

Purdue University
College of Technology
Department of Electrical and Computer Engineering Technology
Strategic Plan 2003 – 2008

March 9, 2008 update

Preamble

The College of Technology and the Department of Electrical and Computer Engineering Technology grew out of the expressed need of business and industry for employees with the ability to work in an ever-changing technological environment and with the ability to apply the latest technology to solve problems and improve business and industry processes. The definition of the College's emphasis is to apply standard and emerging technologies and business and industry practices to the immediate solution of business and industry challenges. The department emphasizes student centered learning and education. In the beginning, much of the department's focus was on the manufacturing needs of the state of Indiana. Although, this remains a key part of the College's focus, the department has matured to a place where it is recognized as a leader in serving a wide scope of the business, industrial, and service industry needs of the state, the nation, and the world. The department's graduates consistently have one of the highest job placement rates of any department on campus, with some of the higher starting salaries among all undergraduate majors. Note: In the balance of this document, when reference is made to the Department, it is intended to mean its entire Department at West Lafayette and each of the statewide locations (where appropriate). When particular locations are intended, they will be referred to specifically and/or separately. Constituents of the Electrical Engineering Technology Program at Purdue University include business and industry, students, graduates, employers, other Departments in the College of Technology, and the Department faculty.

Mission

The mission of Electrical and Computer Engineering Technology at Purdue University is to provide quality, applications-oriented education that produces professionals who contribute to the advancement of technology and engineering.

Vision

To be recognized as a national leader in Electrical and Computer Engineering Technology Education through excellence in student learning, engagement of relevant constituents, professional service, and discovery activities that contribute to student learning.

Core Values and Shared Principles

Reflecting the uniqueness of a land-grant institution, and specifically Purdue University, the following shared core values and guiding principles serve as the foundation for our commitment in the College of Technology:

- **Professionalism.** We pursue excellence in all our endeavors and will conduct our daily business with honesty, simplicity, humility, modesty, integrity, and patience. We have the courage and perseverance necessary to be a world leader in the learning and application of electrical engineering technology.
- **Focus on Learning.** We commit to provide our students the highest level learning environment, support, and expectations necessary to be successful and contribute to the economic well being of the state, the nation and the world. We believe that the learning of electrical engineering technology is best accomplished through intensive and challenging theoretical, experiential, and laboratory-based instruction. We believe that faculty and student involvement in engagement and discovery activities help to enhance faculty development, improve student learning, and achieve the integration and effective use of technology in business and industry.
- **Technology, Human Resource Development, and Change.** We believe that the application of electrical engineering technology and human resource development should be at the core of all our programs of instruction, outreach, and research. We accept the responsibility to nurture and develop individuals with the necessary knowledge, skills, and character required to thrive in a changing environment.
- **Diversity.** We believe in the basic human dignity and potential of all people and encourage individual growth through nurturance, service, and fairness. We are dedicated to the value of diversity among individuals and the uniqueness of their ideas.
- **Collaboration.** We believe it is important to work together with colleagues across disciplines and with business and industry. We value the synergy that results from collaboration, which enhances the learning, discovery, and engagement mission of the Department and the College of Technology.

Shared Principles

- A commitment to always keep the general welfare and education of our students as the guiding principle in all that we do.
- A commitment to innovation through cutting-edge application of technology.
- A commitment to excellence in teaching a rigorous laboratory based electrical engineering technology curriculum that provides students with state-of-the-art knowledge.
- A commitment to the development of ethical behavior and strong leadership, communication, interpersonal, critical thinking, and problem solving skills.
- A commitment to serving the technology education needs of the state of Indiana.
- A commitment to actively engage the community, business, and industry partners to assist in the integration and effective use of technology.
- A commitment to creating an environment that stimulates professional excellence, lifelong learning, and discovery.

Peer Institutions

The Department has identified four peer universities that offer similar programs and share significant commonality of institutional characteristics with the Department, the College, and Purdue.

- Arizona State University
Electrical, Computer, and Telecommunications programs in the Electronics and Computer Engineering Technology Department in the College of Technology and Applied Sciences
- Penn State University
Electrical Engineering Technology program in the School of Engineering Design, Technology, & Professional Programs
- Rochester Institute of Technology
Electrical, Computer, and Telecommunications Department in the College of Applied Science and Technology
- Texas A& M University
Electronics Engineering Technology program and Telecommunications Engineering Technology program in the Engineering Technology and Industrial Distribution Department in the Dwight Look College of Engineering

Core Curriculum Competencies

The Department has an established record of core curriculum competencies in the following major areas that support a broad spectrum of technologies. These are areas that are not necessarily broad signature areas, but rather *enabling technologies* of broad signature areas.

