineers by creating an unusual engineering school, differentiated by:

- Flexibility and agility in engineering education and research
- A focus that both expands and goes beyond high technology;
- Its short but dramatic history as an engineering school;
- A fearlessly aggressive leadership and approach in solving the nation's most important issues;
- A location in one of the nation's premier technology regions.

The school's vision is to provide superior engineering education and research that will continue to earn the respect of students, faculty, administrators, industry and the public from across Texas and the nation, placing the school into national prominence as one of the top engineering schools in the U.S.

CURRENT STATUS

The Jonsson School enjoys an enrollment of 2800 students, a remarkable achievement for an engineering school specializing only in electrical engineering and computer science & engineering – and one that began its undergraduate program only 15 years ago, in 1990.

The school confers approximately 750 degrees per year and its production of Ph.D. degrees is now at 34 per year. According to data from the *2004 American Society for Engineering Education Report*, UTD ranks fifth in the nation in engineering degrees awarded in electrical and computer science and engineering – ahead of such schools as Georgia Tech, MIT, Stanford, UCLA and Michigan. UTD ranks first in degrees awarded in computer science. The school's tenure-track faculty has grown to 82 and is projected to be 90 by the fall semester of 2005.

With a completion date expected in late 2006, UTD's new Natural Science and Engineering Research Building will provide 192,000 sq. ft. of additional laboratory and office space and will house clean room laboratories and other engineering research labs. Putting engineers and scientists in the same building will facilitate interdisciplinary interaction so important to novel discoveries.

STRATEGIES FOR SUCCESS

INITIATIVE 1:

Beyond High-Tech: To develop the infrastructure, the philosophy, and the operational behavior to bring

forth revolutionary advances in engineering research and sustained superior performance in engineering education and, thus, become internationally respected as a first-class institution.

Within five years, the Jonsson School will double the number of faculty in critical areas we predict will solve many of the major problems of our time. The addition of these faculty members will dramatically increase possibilities for external funding. The Jonsson School also plans to double the number of undergraduate and graduate students and improve the pipeline of women and minorities into engineering. It has an aggressive goal of justly deserving and being ranked, by any external organization or by peers, in the nation's top fifty engineering schools within five years.

INITIATIVE 2:

To be of better service and higher value to the community.

The Jonsson School can serve as an enormous asset to the North Texas region and the City of Dallas in attracting high-tech firms that require the services of a first-class university. The school will inevitably spin-off additional high-tech firms and enable North Texas to grow as one of the nation's premier technology hubs. These firms will bring more high-level, high-value jobs that will ensure economic growth and they and the university will attract more federal dollars to the region well into the future. The Jonsson School will tackle the critical problems of society, bring forth technologies that will improve the quality of life, and stimulate economic development. It must work with city, state and national leaders to create initiatives for economic expansion in the region.

INITIATIVE 3:

To establish the resources that support the school's vision and goals.

The Jonsson School is moving in a courageous new direction to accept bold responsibility toward solving the most important challenges of our time. It will accomplish its goals through thoughtful, disciplined, rational, targeted approaches. It must invite and receive significant philosophical and financial support from the community to launch these initiatives. Investing in UTD is a direct investment in the future of Dallas and the North Texas region. American technologies must move in new directions to solve problems, improve quality of life, and spur economic development. The Jonsson School has a mandate to raise \$100 million in the next four years and to use the money to live up to its potential. UTD invites the community to join with the Erik Jonsson School to *Invent Tomorrow*.

SUMMARY

The Jonsson School has both an extraordinary history and an extraordinary promise for distinction. It is truly a rising star in engineering education and research. To accomplish its goals it needs to: add twenty-five chaired professors at \$2 million each, establish an Excellence Endowment, add programs in both Bioengineering and Materials Science & Engineering, and establish an aggressively funded, \$25 million Graduate Fellowship Program.