2009-2010 Engineering & Technology

Section	Document Name
Fiscal Health	• EGTC.pdf
Fiscal Health	• MUS.pdf

Mission

Our vision is to be one of the best urban schools of engineering and technology, recognized locally, nationally, and internationally for its achievements.

Our mission is to provide to our constituents:

- High quality, well-rounded, and relevant educational experiences that promote critical thinking, scholarly work, and effective communication
- An environment that encourages and promotes excellence in technical proficiency, leadership, scholarship, basic and applied research, creative pursuits, and lifelong learning and that provides opportunities to develop the necessary skills
- An environment that fosters respect for cultural, ethnic, racial, age, and gender diversity
- Educational programs that are regularly reviewed and assessed for continuous improvement
- Outreach and accessibility to the educational, research, and service needs of the broader community through collaboration with other educational institutions, local school systems, businesses and government agencies, and cultural organizations
- Activities that support the intellectual and economic development of business, industry, government, and community stakeholders.

Our Core Values that define, inform, and guide our decisions and actions are:

- *Academic Excellence:* Academic excellence is our first priority. We foster, recognize and value lifelong excellence in learning, teaching, and scholarship.
- *Collaboration & Partnering:* We value teamwork, collaboration, and partnership building within and across disciplines and with the community.
- *Diversity:* We value and encourage intergenerational, multiethnic, and international diversity in our research foci, curricula, and pedagogy and in our faculty, staff, and student composition. We encourage diversity of ideas.
- *Professionalism & Integrity:* We foster, recognize, and reward high standards of professionalism and integrity. We value industrial experience in our faculty and students. We expect faculty to be academic and professional role models. We support best practices in teaching and learning. We expect ethical decision making and behavior by all people and in all practices associated with the School.
- *Respect/Collegiality/Civility:* We respect and value the unique abilities, perspectives, and contribution of every person in the Schools community. We respect each other as individuals. We respect every persons right and responsibility to carry his/her share of the load.
- *Responsiveness & Service:* We are committed to service and volunteerism both within and outside our School and to meeting the needs of our constituents. We encourage feedback from our constituencies and work to adjust our efforts to meet their needs. We are committed to changing our teaching programs and research initiatives to respond to our constituents stated and anticipated needs.
- *Leadership & Continuous Improvement:* We foster, recognize, and reward high levels of leadership at every level in the School. We are committed to being a leader in the disciplines of engineering and technology. We seek to assess and regularly refine our programs and administrative processes.
- *IUPUI Identity:* We value the unique opportunities associated with being part of one of the nations best urban universities, and we appreciate the value of the Purdue name in our degrees. With a wide range of degree programs (over 200 associate through doctoral) and 18 schools, IUPUI is Indiana's most comprehensive academic institution and is one of the leading research institutions in the State.

Goals and Objectives

Goals and Objectives

A1. Attract more students, including better prepared students and a more diverse population to the school

A1.a. Increase involvement in Project Lead the Way and similar programs.

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Continued to host students from local area high schools.
- Hosted the annual Project Lead the Way Student Conference in collaboration with the Indiana Department of Education in April 2010 with 350high school students in attendance.
- Continued offering $1,000 scholarship to students who completed Project Lead the Way courses in high school and who agreed to come to our technology programs.

Evidence of Progress for 2009-2010:

- Our Friday labs still attracts attention of high schools. As economy improves, we hope to have more high school student visits.
- Project Lead the Way Student Conference attendance has maintained consistent attendance.
- Approximately 20% of direct admits for fall 2009 have taken one or more PLTW courses in high school.

Activities planned for 2010-2011:

- Continue with the theme-oriented Friday labs.
- Continue with CIT Day hands-on computer and information technology activities on campus as part of Friday labs.
- Continue to offer PLTW scholarships to students who complete appropriate PLTW courses in high school.

A1.b. Continue to improve our process for recruiting students from K-12.

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Maintained level of scholarship funds provided by school ($300,000).
- Continued merit-based awards sponsored by local business and industry to attract students.

Evidence of Progress for 2009-2010:

- Offered the following scholarships to prospective students in the school: 5 for Bepko, 4 for Presidential, 1 Plater, 10 Val/Sal, 26 Academic Excellence, and 43 for Dean of Faculties scholarships.

Activities planned for 2010-2011:

- Continue looking for additional funding opportunities for student scholarships.
- Market scholarship opportunities to prospective donors.
- Market the scholarship opportunities to prospective students.
- Increase the school match for number of these scholarships.

A1.c. Increase the number of scholarships for underrepresented students.
Campus Planning Theme: Teaching and Learning, Civic Engagement
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Matched all campus admission based scholarships at the rate of 25% for both domestic and international students.
- Created a new scholarship for direct admit students with a 3.25 GPA that did not receive a campus admission scholarship in the amount of $1,000 annually.
- Continued 3 year grant from the IU President's Initiative to provide scholarships, mentoring and tutoring to under-represented students (African American, Hispanic, and females); funds are $20,000 1st year, $30,000 2nd year, $40,000 3rd year.
- Continued Commitment to Engineering Excellence program, a joint proposal with Science and provides $22,000 in scholarships and additional funds for research and internships; E&T awards $2,200 per year to 10 students who apply.
- Continued Preparing Outstanding Women for Engineer Roles (POWER) camp for girls was conducted again with the support from Midwest ISO and Rolls-Royce.
- Continued our successful summer Minority Engineering Advancement Program as well as the Transportation Camp and Pathways to Engineering program.

Evidence of Progress for 2009-2010:

- We have more minority students who hold scholarships.

Activities planned for 2010-2011:

- We will continue with the programs noted above and will work with new Assistant Dean for Development and External Relations to pursue funding opportunities from business, industry, and other stakeholders as part of the Capital Campaign.

A1.d. Increase the number of merit-based scholarships and funding per scholarship.
Campus Planning Theme: Teaching and Learning
Secondary Goals:

Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Offered 135 in-state (43 accepted) merit scholarships.

Evidence of Progress for 2009-2010:

- We continue attracting students with better academic credentials due to merit-based scholarship offers.

Activities planned for 2010-2011:

- We will continue to match all campus admission based scholarships at the rate of 25% for both domestic and international students.

A1.e. Increase the number of highly qualified traditional students who are directly admitted to the school.
Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Offered supplementary scholarships to campus admission-based scholarships in the amount of 50% for all domestic students.

Evidence of Progress for 2009-2010:

- For fall 2009, our school admitted 30.1 percent of the Top 10% students.
- The average SAT scores fall 2009 was 1143.

Activities planned for 2010-2011:

- We will continue offering merit-based scholarships to academically strong students. Our match for campus admission based scholarship was reduced to 25% due to the increase of amounts of campus awards. However, the 25% match was extended to International students also.

A1.f. Expand articulation agreements with other institutions to increase the number of qualified transfer students.
Campus Planning Theme: Teaching and Learning
Secondary Goals:

Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Developed articulation agreement between Ivy Tech A.S. in Pre-Engineering with newly approved B.S. in Energy Engineering
- Continued to review existing articulation agreements with Ivy Tech, Vincennes, and a number of area high schools.
- Signed additional agreements with international institutions (e.g. Sun Yat Sen University)
- Signed articulation agreement with Clark Atlanta University to support the recruitment of underrepresented students to upper-division E&T courses at IUPUI.
- Offered additional online computing courses to high schools through CITIDOE program.

Evidence of Progress for 2009-2010:

- There is more interest on the part of area high schools, with Ivy Tech, and Vincennes to articulate courses and programs with our school.
- CITIDOE program continues to expand across the state.

Activities planned for 2010-2011:

- Articulation agreements with Ivy Tech will be developed for the following engineering programs: computer, electrical, and mechanical
- Articulation agreements with Ivy Tech will be revised in all of the Technology progams.
- Department of Computer and Information Technology will add more online course offerings to high schools and articulate some advanced placement of high school students when they apply to and are admitted by our school.
- Administration of CITIDOE courses may increasingly administered by IUPUI's SPAN office.