- **Analog and Digital Electronics**
- **Computer Engineering Technology**
- **Electrical Energy – generation, transmission, distribution, conservation, and management.**
- **Electronics Communication (RF, wireless, electromagnetics)**
- **Embedded Microcontrollers**
- **Industrial and Process Controls**

Current and Evolving Signature Areas

The Department has identified broad signature areas related to strengths of its faculty, curriculum and facilities that are the building blocks for strong program areas in Electrical and Computer Engineering Technology. Signature areas are synergistic combinations of the core competencies that provide a platform for student and faculty learning, discovery, and engagement. In most cases, the strategy is to partner with other disciplines for curriculum development, applied research, and engagement. ECET signature areas aligned with the College of Technology signature areas are:

- **Advanced Manufacturing**
An area of evolving interest is Advanced Manufacturing. It is supported by the ECET core competencies including instrumentation, sensors, signal measurements, data acquisition, data storage and transmission, data interpretation and control, process controls, simulation, and computer engineering technology. These core areas have potential in terms of applications such as pharmaceutical manufacturing, possible nanotechnology applications, health technology manufacturing, etc. Computer Engineering Technology is a supporting signature area.
- **Intelligent Health Systems and Technology**
Another area of evolving interest is the Intelligent Health Systems and Technology area. Many of the ECET core competencies are required in this emerging technology area: instrumentation, sensors,

signal measurements, data acquisition and capture, data storage and transmission, data interpretation and control, process controls, simulation, embedded microcontrollers, computer engineering technology, and RF electronic communication.

- **Life Science Based Technology**

Also on the horizon is the area of Life Science Based Technology. Many of the core ECET competencies are applicable to this area: instrumentation, sensors, signal measurements, data acquisition and capture, data storage and transmission, data interpretation and control, process controls, simulation, embedded microcontrollers, computer engineering technology, and RF electronic communication.

- **Forensics Engineering Technology**

The ECET department in cooperation with the National Academy of Forensic Engineers is leading in the development of the first national graduate degree in Forensic Engineering Technology. This will be primarily a distance M.S. degree. This activity is a catalyst for learning, research, and engagement in the growing area of forensic engineering and related to the major area of computer security. Forensics is an area of current and expanding ECET expertise.

ECET department signature areas are multidisciplinary initiatives that cut across the established core competencies within ECET with the potential applications to many disciplines outside of ECET. These ECET signature areas represent future strategic signature areas as well as current signature areas.

- **Audio Systems**

ECET has significant experience in the audio field. Indiana is home to major audio equipment producers that span the industry. ECET is in the process of forming a coalition of these industries to synergistically enhance the opportunities for audio research and development.

- **Cluster Computers and Sensor Networks**

ECET has expertise in Cluster Computers (large-scale distributed processing) and (wireless) Sensor Networks; and, is developing curriculum and applied research in this area of expanding national and international interest. Today, the majority of super computers are computer clusters, optimizing parallel processing of less sophisticated, slower computing systems and subsystems. Sensor Networks combine many core competencies from power management and efficiency to processing and communication, to RF electronics, nanotechnology and fabrication, as well as the sensing technologies. Application of sensor networks span biology and the health sciences, agriculture, manufacturing and defense; and, will become pervasive in future technology applications. Cluster Computing and Sensor Networks are major enablers of other emerging technologies as well as fields of study unto themselves.

- **Controls and Energy Management**

ECET has significant expertise in controls and energy management. This is an expanding area of focus and strength for ECET. Energy management is an area of critical national importance as energy continues to be an international issue.

- **Electronics Communication (RF, wireless, electromagnetics)**

ECET has one of the most advanced instructional laboratories in electronics communication in the country with several electronics communication courses that utilize this laboratory. This discipline is listed as both core competency as well as a signature area. As a core competency, it is a major curriculum focus area within the EET program. As a signature area, it utilizes several ECET core areas and can be applied over a wide spectrum of technical applications.

