Texas Higher Education Coordinating Board
Technology Workforce Development Grant Program – 2002

Process for Developing Recommendations for Funding

The 77th Texas Legislator and the Governor adopted the Technology Workforce Development Act (Senate Bill 353). The purpose of the Act is to increase both the quantity and quality of baccalaureate-level engineers and computer scientists produced in Texas universities. The Act created a grant program to be administered by the Texas Higher Education Coordinating Board. It mandated the creation of an advisory committee made up of industry and academic members to provide oversight to the grant program. The roster of the 2002 Technology Workforce Development Grant Program Advisory Committee approved by the Commissioner is listed on the reverse side. The Act specified a peer review process for making the awards.

The Coordinating Board approved a Program Announcement in October 2001. It was published and distributed to all Texas Engineering and Technical Consortium members on November 8. By the due date, December 14, 2001, 55 proposals were submitted.

Two panels of experts from industry, government, and out-of-state academia evaluated proposals submitted by computer science programs and accredited electrical engineering programs from public and independent higher education institutions in Texas. The panels represented the Engineering (EE) and Computer Science (CS) program areas.

The panels evaluated the proposals using a process reviewed and approved by the Technology Workforce Development Grant Program Advisory Committee. Two reviewers independently studied each proposal in preparation for the panel meetings.

Each panel considered all proposals assigned to its area and assigned each proposal to the "Fund" or "Do Not Fund" categories. The Electrical Engineering panel further divided the "Fund" category into "Fund - Priority 1" and "Fund - Priority 2." All proposals marked as "Fund" were ranked relative to each other after in-depth panel discussions. Both panels made recommendations for budget changes, which usually led to lower funding levels. However, there were two recommendations to increase the funding level.

The Program Advisory Committee recommended dividing the total funds available for awards by a 60 to 40 ratio between the EE and CS program areas. The Advisory Committee selected proposals for funding in rank order by program area (EE or CS) until the funding allocation was exhausted. The Committee also recommended apportioning one grant to a large joint proposal, which combined EE and CS departments, by the 60 to 40 ratio.

The Texas Higher Education Coordinating Board gave Commissioner Brown authority to make awards according to the available budget at the time of the awards announcement.

Technology Workforce Development Grant Program – 2002

Technology Workforce Development Grant Advisory Committee

(Membership list as of April 1, 2002)

Mr. Torrence H. Robinson (Chair) – Worldwide DSP University Program Manager, Texas Instruments, Dallas, TX
Dr. C. S. Burrus – Dean of Engineering, Rice University, Houston, TX
Dr. Bill D. Carroll – Dean, College of Engineering, The University of Texas at Arlington, Arlington, TX
Dr. Daniel E. Cooke – Head, Department of Computer Science, Texas Tech University, Lubbock, TX
Dr. Alfred J. Griffin, Jr. – Distinguished Member Technical Staff, Silicon Technology Development, Texas Instruments, Dallas, TX
Dr. Sam Hughes – Director, Continuous Improvement, Motorola, Austin, TX
Mr. Wayne Johnson – Executive Director, University Relations Worldwide, Hewlett Packard, Palo Alto, CA
Dr. Sung-won Park – Chairman, Electrical Engineering & Computer Science, Texas A&M University, TX
Ms. Sue Snyder – Government Affairs Director, AMD, Austin, TX
Dr. Ben Streetman – Dean, College of Engineering, The University of Texas at Austin, Austin, TX

2002 Review Panel Members

Dr. Kenneth A. Connor – Professor and Chair, Electrical Computer, and Systems Engineering Department, Rensselaer Polytechnic Institute, Troy, NY
Mr. Sherel D. Horsley – VP Texas, Plano, TX
Dr. Richard LeBlank – Professor, Director of Education, College of Computing, Georgia Institute of Technology, Atlanta, GA
Dr. Peter Lee – Associate Dean of Undergraduate Programs, Computer Science Department, Carnegie Mellon University, Pittsburgh, PA
Dr. Zane C. Motteler – Computer Scientist Emeritus, Lawrence Livermore National Laboratory, Albuquerque, NM
Dr. Donn G. Sickorez – University Affairs Officer, NASA, Lyndon B. Johnson Space Center, Houston, TX
Mr. Stephen Waters – University Relations Group, Microsoft Research, Redmond, WA
Dr. H. Oner Yurtseven – Dean and Professor of Electrical Engineering, School of Engineering and Technology, Indiana University Purdue University, Indianapolis, IN