A1.g. Increase the number of classes offered via distance education.
Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Conducted a survey of all E&T undergraduate students to determine their needs, experiences, and preferences for online courses; this information was shared with departments to encourage enhancement to online courses.
- Continued courses at IUPUI's Park 100 location for select programs and launched courses at IUPUI's Greenwood location for select programs
- Expanded the number of CIT, OLS, and TCM courses offered online
- Continued to promote the Facilities Management concentration within the M.S. in Technology program, the only online program of its kind in the United States

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Evidence of Progress for 2009-2010:

- Percentage of student credit hours generated by online courses is now nearly 15% in the school.
- Response rate of 18% for online course survey.

Activities planned for 2010-2011:

- We will maintain online course percentage of 15% with a goal of selectively increasing the number of additional courses offered online
- We will establish minimum expectations for Oncourse usage by faculty teaching in all types of delivery modes (e.g. classroom; hybrid; online)
- We will market Park 100 and Greenwood course options to current and future students, working in partnership with IUPUI's Community Learning Network

A1.h. Enhance the quality of all programs, as measured by accrediting agencies, in comparison with peer institutions, and to meet the needs of industry.

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Continued Assessment Committee as a sub-committee of the E&T Faculty Senate
- Engaged in initial ABET, Inc. reviews for CIT and CGT programs
- Engaged in NASM review for MAT programs
- Undertook planning process for ABET, Inc. reviews for BME, CmpE, EE, and ME

Evidence of Progress for 2009-2010:

- CIT and CGT programs received positive ABET, Inc. review and are accredited for 2-year period with an interim report due in 2012
- NASM accreditation deferred for one year while some curriculum issues are reviewed

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Activities planned for 2010-2011:

- BME, CmpE, EE, and ME programs will undergo ABET, Inc. review in fall 2010.
- We continue preserving the accreditation status of all of our discipline-specific accredited programs.

A1.i. Increase marketing efforts for academic programs.

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Enhanced school and the department websites and created additional websites to highlight some of the special programs in the school (e.g. Motorsports Engineering)
- Continued partnership with Westcomm to promote E&T accomplishments in various media
- Revised brochures with new branding and updated content
- Continued targeted recruitment to Puerto Rico and Southeast Asia, yielding additional student interest and enrollment in E&T programs

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Evidence of Progress for 2009-2010:

- Number of incoming freshman for fall 2009 increased 15% over 2008.
- Number of UC admits for fall 2009 increased 13.8% over 2008.
- Number of direct admits for fall 2009 increased 5.7% over 2008.
- Number of transfer applicants for fall 2009 increased 17.8% over 2008.
- Number of intercampus transfers for fall 2009 increased 25.7% over 2008.
- Number of returning students for fall 2009 increased 8.9% over 2008.

Activities planned for 2010-2011:

- Continue to improve website and make information up-to-date and relevant
- Expand the marketing of unique E&T programs, in particular Motorsports and Energy Engineering
- Continue targeted international recruitment trips that complement IUPUI enrollment shaping initiatives

A1.j. Continue to improve the school's process for maintaining contact with prospective students upon first contact.
Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Provided personal outreach and contact to newly-admitted or transferred students by the Assistant Dean for Student Services to facilitate academic advising, registration, and any needed follow up. Departments are asked to also establish contact with new students and welcome.
- Used E&T-based Student Ambassadors to follow up with admitted students to facilitate student-to-student conversations and connections
- Continued postcard and electronic mailings to admitted students

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Evidence of Progress for 2009-2010:

- Initial feedback from newly-admitted students suggests that the Student Ambassadors program is being well-received.

Activities planned for 2010-2011:

- We will provide greater coordination and communication between Office of Student Services and the New Student Academic Advising Center for enhanced orientation, advising, and initial enrollment of students.
- For fall 2010 admits, two email newsletters per semester will be sent and we will again host "Be a College Student for a Day" event.
- Ongoing evaluation of Student Ambassadors program will occur and expansion of this initiative is likely

A1.k. Increase the number of classes offered via nontraditional delivery methods.
Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Continued to develop and teach more online courses as well as 1-week intensive courses during the Christmas Holiday break, Spring Break week, and throughout the summer.
- Increased the number of late-start classes to accommodate students who need to maintain full-time enrollment status but must make schedule adjustments after the official add-drop period ends
- Redesigned several CGT courses to be offered as 4-week intensive block schedules, permitting students an opportunity to potentially graduate with that degree in fewer than 4 years

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Evidence of Progress for 2009-2010:

- Increase in credit hours for E&T can be partially attributed to late-start courses in CIT, TCM, and OLS
- Initial feedback from CGT students and faculty concerning 4-week courses has been positive, and this has the potential of improving the student retention and persistence in this program.

Activities planned for 2010-2011:

- We will selectively expand late-start and concentrated course offering to other courses, programs, and departments, as appropriate.

A1.l. Increase the number of certificate and degree programs offered by nontraditional delivery methods.
Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Expanded the scope of Biomedical Engineering Technology-BS program online courses
- Marketed the fully-online Facilities Management-MS degree program.

- Provided OLS, CIT, and TCM certificates and degree programs fully available online and/or through IUPUI's Park 100 and Greenwood locations, in addition to IUPUI campus-based offerings.

Evidence of Progress for 2009-2010:

- Student demand for online courses continues to increase, as evidenced by the number of sections that fill quickly and the waitlist for online courses.
- Increase in credit hours for E&T can be partially attributed to some of these nontraditional delivery method initiatives.

Activities planned for 2010-2011:

- Music Technology-BS and Music Technology-MS programs will add more online courses.
- We will selectively expand nontraditional delivery offerings to other programs and departments, as appropriate.

A1.m. Continue to develop new academic initiatives appropriate to Central Indiana and beyond.

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Admitted initial cohort of students to these newly-approved degree programs: Music Technology-BS program and Motorsports Engineering-BS.
- Developed and approved new concentrations/sub-plans in CIT and ME
- Developed and approved new minor in Interior Design
- Developed and launched a newly-packaged program for OLS (A+PLUS: Adult Programs in Leadership for Undergraduate Students)
- Received approval for Energy Engineering-BS program by IUPUI campus, Purdue Board of Trustees, and Indiana Commission for Higher Education

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Evidence of Progress for 2009-2010:

- Increase in credit hours for E&T can be partially attributed to some of these new programs and options.

Activities planned for 2010-2011:

- As part of a broader strategic planning process, we will work with our stakeholders to identify new courses, programs, and delivery options based on identified needs and priorities.

A2. Support and enhance effective teaching.

A2.a. Continue to evaluate and implement teaching and administrative loads based on the expectations for teaching, research, and service

research, and service.

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Continued to adhere to Faculty Workload Guidelines for teaching assignments after an increased teaching load in prior years due to budget constraints.
- Hired visiting, lecturer, and adjunct/part-time talent in select programs to augment increased teaching needs based on enrollment growth.

Evidence of Progress for 2009-2010:

- With close to normal teaching loads, research and scholarly activities increased as evidenced from the increased number of research proposal submissions.

Activities planned for 2010-2011:

- We will review program enrollments to determine ongoing priorities for staffing needs of both full-time and part-time talent.
- We will strive to adhere to the Faculty Workload Guidelines.

A2.b. Increase the use of Oncourse technology in the teaching and learning process.

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Conducted a survey with E&T students on their perceptions and uses of Oncourse
- Maintained the appointment of Erich Bauer on a 50% basis with UITS for the purposes of helping E&T faculty with Oncourse
- Expanded the number of courses using Oncourse capabilities

Evidence of Progress for 2009-2010:

- There is an increased use of Oncourse by faculty members as the school has now more mentors assisting new faculty learn how to use Oncourse.
- The leveraging of Erich Bauer's expertise encouraged more faculty use of Oncourse.
- Response rate of 18% for online course survey; results shared with faculty on ways to enhance Oncourse use based on student feedback.

Activities planned for 2010-2011:

- Expand the number of courses using Oncourse.
- Develop a set of minimum expectations/ guidelines for Oncourse use by faculty.
- Continue providing support and assistance for faculty development surrounding Oncourse.

A2.c. Increase support on the use of technology in the teaching and learning process.