- **Homeland Security**

Homeland security is a new and developing area of focus for the ECET. ECET will be looking for opportunities and niches in this evolving nationally strategic area through a joint faculty appointment of the Director of Purdue Homeland Security.

- **K-12 and Technology Workforce Development**

The ECET department in partnership with the Agriculture Education department through a joint appointment would develop programs and engage K-12 and post high school citizens through outreach organizations such as 4-H, Purdue extension, and Project Lead the Way (PLTW). ECET is a significant contributor to the development of Project Lead the Way in Indiana and the training of PLTW teachers nationally.

- **Nanotechnology**

ECET is utilizing its micro technology experience to evolve into the emerging nanotechnology discipline with respect to curriculum development and applied research.

- **Power Electronics**

Power electronics applies to many applications areas including energy management, controls, and audio. Power electronics is incorporated in the required program and is a research and engagement area for ECET.

- **Transportation Systems Technology**

Transportation systems technology in such areas as automotive electronics, hybrid vehicles, and unmanned aircraft vehicle is of significant strategic importance to Indiana and the region as well as of national interest. ECET experience combined with other College of Technology disciplines plans to develop expertise in this rapidly technically expanding area.

Priorities for the Electrical and Computer Engineering Technology Department

Five strategic priorities have been identified: focus on these strategic priorities will enable the Electrical and Computer Engineering Technology Department to fulfill its mission and vision.

1. Hire and retain outstanding faculty and staff
2. Attract and retain quality undergraduate and graduate students
3. Continue the development of effective and relevant curricula that prepares graduates for initial and career-long success in areas of industry need
4. Develop scholarship and applied research opportunities
5. Increase fundraising and alumni development initiatives

Goals, metrics, and targets have been (or will be) identified for each of the priorities.

Priority 1. Hire and retain outstanding faculty and staff

Goal 1.1

Attract and retain faculty and staff through competitive compensation

Metric

1.1.a) Benchmark comparisons of faculty salary and compensation with peer institution departments

Baseline

1.1.a) Average ECET tenure track salary by rank (*note: excludes department head*)

2003-04	Purdue	CoT	ECET				
			Purdue	ASU	PSU	RIT	Tex A&M
Assistant	\$60,587	\$54,354	\$54,388	\$60,000	\$57,927	\$60,591	\$62,415
Associate	\$68,638	\$61,435	\$69,016	\$65,000	\$69,348	\$66,867	\$75,375
Full	\$96,597	\$78,865	\$80,369	\$87,000	\$77,184	\$91,955	\$90,018

Target

1.1.a) ECET average salary competitive with peer institutions for all ranks

2004-05	Purdue	CoT	ECET				
			Purdue	ASU	PSU	RIT	Tex A&M
Assistant	\$62,908	\$56,180	\$58,242	—	\$60,657	\$61,804	\$63,567
Associate	\$70,468	\$63,465	\$71,979	\$72,000	\$71,450	\$68,204	\$72,360
Full	\$99,759	\$80,823	\$82,740	\$89,000	\$80,226	\$93,794	\$95,537

2005-06	Purdue	CoT	ECET				
			Purdue	ASU	PSU	RIT	Tex A&M
Assistant	\$66,507	\$58,902	\$61,885	—	\$60,331	\$63,451	\$65,742
Associate	\$72,631	\$65,959	\$74,051	\$86,058	\$74,042	\$69,606	\$77,827
Full	\$103,769	\$83,111	\$86,520	\$94,924	\$82,003	\$97,384	\$102,992

2006-07	Purdue	CoT	ECET				
			Purdue	ASU	PSU	RIT	Tex A&M
Assistant	\$66,802*	\$61,154*	\$66,031*	--	\$63,306	\$62,971	\$68,101
Associate	\$74,820*	\$67,910*	\$76,968*	\$83,009	\$73,582	\$70,442	\$80,349
Full	\$107,564*	\$87,111*	\$89,369*	\$94,924	\$89,766	\$92,965	\$105,514

2007-08	Purdue	CoT	ECET				
			Purdue	ASU	PSU	RIT	Tex A&M
Assistant	TBD	TBD	TBD	--	\$63,306	--	\$68,337
Associate	TBD	TBD	TBD	\$85,629	\$73,582	\$75,030	\$88,779
Full	TBD	TBD	TBD	\$98,024	\$89,766	\$92,355	\$108,423

AAUDE used to calculate salary which includes tenure, tenure-track full-time faculty, chair, heads; excludes assistant deans or higher and faculty in non-academic departments.