Technology Workforce Development Grant Proposals: 2002

Awards

Pending sufficient funding in the TWD account with the Texas Comptroller of Public Accounts

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Computer Sciences

Lamar University

- *Study, Research, and Achievement in Lamar University Computer Science* $98,790

Southwest Texas State University

- *Enhance Computing Workforce & Provide Higher Education in Computer Science to Working Professionals* $609,502

Tarleton State University

- *Launching the Texas Engineering Education Pipeline: Deploying the Infinity Project Statewide* $23,014

Texas Engineering Experiment Station

- *Increasing Computer Science Retention by Developing and Deploying Self-Paced Learning Modules* $422,692

Texas Tech University

- *Efficient, Cost-Effective, Seamless, Advising Process to Increase CS Graduates* $194,822

Texas Woman's University

- *Launching the Texas Engineering Education Pipeline: Deploying the Infinity Project Statewide* $57,500

University of Houston - Clear Lake

- *Texas Scholars in Computer Science* $508,916

University of Houston - Victoria

- *Recruitment and Retention of Computer Science Students* $63,192

University of North Texas

- *Retention Strategies for Computer Sciences* $129,575

The University of Texas at Arlington

- *Launching the Texas Engineering Education Pipeline: Deploying the Infinity Project Statewide* $113,144

The University of Texas at Austin

- *Target Diversity: Increasing Graduation Rates by Recruiting and Retaining Underrepresented Populations* $366,788

The University of Texas at San Antonio

- *Building Strategic Pathways to the Baccalaureate Degree in Computer Science* $487,102

The University of Texas at Tyler

- *Launching the Texas Engineering Education Pipeline: Deploying the Infinity Project Statewide* $44,400

Electrical Engineering

Baylor University

- *Launching the Texas Engineering Education Pipeline: Deploying the Infinity Project Statewide* $38,000

Lamar University

- *Launching the Texas Engineering Education Pipeline: Deploying the Infinity Project Statewide* $71,000

Prairie View A&M University

- *Increasing Electrical Engineering Program Enrollment: New Program, Increased Retention and College Transfers* $385,800
- *Launching the Texas Engineering Education Pipeline: Deploying the Infinity Project Statewide* $77,600

Rice University

- *Launching the Texas Engineering Education Pipeline: Deploying the Infinity Project Statewide* $29,763

Southern Methodist University

- *Launching the Texas Engineering Education Pipeline: Deploying the Infinity Project Statewide* $96,697

St. Mary's University of San Antonio

- *Launching the Texas Engineering Education Pipeline: Deploying the Infinity Project Statewide* $49,670

University of Houston (Main)

- *Undergraduate Retention and Recruiting of ECE Students at the University of Houston* $604,450

Texas A&M University – Kingsville

- *Expansion of the EE Program at TAMU-K with Scholarships and Tutoring* $64,280

Texas Engineering Experiment Station

- *Enhancing the Quality and Quantity of Electrical and Computer Engineering Graduates* $850,192
- *Launching the Texas Engineering Education Pipeline: Deploying the Infinity Project Statewide* $58,000

Texas Tech University

- *Electrical Engineering Workforce Development at Texas Tech* $317,518

The University of Texas at Arlington

- *Recruitment and Retention to Increase the Number of Undergraduate Students in the Electrical Engineering Program* $306,670
- *Launching the Texas Engineering Education Pipeline: Deploying the Infinity Project Statewide* $89,697

The University of Texas at Austin

- *Increasing and Improving Texas Capability in Electrical Engineering* $850,000
- *Launching the Texas Engineering Education Pipeline: Deploying the Infinity Project Statewide* $92,150

The University of Texas at Dallas

- *UTD School of Engineering and Computer Science -- TETC Undergraduate Expansion Program* $695,000

The University of Texas at El Paso

- *Launching the Texas Engineering Education Pipeline: Deploying the Infinity Project Statewide* $90,000

The University of Texas - Pan American

- *Electrical Engineering Recruitment and Retention Enhancement* $268,180

The University of Texas at San Antonio

- *Launching the Texas Engineering Education Pipeline: Deploying the Infinity Project Statewide* $89,700