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Reorganized the leadership of the E&T-based Computer Network Center (CNC).
- Leveraged UITS expertise in providing additional resources for CNC and E&T computer labs.
- Continued laptop program initiative in CGT.

Evidence of Progress for 2009-2010:

- Computer laboratories have extensive usage in the renovated basement area.
- Year 1 of UITS involvement in CNC has been generally well-received.

Activities planned for 2010-2011:

- We will monitor the relationship with UITS with particular attention to increase in scope and efficiency of computing access for our students.
- CGT will continue to evaluate laptop program impact on student learning and other logistics.
- CIT and ENT will continue to explore the possibility of laptop programs for students in their programs.
- We will continue to explore the use of mobile technologies, as appropriate, to enhance the teaching-learning process.

A2.d. Increase support for faculty and staff in course preparation.

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Continued staff assistance on Oncourse that has been available through UITS-shared staff member, Erich Bauer.
- Provided graders, teaching assistants, and other support to selective faculty, programs, and departments.

Evidence of Progress for 2009-2010:

- All newly hired faculty use Erich Bauer's support on Oncourse.

Activities planned for 2010-2011:

- We plan to monitor Erich Bauer's work arrangement between our school and UITS to determine ongoing need, utility, and effectiveness.
- We will identify additional teaching assistant needs in programs and prioritize resource allocations accordingly.

☒ A2.e. Increase participation from each department in programs such those conducted by the Center for Teaching and Learning that emphasize teaching excellence.

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Marketed Center for Teaching and Learning (CTL) offerings to faculty and staff within the school and encouraged their participation.
- Arranged for newly-hired and probationary faculty to have consultations with CTL representatives.
- Provided input to CTL by ensuring E&T representation on CTL Advisory Board.

Evidence of Progress for 2009-2010:

- The number of faculty preparing proposals for teaching grants, the number of faculty using CTL services, and the number of faculty involved in the Scholarship of Teaching and Learning have been on the increase.

Activities planned for 2010-2011:

- We will continue to leverage CTL resources, in particular to support proposal development for external grants in teaching-related areas.

☒ A2.f. Develop a uniform school-wide orientation, training and mentoring program for junior faculty with an emphasis on teaching excellence.

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Revised school orientation program for new faculty.
- Ensured that each newly hired full-time faculty member was provided a mentor.

- Ensured that each newly-hired full-time faculty member was provided a mentor.

Evidence of Progress for 2009-2010:

- End-of-program feedback on school orientation program for new faculty indicates the program was well-received.
- No data available yet on the long-term effectiveness of mentoring.

Activities planned for 2010-2011:

- Continue orientation and mentoring programs.
- Begin the evaluation of mentoring processes.

A2.g. Increase the recognition of effective teaching.

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Maintained E&T-based awards for teaching excellence.
- Continued the recognition of effective teaching through university-sponsored Trustees' Teaching Award program.
- Encouraged faculty to pursue campus-based and external awards for teaching excellence.

Evidence of Progress for 2009-2010:

- Provided 5 faculty members with Trustees' Teaching Awards
- Provided 3 faculty members with school-based teaching-related awards.

Activities planned for 2010-2011:

- Continue teaching recognition awards programs.
- Selectively reward faculty for innovations and impact in teaching that contribute to the enhancement of the school's national reputation in this area.

A2.h. Develop a uniform school-wide orientation, training and mentoring program for part-time faculty with an emphasis on effective teaching.

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Continued offering orientation at the beginning of each fall and spring semester to all new and continuing associate faculty.
- Reviewed and revised associate faculty academic manual to include new campus policies and emphasis on FERPA regulations.

Evidence of Progress for 2009-2010:

- The feedback has been very positive from the associate faculty.

Activities planned for 2010-2011:

- Conduct needs assessment with department chairs, course coordinators, and associate faculty to determine on going needs and opportunities for professional development.

A2.i. Maintain life-cycle plan for computer hardware and software.
Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Maintained selective replacement of hardware and software due to budget limitations.

Evidence of Progress for 2009-2010:

- No data to report on this area.

Activities planned for 2010-2011:

- With the transfer of the student technology fees to UITS, the budget for faculty and staff computer life-cycle will change. A new planning will be underway and we will work with UITS on this process.

A2.j. Increase the number of faculty and staff who attend engineering and technology education conferences and workshops.
Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Encouraged strong participation by faculty in appropriate teaching-centric conference, such as the American Society for Engineering Education.

Evidence of Progress for 2009-2010:

- Significant numbers of faculty publish papers in ASEE proceedings and participate in leadership roles in this organization.

Activities planned for 2010-2011:

- In spite of travel budget limitations, continue to encourage faculty to enhance the school's reputation by expanding involvement in ASEE through publications and leadership roles.

A2.k. Increase the number of faculty and staff who participate in the scholarship of teaching and learning.

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Encouraged faculty to participate in Scholarship of Teaching and Learning activities.
- Communicated to faculty the campus definitions and examples of evidence for "excellence" and "satisfactory" teaching in promotion/tenure guidelines.

Evidence of Progress for 2009-2010:

- Departmental and school guidelines for performance expectations in teaching were reviewed, revised, and communicated to faculty.

Activities planned for 2010-2011:

- More attention to Scholarship of Teaching and Learning will be encouraged, with particular attention on ways to leverage this work in pursuing external funding and dissemination opportunities to enhance the national reputation of the school.

A2.l. Develop a program of faculty conversations on good teaching in the school and in departments.

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Conducted needs assessment with department chairs and faculty on the professional development desired in teaching.
- Developed a series of Lunch-n-Learn workshops targeted to faculty and staff for the purposes of enhancing professional development in teaching.

Evidence of Progress for 2009-2010:

- Initial attendance at and feedback from Lunch-n-Learn series is promising.

Activities planned for 2010-2011:

- Ongoing evaluation, refinement, and institutionalizing Lunch-n-Learn series will continue.

A3. Enhance undegraduate student learning and success.

A3.a. Continue to improve student advising practices.
Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Maintained and expanded the scope of services provided by the New Student Academic Advising Center (NSAAC)
- Provided advising through NSAAC to approximately 50% of E&T undergraduate students.
- Held "Undergraduate Programs Summit" to share advising and other best practices with faculty and staff within E&T.

Evidence of Progress for 2009-2010:

- Student satisfaction with the quality of advising is strong.

Activities planned for 2010-2011:

- We will reorganize some staff talent in order to maximize advising effectiveness and improve proactive decision-making in order to serve students more efficiently and effectively.
- We will continue to train faculty and advisors on effective advising practices.
- We will continue to encourage students to be self-sufficient in leveraging technology to support advising and registration processes.

A3.b. Develop additional technology-based advising tools to assist students in monitoring degree progress.
Campus Planning Theme: Teaching and Learning

Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Completed the coding for both graduate and undergraduate plans of study for all degree programs.
- Updated plans of study based on curricular and/or policy changes.
- Continued training faculty and staff on ways to leverage degree audit and other technology-related tools to facilitate good advising.

Evidence of Progress for 2009-2010:

- Degree auditing process and academic progress monitoring continues to be more manageable at the department/program and the school levels.

Activities planned for 2010-2011:

- Additional improvements in degree auditing process will be sought.

A3.c. Ensure that all programs provide relevant and coordinated course offerings.
Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Completed and published "shortest path to graduation" plans for all undergraduate degree programs.
- Held E&T-based Scheduling Officers meetings to discuss ways to maximize and coordinate schedules using scarce physical resources.
- Worked with the Undergraduate Education Committee of the Faculty Senate to ensure overlaps in course content is minimized.

Evidence of Progress for 2009-2010:

- Graduation rates continue to increase, which is partially due to more intentional scheduling in order to reduce junior-senior bottlenecking.

Activities planned for 2010-2011:

- We will continue to evaluate course delivery and scheduling options, with a goal of using more nonstandard and "non-prime" course delivery times.

A3.d. Increase the number of undergraduate student involvement in internship, co-op, and research experiences.