* AAUP provided until AAUDE available (different results). Full-time faculty, 12 month salaries converted to academic year with 0.8181 factor, heads included with professors; excludes deans, lecturers, and instructors.

Implementation (Goal 1.1):

- Just distribution of merit increases based on annual performance per established criteria
 - Recruit top candidates at highest appropriate starting salary and start-up packages; and where appropriate in strategic hire positions
 - Use strategic and EMME merit increases appropriately to reward excellent faculty accomplishments
 - Use special bonus merit pay where appropriate to reward faculty and staff for an extraordinary year of accomplishments (one-time bonus pay)
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Goal 1.2

Diversify faculty and staff.

Metric

1.2a) Diversity statistics of faculty.

Baseline

1.2a) 2002-2003

Target

1.2a) Increase faculty diversity to 20% by 2008-09: focus women, African American, and Hispanic.

Faculty and Staff Diversity	2002-03 Baseline	2003-04	2004-05	2005-06 No hires	2006-07
Increase in under-represented (including female) faculty	0	0	1 (5%)	0	2 (10%)
Total female faculty	0	0	0	0	2 (10%)
Total African-American faculty	0	0	1 (5%)	1 (4.8%)	1 (5%)
Total Hispanic faculty	0	0	0	0	0
Total Other	1	1	1	1	2 (10%)
Total under-represented faculty	1 (5%)	1 (5%)	2 (10%)	2 (9.5%)	4 (20%)

Implementation:

- Proactively develop a diverse candidate pool for new faculty searches through marketing strategies and strategic placement of ads
 - Partner with Historically Black Universities, predominately Hispanic Universities (e.g., Puerto Rico), and other universities with significant portion of under-represented students with TAC of ABET accredited EET and CpET programs to attract faculty as well as students
 - Create climate of inclusiveness in the department
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Goal 1.3

Enhance learning, discovery, and engagement through an increasing number of faculty

Metric1.3a) Total number of and FTE of tenure-track faculty (*note: excludes department head*)**Baseline and Targets**

1.3a) Increase to 22 FTE tenure/tenure-track faculty FTE by 2008-09

Faculty	2003-04 Baseline	2004-05	2005-06	2006-07 No hires
Number of faculty	19	20	21	20
Faculty FTE	17.5	18.5	19.5	19.5

Implementation:

- Identify and seek approval for strategic hires including targeted joint appointments with other departments and colleges
- Replace retiring faculty to sustain faculty foundation for strategic initiatives
- Increase soft-money funding to support faculty positions

Priority 2. Attract and retain quality undergraduate students

Goal 2.1

Develop outreach and marketing tools to develop larger candidate pool from High School.

Metric

2.1a) Increasing number of qualified applicant pool from High School while managing enrollment

Baseline

2.1a)

Number of applicants	2004-05 Baseline	2005-06	2006-07	2007-08
HS	147	163	163	168

Target

2.1a) Increasing applicant pool.

Implementation:

- Market to increase quality applicant pool and take advantage of greater selectivity
- Market and connect to targeted PLTW schools

Goal 2.2

Increase quality of graduate students

Metric

2.2a) Average undergraduate B.S. GPA of entering graduate students

2.2b) Average GRE combined verbal and quantitative

Baseline

2.2a) and 2.2b)

Average	2002-03 Baseline	2003-04	2004-05	2005-06	2006-07
B.S. GPA	3.35	3.35	3.73	3.00	3.32
GRE	1020	1047	1092	1150	1130

Target

2.2a) Generally increasing B.S. GPA

2.2b) Generally increasing GRE combined verbal and quantitative scores

Implementation:

- Continue to build a quality MS of Technology program with an AOS in EET
- Market graduate education to TAC of ABET accredited B.S. EET and CpET programs

Goal 2.3

Diversify undergraduate student population

Metric

2.3a) Diversity statistics of undergraduate students.

Baseline and Targets

2.3a) Increase undergraduate diversity, primarily women, African American, and Hispanic

Undergraduate representation	2003-04 Baseline	2004-05	2005-06	2006-07
Female	31 (5.6%)	31 (5.8%)	22 (4.5%)	22 (4.7%)
African-American	41 (7.3%)	33 (6.2%)	22 (4.5%)	22(4.7%)
Hispanic	11 (2.0%)	10 (1.9%)	11 (2.2%)	16 (3.4%)

Implementation:

- Market to increase quality applicant pool and take advantage of greater selectivity
- Market and connect to targeted PLTW schools with significant under-represented students
- Create climate of inclusiveness in the department

Goal 2.4

Diversify graduate student population

Metric

2.4a) Diversity statistics of graduate students

Baseline and Targets

2.4a) Increase/maintain graduate student diversity at or above 20% – primarily women, African American, and Hispanic

Graduate student ethnicity/gender	2003-04 Baseline	2004-05	2005-06	2006-07
Female	3 (17%)	4 (22%)	3 (25%)	4 (28.6%)
African-American	4 (22%)	3 (17%)	0	0
Hispanic	0	0	1(0.5%)	0
Total under-represented students	6 (33%)	6 (33%)	4 (28.6%)	4 (28.6%)

Implementation:

- Proactively seek under-represented population from quality TAC of ABET accredited BS EET and CpET programs
- Create climate of inclusiveness in the department
- Partner with Historically Black Universities, predominately Hispanic Universities (e.g., Puerto Rico), and other universities with significant portion of under-represented students with TAC of ABET accredited EET and CpET programs to attract graduate students
- Market a strong graduate program

Priority 3 Continue the development of effective and relevant curricula that prepare graduates for initial and career-long success in areas of industry need

Goal 3.1

Develop a strong and ongoing continuous improvement program to ensure that the programs achieve their objectives and outcomes.

Metric

3.1a) TAC of ABET accreditation for all programs at all locations

Baseline

3.1a) TAC of ABET accreditation for EET programs at West Lafayette and Kokomo

Targets

3.1a) Program Accreditation

Location	Year Accredited
New Albany	2004-05 – accredited 2005
West Lafayette	2005-06 – accredited 2006
South Bend	2007-08 – reaccredit - visit fall 2007
Kokomo	2007-08 – reaccredit – visit fall 2007
New Albany	2010-11 – reaccredit but request to defer review for a year to 2011-12 to start system accreditation on WL schedule
System wide	2010-11 – reaccredit but request to defer review for a year to 2011-12 to start system wide visit every 6 years based upon WL current schedule

Note: Anderson status to be determined. Columbus program no longer offered after spring 2007.

Implementation:

- Identify and train key ABET coordinators at each statewide location
- Increase the number of faculty at statewide that are ABET evaluators
- Develop department-wide assessment and continuous improvement templates available to all locations

Goal 3.2

Continue to develop graduate curriculum and create an EET area of specialization that evolves into an MS of EET

Metrics

- 3.2a) Increasing the number of graduate courses including a set of core EET courses to offer per semester (1 core course per semester and at least 1 non-core course per semester)
- 3.2b) Implementation of an EET core curriculum Area of Specialization
- 3.2c) Implementation of an MS of EET

Baselines and Targets

3.2a)

Number of grad courses offered	2003-04 Baseline	2004-05	2005-2006	2006-2007
Core courses	0	1	2	2
Non-core courses	3	5	5	5

3.2b) Fully implement core curriculum (4 core courses) by fall semester of 2006, then rotating through all 4 core courses over 2 year period (one per semester)

3.2c) Implemented MS of EET by fall 2008

Implementation:

- Increase the number of faculty involved in the graduate program
- Strategically hire tenure-track faculty that will enhance the graduate program
- Design and develop ECET core graduate curriculum of four course of which three are required for an ECET graduate student
- Continue to evolve graduate curriculum strategy toward MS of EET

Goal 3.3

Develop and implement a Computer Engineering Technology Program (CpET) that is TAC of ABET accredited under the Computer Engineering Technology criteria

Metric

3.3a) A critical core of CpET faculty are hired and charged with the CpET Program development and implementation

3.3b) CpET is approved as a program by the Department, College, Purdue, and the State of Indiana

3.3c) After the CpET program produces graduates, the program will obtain TAC of ABET accreditation under the Computer Engineering Technology criteria.

Baselines and Targets

3.3a) One faculty member was hired in the fall of 2003 and another in the fall of 2004 to focus on CpET specialization. A current faculty was moved to the CpET specialization in 2007. With current faculty and the additional two newly hired faculty, critical faculty mass of faculty has been achieved to transform the current CpET option into a program.

3.3b) The current CpET specialization will be enhanced so that it may be proposed as a program in the future.