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Taught and/or oversaw 2 sections per semester of cross-listed course TCM and CIT course to increase interest and involvement through career and company research, resume preparation, and mock interviews by employers.
- Conducted site visits of current interns to promote an on-going relationship between the school and the employer.
- Conducted site visits of dual degree students in the summer prior to their registration for internship course.
- Continued online student profiles with photos of students and quotes to promote interest for students and employers alike.
- Attended Fall 2009 Industrial Roundtable at Purdue West Lafayette to seek additional leads
- Planned for summer 2010 ET Career Camp one-week intensive career search strategy workshop for May 2010 grads
- Developed new worksheets for job search strategies, interview preparation, and resume planning.
- Produced the ET Career Connection that drew a record 600+ students and 60+ employers.
- Conducted mock telephone interviews as a way to help our students better prepare and get the onsite interviews.

Evidence of Progress for 2009-2010:

- The number of internships for 2009-2010 grew slightly from 2008-2009, but still faced challenge due to economic downturn.

Activities planned for 2010-2011:

- The Career Services Office will continue providing more services to our students and graduates.

A3.e. Increase the amount of space for studying, meeting with other students, and working on team projects.

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Provided additional study areas in the basement and first floor of ET Building for students.
- Began renovation of new space for student organizations on the first floor of ET Building.

Evidence of Progress for 2009-2010:

- More students use the newly renovated ET Building lounges.

Activities planned for 2010-2011:

- We will complete the renovation of student organization space.
- We will ensure that space for student studying, projects, etc. is incorporated into the planning for Phase II of the SELB project.

A3.f. Maintain ABET and other accreditation such as CIDA and NASM in applicable programs.

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Continued Assessment Committee as a sub-committee of the E&T Faculty Senate.
- Engaged in initial ABET, Inc. reviews for CIT and CGT programs.
- Engaged in NASM review for MAT programs.
- Undertook planning process for ABET, Inc. reviews for BME, CmpE, EE, and ME.

Evidence of Progress for 2009-2010:

- CIT and CGT programs received positive ABET, Inc. review and are accredited for 2-year period with an interim report due in 2012
- NASM accreditation deferred for one year while some curriculum issues are reviewed

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Activities planned for 2010-2011:

- BME, CmpE, EE, and ME programs will undergo ABET, Inc. review in fall 2010.
- We continue preserving the accreditation status of all of our discipline-specific accredited programs.
- We will invite colleagues from Ivy Tech to join our Assessment Committee to align continuous improvement efforts between the two campuses.

A3.g. Increase tutoring availability.

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Continued offering department- and program-based tutors that are hired from each department's allocated budget.

Evidence of Progress for 2009-2010:

- Students continue to ask for and receive tutoring assistance in several classes that we offer.

Activities planned for 2010-2011:

- We will maintain and increase tutoring resources, as appropriate, and will work with professional societies and other stakeholders to offer tutoring to students.

A3.h. Expand career planning and placement services for students.
Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Expanded the breadth of professional development opportunities available for students through the Office of Career Services and Professional Development.
- Conducted E&T-specific workshops on the following topics: Career Planning, Career and Internship Resources, Employer Resume Reviews, Mock Interviews, Employer Information Sessions, etc
- Created and conducted an alumni survey to capture placement information.

Evidence of Progress for 2009-2010:

- Over 175 engineering and technology students participated in on-campus interviews that took place in the office.
- Over 200 students attended the workshops conducted by the office.

Activities planned for 2010-2011:

- Further advance the professional development opportunities to include: additional discipline-specific workshops, online workshops, alumni mentoring, and career planning courses.
- Increase the number of businesses and alumni that come to campus to talk to students about career opportunities.

A3.i. Improve student laboratory and classroom experiences.
Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Ensured that equipment in the laboratories is upgraded on a regular basis to the extent the limited budget permits.

Evidence of Progress for 2009-2010:

- Accreditation visitors have positive comments about our laboratories.
- Evidence from focus groups, National Survey of Student Engagement, and Continuing Student Satisfaction Survey indicates that students appreciate up-to-date environments.

Activities planned for 2010-2011:

- Encourage more faculty members to prepare and submit equipment proposals to NSF, industry, and other potential funding sources.
- Leverage the E&T "Program Fee" charged to our majors to continue to upgrade laboratory equipment.

A3.j. Improve student retention and graduation rates.

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Made improvements in student advising via the New Student Academic Advising Center, provided tutors, and recruited academically better-prepared students, which resulted in improved student retention.
- Nominated several students for leadership awards and recognition.

Evidence of Progress for 2009-2010:

- Retention rate increased from 75% to 78% for freshman/sophomore students and from 82% to 85% for junior/senior students.
- The overall increase is from 80% to 82%.
- There is also a slight improvement in the graduation rate.
- For 2009-10, 22 of the Top 100 IUPUI students and 10 of the Top 20 students were from the school.

Activities planned for 2010-2011:

- Office of Student Services will continue promoting activities on campus that include prospective employers.
- Office of Student Services will continue promoting student council and other student organizations to students.
- Office of Student Services will continue developing plan to offer scholarships to part-time, high achieving, and current students, and it will work with IUPUI Housing Office to provide theme housing unit (Purdue House) for engineering and technology students

engineering and technology students.

A3.k. Continue benchmarking with peer universities and use the information in planning.

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Compared our progress and performance on key indicators against the universities identified as IUPUI's peers as selected by the IU Board of Trustees.

Evidence of Progress for 2009-2010:

- The comparative statistics from the peer institutions were used in budget presentations to IUPUI campus administration.

Activities planned for 2010-2011:

- We will further define peer and aspiration benchmark institutions for each program and for the school, with the goal of identifying how the school compares to each benchmark. This information will be used in strategic planning and in evaluating performance of the school and various programs therein.

A3.l. Develop a formal honors degree program.

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Developed an interdisciplinary Honors Minor in Leadership, a partnership between OLS and the Honor's College that also encompasses several other IUPUI units.

Evidence of Progress for 2009-2010:

- No data is available yet.

Activities planned for 2010-2011:

- We will continue work with the Honors College to identify additional courses, programs, and opportunities for high-ability students.

A3.m. Develop a student development program that enhances student persistence and graduation in areas such as goal setting, motivation, student learning, and study skills.

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Conducted a series of focus groups with E&T students to identify key issues surrounding their engagement, retention, performance, and persistence.
- Developed Ready-Set-Go workshops for at-risk and probationary students.

Evidence of Progress for 2009-2010:

- No data is available yet.

Activities planned for 2010-2011:

- We will evaluate the Ready-Set-Go workshops and revise and expand as appropriate.

A3.n. Increase student participation in professional societies and clubs.

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Involved Dean's Industrial Advisory Committee to work with student organizations to develop plans, funding opportunities, and other initiatives.
- Required all students receiving an E&T-based scholarship to attend at least one student organization meeting.
- Encouraged student organizations to apply for campus-level funding to support their specific events.
- Leveraged the tutoring provided by some of these organizations to market to interested students.

Evidence of Progress for 2009-2010:

- Student retention in both the school and in their ongoing involvement in professional organizations can be attributed, in part, to these activities.

Activities planned for 2010-2011:

- Engineering Technology Student Council (ETSC) will support a one-day leadership development program for

- Engineering Technology Student Council (ETSC) will support a one-day leadership development program for organization leaders
- ETSC will continue to require all student organizations to be represented in meetings to receive funding and they each report out on upcoming activities.
- ETSC will continue to provide up to $1500 for student organizations to attend professional conferences.
- ETSC is planning for a retreat in 2010-2011.
- Regularly scheduled meeting with DIAC will occur with greater frequency in 2010-2011 to advance key initiatives.

A3.o. Expand the use of awards and scholarships for continuing students to encourage them to excel.

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Received external industry support for a continuing student scholarship in Motorsports Engineering.
- Continued to recognize and reward excellence through the E&T Honors Convocation.
- Promoted and encouraged more of our students to compete for the IUPUI Top 100 Student Awards.

Evidence of Progress for 2009-2010:

- Significant scholarships awarded through Honors Convocation.
- Significant numbers of student receiving recognition through IUPUI Top 100 Student Awards.

Activities planned for 2010-2011:

- We plan to create additional awards for students that are sponsored by our business and industry partners. This will be a key feature of the Capital Campaign.

A4. Provide effective support for graduate students and post-doctoral fellows.