3.3c) If implemented, at least one year after the CpET program produces its first graduates, the ECET Department will seek TAC of ABET accreditation for CpET as a separate program. Currently the CpET option is TAC of ABET accredited through the Electrical Engineering Technology criteria.

Implementation:

- The critical faculty have been hired and are now focusing their efforts on curriculum and laboratory development to raise CpET to a distinct program level
- The CpET faculty collaborate with the appropriate faculty, staff, and faculty teams to facilitate program development and approval
- Determine laboratory space and equipment needs to support the CpET program and also support service courses relevant to this discipline area

Goal 3.4

Continue to update the laboratory environment for enhanced learning and discovery in a safe environment

Metrics

- 3.4a) Laboratory infrastructure
- 3.4b) Laboratory equipment
- 3.4c) Achieve and maintain Purdue Indemnification of laboratories

Baselines and Targets

- 3.4a) Laboratory infrastructure is a dynamic need that will change based upon internal and external demands on instructional delivery and applied research space needs.

Laboratory infrastructure	2004-05	2005-06	2006-07
Need (met or unmet)	Need CPT- CpET instructional and applied research space for fall 2005	<ul style="list-style-type: none">• MGL 1210 acquired for CpET• MGL 1236 converted to cluster computing	<ul style="list-style-type: none">• MGL 1230 (IR-PEDAL) created• Open lab supported by IR• Need biotech research space• Need expanded cybercomputing space

- 3.4b) ECET laboratories are well equipped but currently have targeted needs for instructional and applied research equipment; and must continually evolve as technologies emerge. The ECET capital equipment request list maintained by the ECET Laboratory and Safety Team maintains the current and projected needs of the department.
- 3.4c) The ECET Department achieved initial Purdue Indemnification in the spring semester of 2004 and will continue to meet Purdue requirements to maintain its Indemnification

Implementation:

- The faculty and the ECET Laboratory and Safety Team will continue to review laboratory needs and make recommendations for capital investment, space management, and safety recommendations
 - Faculty proposing applied research that requires laboratory utilization will review laboratory resources and make appropriate recommendations with recommendations on how to satisfy laboratory needs
 - Continue to work with and expand our industrial partnerships to acquire appropriate gifts-in-kind and/or utilize off-site location and equipment when appropriate
 - Continue to look for private and public funding to equip the laboratories
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Priority 4 Scholarship and applied research

Goal 4.1

Enhance faculty performance in learning, engagement, and discovery

Metrics

- 4.1a) Number of publications, presentations, textbooks, etc. to disseminate results of learning, engagement, and discovery
- 4.1b) Dollar amount of sponsored projects

Baselines, targets, and data

4.1a) Scholarship baseline and data

	2002-03 Baseline	2003-04	2004-05	2005-06	2006-07
a. Nationally published textbook- new	11	13	2	1	0
b. Nationally published textbook– new edition	(in a)	(in a)	2	7	1
c. Nationally published textbook – continued in print	(in a)	(in a)	13	5	15
d. Refereed journal articles	3	5	4	3	12
e. Refereed conference proceedings	1	4	10	12	17
f. Reviewed conference proceedings	20	23	7	4	10
g. Trade journal article	■	■	0	0	1
h. Technical report	■	■	1	4	1
i. Invited presentations/papers	0	0	4	5	4
j. National & international professional presentation without proceedings	5	8	1	2	4
k. Book editorship	■	■	0	1	1
l. Journal editorship	1	3	1	1	1
m. Reviewer	11	14	8	13	14
n. Other scholarly publications (local, ...	14	17	8	11	5
TOTAL	66	73	61	69	86

4.1b) Dollar amount of sponsored programs baseline, target, and data

Sponsored Research Dollars	1999-00	2000-01	2001-02	2002-03
Total	\$66,405	0	0	0

	2003-04	2004-05	2005-06	2006-07
Number of faculty (FTE)	21.0	31.25	29.75	29.75
Number of faculty with proposals	6	6	7	3
Number of proposals	8	5	7	4
Proposal \$ per faculty	\$46,784	\$32,721	\$54,217	\$100,548
Award \$ per faculty	\$2,804	\$395	\$1,792	\$2,246
<i>Amount awarded (goal)</i>	\$10,000	\$100,000	\$100,000	\$400,000
External amount proposed	\$982,474	\$1,022,533	\$1,612,945	\$2,991,293
External amount awarded	\$58,892	\$12,333	\$53,300	\$66,809
Internal amount proposed	■	\$384,947	\$161,193	\$312,513
Internal amount awarded	■	\$28,312	\$141,237	\$91,035
Total amount proposed	■	\$1,407,480	\$1,774,138	\$3,303,806
Total amount awarded	■	\$40,645	\$194,573	\$157,844

Targets

4.1a) Maintain exceptional national textbook publications level; increase refereed publications.

4.1b) Number and dollar amount of sponsored projects proposed and obtained

Implementation:

- The Department uses merit based performance criteria that reward scholarship through publication and sponsored program activity
- The Department rewards through release time for faculty members who are actively involved in publication and sponsored program activity

Priority 5 Fund raising and alumni development

Goal 5.1

Increase the Department's fiscal resources for technology education, technology discovery, collaborative interdisciplinary engagements, and related support functions.

Metrics

- 5.1a) Total giving to the Department (cash and gifts-in-kind)
- 5.1b) Number and amount of endowments for distinguished and named professorships added per year
- 5.1c) Number and amount of endowments for scholarships added per year
- 5.1d) Number of President's Council (\$1000 donors) and Dean's Club (\$500 donors) members

Baselines, Targets, and Data

- 5.1a) Generally increasing ECET total giving in dollars
* As of May 1, 2007

Benchmark		Data		
2002-03	2003-04	2004-05	2005-06	2006-07*
\$47,801	\$234,701	\$255,780	\$308,123	\$236,900

- 5.1b) Endowments for distinguished and named professors

Baseline

Distinguished - Hoffer
Named - McNelly

Target: Generate a proposal for a distinguished and/or named professor at least every three years.

- 5.1c) Endowments for scholarships

Baseline
2002-03
<ul style="list-style-type: none">• Dr. Margaret R. Taber Endowed Scholarship• Robert W. Schumacher Memorial Endowed Scholarship

Target: Generate an endowed scholarship or fellowship proposal at least every three years.

- 5.1d) President's Council and Dean's Club membership do not have a direct departmental metrics. The Department will implement activities to support growth in these areas (see "Implementation" below).

Implementation:

- Increase percent and total giving with increased communication and outreach with current donors showing our continued appreciation
 - Annual thank you, very visual postcards of Purdue promoting the EET program attributes mailed to all donors a few months before telefund campaign begins
 - Personal calls to major donors
- Continue end of semester recognition and celebration with graduating seniors with food and ECET mementos to establish personal link with graduates as they become alumni
- Participate in appropriate Purdue and College major alumni events locally, regionally, and nationally to build relationships
- Engage industry as appropriate to seek out and establish partnerships
- Articulate to donors and potential donors the opportunity to leverage their donations and receive exciting alumni and friend benefits
- Examine the opportunities that the Industrial Advisory Board may provide in linkage to industrial support
- Utilize sporting events as appropriate to network with alumni and friends
- Develop and propose named professor positions that align with the strategic plan
- Be aware of faculty that have the potential to become distinguished professors and nurture-mentor them toward the appropriate activities to help them achieve this distinction

Goal 5.2

Increase gifts by enhancing both development and alumni relations through cultivation of alumni interests, increased communication, and engaging alumni/patrons (friends) of the Department

Metric

5.2a) Participation rate of alumni giving

Baselines and Targets

5.2a) Percent of alumni giving

ECET Total Gifting	Baseline Percentage		Targets & Data (%)		
	2002-03	2003-04	2004-05	2005-06	2006-07
Target		8%	9%	10%	11%
Percent giving	7%	9.11%	6.42%	5.94%	4.94%

Implementation:

- Increase percent and total giving with increased communication and outreach with current donors showing our continued appreciation
 - Annual thank you, very visual postcards of Purdue promoting the EET program attributes mailed to all donors a few months before telefund campaign begins
 - Personal calls to major donors
- Continue end of semester recognition and celebration with graduating seniors with food and ECET mementos to establish personal link with graduates as they become alumni
- Participate in appropriate Purdue and College major alumni events locally, regionally, and nationally to build relationships
- Utilize special events like the Distinguished Technology Alumni event to establish long term relationships with our most successful graduates
- Determine our most successful alumni and look for opportunities to engage them
- Utilize sporting events as appropriate to network with alumni and friends