A4.a. Increase financial support for graduate students through fellowships and assistantships, etc.

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Continued offering tuition scholarships to graduate student that will cover the cost difference between the in-state and out-of-state rates. In return, these students assist school for laboratory coverage, tutoring, and grading.

Evidence of Progress for 2009-2010:

- Reduced the debt burden of graduate students by offering this arrangement.

Activities planned for 2010-2011:

- We will pursue additional base budget funding to support graduate students.
- We will encourage faculty to be intentional in the inclusion of graduate student support in grant and contract proposal development.

A4.b. Increase the support for grantsmanship to improve financial support for graduate students and post-doctoral fellows.
Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Continued to provide part-time technical communication faculty to support grant writing.

Evidence of Progress for 2009-2010:

- Several new faculty members used this support.

Activities planned for 2010-2011:

- As we make plans to compete at the highest levels, enhance our image and national reputation, and grow our share of externally-funded research awards, we plan to continue this for 2010-11.

A4.c. Increase space and fiscal allocations for graduate degree programs.
Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Provided $180K school match for the campus Block Grant for graduate programs.

Evidence of Progress for 2009-2010:

- Faculty have continued to expand the support for and assistance received from graduate students.

Activities planned for 2010-2011:

- We will pursue additional base budget funding to support graduate students.
- We will pursue strategies with the campus to increase and stabilize block grant funding for longer periods of time.

A4.d. Increase marketing efforts locally and internationally to attract highly qualified students.

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Hosted a school-based Graduate Open House.
- Participated in events held by the Graduate Programs Office.
- Traveled to nearby graduate recruitment fairs at Purdue University, West Lafayette and Rose-Hulman.

Evidence of Progress for 2009-2010:

- Graduate student enrollment increased from 203 in 2008-2009 to 243 in 2009-2010.

Activities planned for 2010-2011:

- Continue promoting graduate programs to Central Indiana business and industry.
- Identify regional universities that have undergraduate programs in E&T and participate in their graduate fairs.
- Participate in IUPUI campus-level graduate fairs, open houses, etc.

A4.e. Grow the Ph.D. programs and improve the quality of graduate programs.

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Continued to negotiate special arrangements with Purdue University, West Lafayette to provide flexibility in administering Ph.D. programs in engineering.

Evidence of Progress for 2009-2010:

- Number of Ph.D. students has increased in BME, ECE, and ME programs.

Activities planned for 2010-2011:

- There continue to be additional procedural challenges in administering the Ph.D. programs and the school graduate committees will be working with their West Lafayette counterparts on strategies to enhance the effectiveness of program delivery and quality.
- Designation of the Ph.D. degrees is an ongoing topic of discussion between IUPUI and Purdue University, West Lafayette.

A4.f. Increase the number of graduate courses offered.

Campus Planning Theme:
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Developed additional courses to support the M.S. in Technology.

Evidence of Progress for 2009-2010:

- Student credit hours in graduate courses increased from 3,458 in 2008-2009 to 3,912 in 2009-2010.

Activities planned for 2010-2011:

- More streamlining of graduate course offerings will be planned due to resource scarcity.
- Greater marketing of E&T graduate courses to students in other IUPUI graduate programs will occur.

A4.g. Continue to develop new academic initiatives appropriate to Central Indiana

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Continued to grow course offerings for the M.S. in Technology program.

Evidence of Progress for 2009-2010:

- Credit hours in M.S. in Technology increased from 343 in 2008-2009 to 394 in 2009-2010.

Activities planned for 2010-2011:

- We will pursue the creation of a graduate certificate in Organizational Leadership to support students in other IUPUI graduate programs.
- We will encourage high-ability students to proactively consider the 5-year B.S./M.S. programs in select engineering fields.
- We will pursue the development a 5-year B.S./M.S. program for the Technology programs.

A4.h. Provide resources for graduate students to attend national research conferences

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Encouraged departments and faculty members with research grants assist their graduate students in pursuing these opportunities.

Evidence of Progress for 2009-2010:

- Research faculty members support few of their students with travel.

Activities planned for 2010-2011:

- This will be a continuing priority for the school.

B1. Conduct world-class research as evidenced through scholarly and creative activities.

B1.a. Develop and/or maintain department-level research plans

Campus Planning Theme: Research, Scholarship and Creative Activity
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Maintained department-level research plans for all E&T departments.

Evidence of Progress for 2009-2010:

- Dean's Industrial Advisory Council (DIAC) Research Subcommittee reviewed the research plans for biomedical engineering, electrical and computer engineering, mechanical engineering, and engineering technology departments during the past two years. DIAC members provided feedback and guidance to improve the plans.

Activities planned for 2010-2011:

- As part of a strategic planning process, the school will identify its areas of research strength and differentiation and will target externally-funded research opportunities in support of these priorities.

B1.b. Increase funded research with grants or contracts from government agencies, industry, foundations, and/or other organizations.

Campus Planning Theme: Research, Scholarship and Creative Activity
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Continued to pursue externally-funded opportunities through proposal development to NIH, NSF, and other agencies.
- Pursued Federal earmark funds in key areas.
- Continued strong relationships with key industry research partners, including: Delphi, Raytheon, Rolls-Royce, Crane, Roche, Cummins, and others.
- Maintained half-time Director of Industry Relations position to liaise with industry and coordinate Dean's Industrial Advisory Board and departmentally-based advisory boards.

Evidence of Progress for 2009-2010:

- Research income increased from $7.2M in 2008-2009 to $10.3M in 2009-2010, a record for E&T.
- Of this, the School received Federal earmark funding of $1.4M to support research on lithium ion battery safety.

Activities planned for 2010-2011:

- The goal is set to increase the external grants to a sustained $10M and above level.

B1.c. Attract and retain world-class faculty and staff capable of research, scholarship, and creative activity.

Campus Planning Theme: Research, Scholarship and Creative Activity
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Provided release time from teaching for new faculty to develop and launch research agendas.
- Increased modestly the amount of funding provided for competitive start-up packages for key faculty hires.
- Continued to promote and publicize research accomplishments of faculty.

Evidence of Progress for 2009-2010:

- In 2009-2010, we were able to recruit 8 tenure-track faculty members in the following disciplines: BME, CIT, CGT, ENT, INTR, and ME.

Activities planned for 2010-2011:

- Additional faculty searches will be conducted during 2010-2011 for mechanical engineering, biomedical engineering, and energy engineering.

B2. Provide resources and support for faculty and staff development to increase scholarly activity and external funding.

B2.a. Provide support to attend research-related professional development activities.

Campus Planning Theme: Research, Scholarship and Creative Activity
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Encouraged department chairs to provide funds from departmental budgets to support faculty pursuing these initiatives.

Evidence of Progress for 2009-2010:

- Research-active faculty members often have funds for dissemination and travel to research-related meetings as part of their grant or contract award.

Activities planned for 2010-2011:

- We will review our approach to supporting travel to research-oriented professional development and make enhancements, as necessary.

B2.b. Provide mentorship to junior faculty members

Campus Planning Theme: Research, Scholarship and Creative Activity
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Assigned all new faculty members a mentor.

Evidence of Progress for 2009-2010:

- The number of research proposals submitted increased in 2009-2010, and this is attributed, in part, to mentoring of junior faculty.

Activities planned for 2010-2011:

- We will evaluate the effectiveness of mentoring approaches for junior faculty and make enhancements, as needed.

B2.c. Provide training for faculty on better proposal writing, etc

Campus Planning Theme: Research, Scholarship and Creative Activity
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Provided grant writing and budgeting workshops and orientation sessions were for new faculty members.
- Encouraged faculty to attend campus-level workshops on research topics, proposal writing, etc.
- Continued to provide part-time technical communication faculty to support grant writing.

Evidence of Progress for 2009-2010:

- Almost all new faculty members used the assistance provided so far.

Activities planned for 2010-2011:

- We will continue to offer faculty workshops and professional development opportunities related to their research interests.

B2.d. Provide seed funding for research initiation and proposal generation.

Campus Planning Theme: Research, Scholarship and Creative Activity
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Provided modest support for research initiation as part of the start-up funds for newly hired faculty.

Evidence of Progress for 2009-2010:

- Most of the faculty members developed full proposals using the seed funds.

Activities planned for 2010-2011:

- We will review our approach for providing seed funding for research initiation and proposal generation and make enhancements, as necessary.

B2.e. Adjust teaching and administrative loads based on the expectations for teaching, research, and service to improve research productivities.

Campus Planning Theme: Research, Scholarship and Creative Activity
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Provided newly-hired tenure-track faculty release time from teaching to launch their research activities.
- Encouraged mid-career faculty to apply for sabbatical or release time for research and approvals are considered on a case-by-case basis.

Evidence of Progress for 2009-2010:

- The policy appears to work as the School has fewer failures of promotion and tenure as compared to several years ago.

Activities planned for 2010-2011:

- We will maintain Faculty Work Guidelines and explore the potential for research incentives for faculty.

B3. Enhance infrastructure for scholarly activity.

B3.a. Increase and/or reallocate physical space to improve research environment

Campus Planning Theme: Research, Scholarship and Creative Activity
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Completed renovations for some research-related space within ET and SL buildings.
- Identified research needs for Phase I of SELB project and negotiated with School of Science and other campus stakeholders on such needs.

Evidence of Progress for 2009-2010:

- We are striving to provide adequate research space for research-active faculty.

Activities planned for 2010-2011:

- We will plan for SELB project and additional forthcoming space renovations in ET building in 2012-2013 and beyond
- We will inventory and identify research physical space and environment needs and make these a priority in the Capital Campaign.

B3.b. Continue to enhance research-related resource sharing among departments, schools, and campuses.
Campus Planning Theme: Research, Scholarship and Creative Activity
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Continued sharing laboratory space with the School of Medicine and others.
- Continued to have the three engineering departments share research laboratory space and equipment among themselves, with some technology departments participating in this initiative, as well.

Evidence of Progress for 2009-2010:

- Departments have continued to consolidate and share teaching and research lab spaces, as appropriate.

Activities planned for 2010-2011:

- We will be working with the School of Science to develop program for collaborative research space in Phase I of SELB.

B3.c. Increase intellectual property generation and technology transfer through IURTC and other research incubators.
Campus Planning Theme: Research, Scholarship and Creative Activity
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Continued to promote collaboration with IURTC for invention disclosure and patent applications.
- Encouraged faculty members to transfer the technology from university to commercial arena.

Evidence of Progress for 2009-2010:

- The research and development activity of one of the school faculty, Ali Jafari, paid off handsomely for Indiana University when the ANGEL software was sold to Blackboard, Inc. for $100M; the university, together with IURTC, received around $24M, while E&T benefitted from an investment in Phase I of SELB.
- School ranks secondat IUPUI (behind the School of Medicine) in terms of patents and innovation disclosures.

Activities planned for 2010-2011:

- We will continue to encourage collaboration with IURTC and use the example of ANGEL's success as a motivator for other faculty members in commercializing their inventions and research products.

B3.d. Develop and/or maintain local and national industry relationships and establish long term partnerships

Campus Planning Theme: Research, Scholarship and Creative Activity
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Maintained a research partnership with industry through the Dean´s Industrial Advisory Council (DIAC).
- Ensured that research activities are a discussion point on the quarterly DIAC agenda.
- Involved the DIAC research subcommittee in working closely with the Associate Dean for Research and Graduate Programs in the school.

Evidence of Progress for 2009-2010:

- There are number of research contracts with Delphi, Rolls Royce, Cane, Raytheon, and others.

Activities planned for 2010-2011:

- The planning for collaboration with DIAC will continue.
- We will maintain the half-time Director of Industry Relations position to increase the interaction with our industry partners.

B3.e. Provide resources to increase participation in Undergraduate Research Programs

Campus Planning Theme: Research, Scholarship and Creative Activity
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Encouraged faculty and undergraduate students to pursue research opportunities and projects through the Multidisciplinary Undergraduate Research Institute (MURI)
- Inventoried the number of research opportunities at the course and program levels with E&T in support of IUPUI's RISE initiative

TOPOI's RISE initiative.

Evidence of Progress for 2009-2010:

- Several faculty-led student MURI teams from E&T were funded.
- All E&T programs have an identified and documented research experience for undergraduate students, appropriate to the discipline.

Activities planned for 2010-2011:

- We will continue to encourage participation in MURI and similar programs.
- We will also make undergraduate research a priority in the Capital Campaign through a focus on RISE Scholarships.

C1. Enhance capacity for engagement.

C1.a. Review promotion and tenure documents to reflect renewed emphasis on civic engagement (e.g. definitions; measurement).

Campus Planning Theme: Civic Engagement
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Initiated a review of promotion and tenure guidelines related to civic engagement by the Faculty Affairs Committee of the E&T Faculty Senate.
- Communicated campus-level guidelines for promotion and tenure, including standards for civic engagement, to E&T faculty members.

Evidence of Progress for 2009-2010:

- This review is still ongoing.

Activities planned for 2010-2011:

- We will continue to work on defining civic engagement appropriate to the disciplines within E&T and in alignment with campus standards and expectations for performance.

C1.b. Promote school-wide sense of responsibility and awareness of civic engagement.

Campus Planning Theme: Civic Engagement
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Encouraged faculty and undergraduate students to pursue service learning and civic engagement opportunities.
- Promoted civic engagement opportunities for E&T-based student organizations.

Evidence of Progress for 2009-2010:

- As evidenced by results from student focus groups, there is more student interest in civic engagement related projects.

Activities planned for 2010-2011:

- All student organizations, such as Engineers Without Borders, will be encouraged to participate in local and international projects.

C1.c. Increase service-learning opportunities for students.
Campus Planning Theme: Civic Engagement
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Inventoried the number of service learning opportunities at the course and program levels with E&T in support of IUPUI's RISE initiative.
- Continued and expanded the activities of Global Design Studio, which brings in students from number of national and international universities together for international service learning projects.

Evidence of Progress for 2009-2010:

- There is presently insufficient capacity in E&T courses and programs to provide the necessary service learning experiences in support of IUPUI's RISE initiative.

Activities planned for 2010-2011:

- We will continue to encourage participation in service learning and similar opportunities.
- We will work with faculty to develop service learning courses and experiences, appropriate to their discipline and in alignment with the RISE initiative.
- We will also make service learning a priority in the Capital Campaign through a focus on RISE Scholarships.

C1.d. Increase international outreach efforts.
Campus Planning Theme: Campus Climate for Diversity, Civic Engagement

Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Continued to be one of two U.S. institutions that served University of Tehran students through articulated 2+2 programs in computer, electrical, and mechanical engineering fields.
- Provided faculty and staff development workshop entitled "Working With International Students."
- Supported the campus priority of a relationship with Sun Yat Sen university by developing articulation agreements in select E&T disciplines.

Evidence of Progress for 2009-2010:

- The school has the largest percentage (12%) of the international students on campus.
- Almost 40 University of Tehran students transferred to IUPUI to complete their BS degrees at IUPUI.

Activities planned for 2010-2011:

- We will review our existing international articulation agreements, MOUs, and partnerships to determine the efficacy, utility, and priority for ongoing relationship maintenance.

C2. Increase engagement activities, partnerships, and services.

C2.a. Continue to increase quality and effectiveness relative to advisory boards for each department.
Campus Planning Theme: Civic Engagement
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Maintained, expanded, and/or revitalized department- and program-level industry advisory boards.
- Held annual Joint Board of Advisors event and monthly Dean's Industrial Advisory Council meetings to engage industry partners in the life of the school.

Evidence of Progress for 2009-2010:

- Corporate donations presently represent the largest giving category in E&T development/fundraising efforts.
- Industry partnerships and involvement of industry advisory boards is consistently noted as a clear strength of the school in accreditation visits and reports.

Activities planned for 2010-2011:

- We plan to have a better coordination of the meetings of these boards, including how to leverage joint activities for widespread impact.
- We will also be relying on industry boards at all levels to support the Capital Campaign.

C2.b. Increase interaction with local high schools (e.g. student outreach; teacher training).

Campus Planning Theme: Civic Engagement
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Hosted a series of "Friday Labs" at IUPUI to expose high school teachers and students to experiments, computer hardware and software, and E&T-oriented career choices.
- Held 10th Anniversary of "Tech Camp," a week-long professional development and outreach activity of CIT aimed at equipping high school teachers with IT competence and skills.
- Continued "Pathways to Engineering" elementary and middle school program in partnership with IPS, Viola Water Company, and Rolls Royce.
- Continued "Project Lead The Way" program, which is the high-school component that builds on "Pathways to Engineering."

Evidence of Progress for 2009-2010:

- "Friday Labs" have been very popular among the high school students and the number of high schools involved in "Project Lead The Way" has increased.
- "Pathways to Engineering" program has progressed well from its inception.
- "Tech Camp" continues to enjoy a strong tradition and reputation.

Activities planned for 2010-2011:

- We will continue to support, evaluate, and expand each of these outreach efforts, as appropriate.
- We will also seek support for targeted outreach programs during the Capital Campaign.

C2.c. Increase initiatives and interaction for specific target populations

Campus Planning Theme: Civic Engagement
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Provided several outreach programs to elementary, middle, and high school students.
- Signed articulation agreements with a variety of institutions, including Ivy Tech, Clark Atlanta University, and several international partners.
- Developed unique programs, delivery models, and assessment approaches to reflect the diversity of disciplines

and constituents served by E&T.

Evidence of Progress for 2009-2010:

- Outreach programs to elementary, middle, and high school students provide a good introduction to E&T disciplines, yet presently lack sufficient data/tracking to determine subsequent enrollment at IUPUI.
- For other initiatives, there is no data to report yet.

Activities planned for 2010-2011:

- We will continue our involvement in selective outreach programs and attempt to evaluate the effectiveness of these activities.
- We will evaluate the impact various initiatives are having, relative to their objectives, and determine the extent to which each initiative should be modified, expanded, or discontinued.

C2.d. Develop appropriate mechanisms for external requests related to civic engagement to be aligned with School resources and assets.

Campus Planning Theme: Civic Engagement
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Collaborated with the IUPUI Solution Center to help broker specific requests.
- Provided a workshop to faculty and staff on Solution Center capabilities.

Evidence of Progress for 2009-2010:

- Several departments and/or programs have civic engagement-related student projects.

Activities planned for 2010-2011:

- More interaction is planned with the IUPUI Solution Center, the Center for Service and Learning, and our industry and community partners.
- Greater capacity for service learning and civic engagement opportunities will be pursued based on strong interest from students.

C2.e. Expand industry partnerships relative to student employment opportunities such as scope and breadth of career fairs, selection as preferred recruitment partner.

Campus Planning Theme: Civic Engagement
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Produced the ET Career Connection that drew a record 600+ students and 60+ employers.

Evidence of Progress for 2009-2010:

- The Office of Career Services and Professional Development posted over 600 engineering and technology-specific career opportunities in the past year.
- The Office of Career Services and Professional Development hosted over 20 companies for on-campus interviews who were recruiting for internship, co-op, and career opportunities.

Activities planned for 2010-2011:

- The Office of Career Services and Professional Development will continue to identify additional means of marketing services to employers.
- The Office of Career Services and Professional Development will incorporate a required site visit as an assignment of the Internship and Co-op Courses to increase employer awareness of the Office and provide a chance for staff to inquire about additional opportunities.
- The Office of Career Services and Professional Development will continue marketing and expanding the ET Career Connection to include companies from every discipline within E&T.

C3. Contribute to economic, cultural and civic development of Indianapolis, Central Indiana and the State.

C3.a. Develop a listing of faculty and staff expertise, as well as industry expertise database that is functional and accessible via web delivery.

Campus Planning Theme: Civic Engagement
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Maintained an up-to-date list of faculty expertise in conjunction with the Dean's Industry Advisory Council.

Evidence of Progress for 2009-2010:

- No data is available yet.

Activities planned for 2010-2011:

- We will encourage faculty to maintain currency of expertise in this system.
- We will also encourage our industry partners and other stakeholders to review and identify sources of E&T faculty talent to assist with external projects.

C3.b. Increase involvement in area economic development activities and research parks.

Campus Planning Theme: Civic Engagement
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Participated in the Purdue University Technical Assistance Program (TAP) by leveraging the talents of engineering (ME) and technology (CIT) faculty members in support of this program.
- Provided technical consultations to small businesses and industry organizations and involved undergraduate and graduate students in these projects.

Evidence of Progress for 2009-2010:

- Feedback received from TAP administrators, clients, and IUPUI faculty and students involved in TAP continues to indicate successful outcomes of the program's objectives.

Activities planned for 2010-2011:

- We will maintain and potentially expand the longstanding relationship with TAP.
- We will attempt to integrate TAP projects with IUPUI's RISE initiative and other independent learning opportunities for undergraduate and graduate students, as appropriate.

C3.c. Develop better ways of identifying new markets and providing unmet needs.

Campus Planning Theme: Civic Engagement
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Gathered input from Dean's Industrial Advisory Council and department- and program-based advisory boards on emerging trends in E&T disciplines.
- Admitted first cohort of Motorsports Engineering-BS students.
- Proposed Energy Engineering-BS degree program.
- Continued to develop the capacity and resources to support M.S. in Technology program.

Evidence of Progress for 2009-2010:

- Motorsports Engineering-BS has already attracted number of new students (both in-state and out-of-state) and has emerged as the one of the fastest-growing degree programs at IUPUI
- Energy Engineering-BS received approval from the Indiana Commission for Higher Education and has strong interest by several current and potential students.
- Growth of the M.S. in Technology program provides evidence of the demand for graduate-level education for individuals holding technology-oriented undergraduate degrees.

Activities planned for 2010-2011:

- We will begin an intensive marketing campaign for the recently-approved Energy Engineering-BS program.
- We will continue to highlight programs that differentiate IUPUI (e.g. Motorsports Engineering) while still maintaining appropriate investment in programs that meet a market need and align with school and campus priorities.

C3.d. Develop outreach efforts for specialized populations (e.g. adults with some college but no degree).
Campus Planning Theme: Civic Engagement
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing

Actions taken for 2009-2010:

- Created and branded OLS program for adults with some college but no degree under the auspices of A+PLUS (Adult Programs in Leadership for Undergraduate Students).
- Marketed OLS via A+PLUS to International Brotherhood of Electrical Workers in a pilot-test program.
- Partnered with IUPUI's Office of Veterans and Military Personnel to ensure proper distribution of military credit.
- Created a new position entitled Adult Prior Learning Advisor to provide leadership to prior learning assessment processes in E&T.
- Launched a fully-online portfolio development course for prior learning assessment.

Evidence of Progress for 2009-2010:

- The number of adults in this category has already enrolled in the school in several programs, most notably in Technology departments.
- Initial experience with A+PLUS signals a potentially strong market for this initiative.
- E&T enrolls the largest number of veteran and military students than any other unit at IUPUI.

Activities planned for 2010-2011:

- We will continue to support the expansion of programs aimed at serving military, veteran, and adult learners and will review initiatives related to these students.

Fiscal Health

Reallocation Plan

Other Question(s)

1. Please describe faculty/staff participation in the planning process in your unit. What factors strongly influence your budget and planning priorities? Please give examples, which might include attracting and retaining undergraduates, strengthening graduate programs, building collaborative partnerships, increasing diversity in faculty and student populations.

Process:

- E&T developed a stakeholder-driven strategic plan in 2006-07 organized around the main goals for implementing IUPUI's mission: *Excellence in Teaching and Learning*; *Excellence in Research, Scholarship, and Creative Activity*; and *Excellence in Civic Engagement, Locally, Nationally, and Globally*. The 2006-07—2009-10 strategic plan includes 74 specific objectives that are derived from and aligned with IUPUI's mission. In 2010-11, E&T will undertake a similar stakeholder-driven strategic planning process.

- E&T routinely engages the following stakeholder groups in its planning processes, and each group contributes (as appropriate) to the annual planning and budgeting report through an infrastructure that includes regularly-scheduled meetings and communication channels:

    - E&T Chairs, Deans, and Directors
    - E&T Faculty Senate
    - E&T Staff Council
    - E&T Student Council
    - E&T Dean's Industrial Advisory Council and 14 department- or program-based industrial advisory boards

Factors influencing budget and planning priorities:

- E&T's annual planning and budgeting report provides actions taken, evidence of progress, and activities planned for each specific objective. Planning and budgeting priorities are influenced by both progress made in each category and the input/feedback from various stakeholder groups involved in planning processes.

- Priorities have also historically been influenced by:

    - Enrollment trends, including retention and graduation rates, in particular departments/programs
    - Investments needed to seed, grow, and sustain new academic programs
    - The need to attract, reward, and retain faculty talent in key areas
    - Upgrades to equipment, technology, and facilities to support teaching and research endeavors
    - Responsiveness to specific needs from stakeholder groups that emerge over time
    - Feedback received from discipline-specific accreditation reports, which may signal resource allocations needed in order to satisfy a particular criterion
    - A need to grow/expand research capabilities while maintaining a diverse teaching portfolio
    - Support needed for students, in the form of scholarships and other resources for student organizations, tutoring

mentoring, and related interventions

2. How do the plans within your unit align with the President's Principles of Excellence and the Chancellor's Guideposts? Please describe your process for integrating your unit's plans with those of the campus.

A. Unit Plans and Their Alignment with *Principles* and *Guideposts*

Principles (I, II, etc.) / *Guideposts* (1, 2, etc.)	How Engineering and Technology's Plans Align with both the President's *Principles of Excellence* and Chancellor's *Guideposts*
I/1: Education	· All E&T programs are seeking or have achieved accreditation by a specific discipline-specific organization (as appropriate) · Each program has specific educational outcomes, guided by a stakeholder-driven process of involving key constituents · Undergraduate degree programs include: (1) traditional engineering/engineering technology offerings; (2) innovative, interdisciplinary programs in Energy and Motorsports Engineering; and (3) diverse offerings in otherwise unique areas such as Music and Arts Technology, Interior Design, Technical Communications, and Organizational Leadership · E&T efforts support student success from admissions to graduation, with unit-specific interventions that augment other work at IUPUI
II/2: Faculty	· E&T continues to attract faculty that can support the increasing research emphasis at IUPUI · E&T supports faculty through start-up packages, mentoring programs, and connections to campus- and industry-based resources to facilitate the faculty member's effectiveness in launching and sustaining a portfolio of teaching, research, and service · E&T is challenged to continue to diversify its faculty, especially in attracting and retaining underrepresented faculty members
III/3: Research	· E&T has a growing portfolio of graduate programs, including capacity expansion for Ph.D. students and graduate student support · Unique 5-year B.S./M.S. programs exist in Electrical, Computer, and Mechanical Engineering · E&T's research productivity continues to grow, as evidenced by an increase in research expenditures from $1.3M in FY 2002 to $9.0M in FY 2010 · E&T has received funding for 3 Signature Centers that connect to existing and emerging research expertise of its faculty
IV/4: International	· E&T has longstanding relationships and agreements with several international partner institutions · E&T has significantly higher numbers of international students enrolled in its programs as compared to the IUPUI campus · E&T offers an array of international study abroad opportunities for students, ranging from year-long to short, intensive periods of study
V/5: Health Sciences	· E&T-specific programs that support this priority include Biomedical Engineering and Biomedical Engineering Technology

VI/6: Engagement	· E&T students have participated in service learning and civic engagement activities in first-year seminars, senior capstone design events, and through international study abroad trips · E&T faculty work with industry partners and IURTC to commercialize work through technology transfer; E&T routinely ranks #2 at IUPUI (behind Medicine) in terms of patents and invention disclosures
VII/7: Advancement	· E&T has a consistent track record of cultivating, sustaining, and leveraging donations from individuals, corporations, and foundations · E&T's case for support has been developed to align with the strengths of the unit and is poised to yield significant investments from stakeholders with an interest and ability to contribute to E&T
VIII/8: Buildings	· E&T has made improvements to its own facilities in the ET and SL buildings to support teaching and research · E&T is working with Science to design and collaborate on dedicated and joint space in the new Science and Engineering Laboratory Buildings (phases I and II)
IX/9: Info. Centrality	· E&T researchers leverage the computing resources of the IU system in storing, analyzing, and retrieving data for large-scale research projects · E&T faculty make use of Oncoure to facilitate the teaching-learning process in on-campus, online, and hybrid offerings · E&T augments IU and IUPUI support through its Computer Network Center, which provides dedicated IT-support to the unit
X/10: Stewardship	· E&T equips its students, faculty, and staff with the tools and technologies to become increasingly self-sufficient in performing routine functions · E&T continues to identify, review, and improve processes in order to minimize redundancies, increase efficiencies, enhance service to stakeholders, and achieve greater effectiveness in transactions
11: Campus Diversity	· E&T has a dedicated senior-level advisor to the dean for diversity · E&T was an early-adopter of internationalization efforts at IUPUI and is recognized for its solid track-record in this area · E&T is a national leader in awarding of engineering technology baccalaureate degrees to women · E&T augments and supports the campus climate for diversity through discipline-specific student organizations: (1) National Society for Black Engineers; (2) Society for Women in Engineering; and (3) Society of Hispanic Professional Engineers · E&T provide outreach efforts to K-12 students through efforts such as: (1) Minority Engineering Advancement Program; and (2) Preparing Outstanding Women for Engineering Roles
12: Communication	· E&T maintains active participation of its various stakeholder groups by involving students, faculty, alumni, and industry partners on various boards and governance committees · E&T contracts with a third-party (Westcomm) to assist in public relations and communication activities · E&T achievements are documented and disseminated to interested stakeholders via multiple communication channels

B. Process for Integrating Unit Plans with those of Campus

· E&T's longstanding alignment of its strategic plan with the mission and priorities of IUPUI signals that the unit has already integrated its efforts with those of the campus; thus, as E&T engages in its forthcoming strategic planning

process, we expect to follow a similar approach.

3. What longer-term trends (5-10 years) exist in your discipline/field that will affect your unit?

Trends in E&T disciplines/field	Implications for the unit
Increased emphasis on connecting theory to practice through experiential learning	Need for: (1) RISE experiences for students; (2) faculty development on pedagogies of engagement; and (3) partnerships with external stakeholders to support these efforts
Heightened competition for research funding from federal sources	Need for: (1) clear, effective research priorities that align with faculty talent and institutional strengths; and (2) partnerships with industry to conduct specific research to meet their needs
Greater need for interdisciplinary efforts in learning and research	Need for: (1) inventory of interdisciplinary capabilities; and (2) policies, structures, and environments that can support emerging work in this area
Continued need to attract, retain, and educate historically underrepresented students in E&T disciplines	Need for: (1) recruitment plan with specific strategies to target desired student candidates; and (2) mentoring, financial, and other support interventions
Continued need to attract, retain, and advance historically underrepresented faculty in E&T disciplines	Need for: (1) recruitment plan with specific strategies to target desired faculty candidates; and (2) mentoring, financial, and other support interventions
Increased emphasis on external benchmarks/ criteria to recognize effectiveness	Need for: (1) ability to compete for nationally-recognized achievements in the field; and (2) widespread communication of E&T accomplishments to external stakeholders

4. If the University experiences further budget cuts, what existing and emerging programs/initiatives in your unit will be your highest priorities?

- E&T is committed to maintaining and enhancing its academic programs and will use the following criteria, in part, to gauge program effectiveness and vitality:
    - Ability of the program to connect to the mission, identity, and plans of the School of Engineering and Technology and IUPUI
    - Ability of program to remain financially viable over time, as determined by student demand, research funding, and other similar measures
    - Ability of faculty to compete at the highest levels in areas appropriate to the program or discipline, compared to peer and aspirational benchmarks
    - Ability for the program to achieve excellence in areas appropriate to the program or discipline, as measured against peer and aspirational benchmarks
    - Ability of the program to identify and showcase its unique and distinctive qualities that can enhance the image and reputation of the School of Engineering and Technology and IUPUI