Administrative and Educational Support Report*

Department of Computer Science

Annual Action Plan
Annual Assessment Report

June 2005 – May 2006

***Student Learning Outcomes for this department are available at**
http://ie.panam.edu/CoSELearningOutcomes.htm

Annual Action Plan: June 1, 2005–May 31, 2006

Unit: **Department of Computer Science**

UTPA Mission: The University of Texas-Pan American (UTPA) serves the higher education needs of a rapidly growing, international, multicultural population in the South Texas Region. The University preserves, transmits and creates knowledge to serve the cultural, civic, and economic advancement of the region and the state. The University provides students advanced instruction in academic programs offered through innovative delivery systems that lead to professional certification, and baccalaureate, master's and doctoral degrees. Through teaching, research, creative activity and public service, UTPA prepares students for lifelong learning and leadership roles in the state, nation and world community.

Division: **Academic Affairs** **Unit Head:** **Dr. P. Ng**

Unit Mission:

The Department of Computer Science is an academic department in the School of Engineering and Computer Science at the University of Texas Pan-American. Currently, the School is an administrative unit within the College of Science and Engineering. The department offers four degrees: Bachelor's of Science in Computer Science (BSCS) as a broad-field major, Bachelor's of Science with a major in Computer Science (BS) with a required minor field, Master's of with a major in Computer Science (MS) and Master's of Science in Information Technology (MSIT). The department offers courses leading to teacher certification in computer information systems, service courses to fulfill University College / General Education requirements, and computer science courses required for degree programs in engineering, science and mathematics. The faculty conduct research in computer science, computer science education and interdisciplinary fields, and contributes their professional service to student advising, mentoring, professional organizations, university activities, industrial interactions and to the community through professional expertise.

The undergraduate curricula in computer science are based on Association for Computing Machinery and Institute of Electrical and Electronics Engineers Computer Society recommendations for curricula and reflect the goals of liberal arts education. The graduate curricula provide advanced and specialized study in the areas of computer science and information technology. The curricula in computer science provide the student with marketable expertise to enter computing and information technology fields, the skills and education required to adapt to the rapid change characteristic of the fields, and the foundation to pursue graduate study in computer science and information technology.

Unit Goal:	Provide a variety of quality academic programs grounded in the liberal arts that cultivate active learning, critical thinking, and interdisciplinary perspectives.
Link to UTPA Goal(s):	2. Enhance graduate education and research

Unit Objective (Action Priority: #1 is highest)	Link to UTPA Objective	Expected Outcome for Unit Objective (AA-Measurable Objective)	Strategy(ies) to Achieve Expected Outcomes	Assessment Criteria, Evaluation Methods for Expected Outcome	New Resources Needed in FY06
To establish specific steps to a multidisciplinary PhD program in Computing/Information Technology in accordance with the University's vision. (1)	6	A written agreement between the Chair and the Dean expressing the expectations necessary for PhD development for the Computer Science Department by May 2006.	• Arrange a meeting between the Dean, P. Ng - Chair, R. Fowler - Director for CITeC and Y. Lopez - Admin. Coordinator • Follow-up meeting with Y. Lopez, Admin. Coordinator	• Minutes of meeting • Agenda & minutes of meeting	None None

Unit Goal:	Provide effective student recruitment, development, retention, and placement programs designed to promote and serve a diverse student population.
Link to UTPA Goal(s):	1. Ensure undergraduate student access and success 2. Enhance graduate education and research

Unit Objective (Action Priority: #1 is highest)	Link to UTPA Objective	Expected Outcome for Unit Objective (AA-Measurable Objective)	Strategy(ies) to Achieve Expected Outcomes	Assessment Criteria, Evaluation Methods for Expected Outcome	New Resources Needed in FY06
Increase undergraduate & graduate enrollment by 2%. (2)	1,2,4	Using AY05 as a baseline, the department chair will compute the increase in SCH's and declared majors by May 2006.	• Faculty collaboration between community colleges and UTPA • Attract students to CS Department by offering TA & RA assistantships prior	• Number of transfer students from community colleges to UTPA that took the courses offered • List of scholarship awards	None Scholarship funding increase budget allocation

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			to the start of the semester. • Electronic Reach-Out Advertising • CS Dept.-UTPA Awareness Activity Program both on-site & off campus	• Web-site, power point presentations & brochures • List of High Schools both visited & invited. High School power point presentation. Travel vouchers	None Increase Travel Budget Dept. Recruitment Specialist

Unit Goal:	Facilitate excellence in scholarship, research, and/or creative activities for the enhancement of knowledge that can be shared with the public through presentation, publication, or performance.
Link to UTPA Goal(s):	2. Enhance graduate education and research

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Increase the number of peer reviewed publications & presentations by faculty and students by 10%.	5	The chair and staff will calculate the increase of publications & presentations over the base year AY05 by May 2006.	• Work closely with CITeC • Increase grant submissions • Increase the number of students with undergraduate research experience	• Number of publications and list of off-campus presentations • Number of grant proposals submitted. List of off-campus funding workshops • Number of students involved in undergraduate research.	Increase travel funding New Research Assistant Increase travel funding Research lab space Increase undergraduate research assistance

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Division: Academic Affairs **Unit Head:** Dr. Zhixiang Chen

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Unit Objective (Priority: #1 is highest)	Link to UTPA Objective	Expected Outcome	Assessment Criteria, Evaluation Methods	Assessment Results (Use actual data to describe annual performance)	Use of Results (What change was made?)
To establish specific steps to a multidisciplinary PhD program in Computing/Information Technology in accordance with the University's vision. (1)	6	A written agreement between the Chair and the Dean expressing the expectations necessary for PhD development for the Computer Science Department by May 2006.	• Minutes of meeting • Agenda & minutes of meeting	• A joint memo of Math Department and Computer Science Department was sent to Dean to propose an interdisciplinary Ph.D. Program in Applied Math and Computer Science. • We also met with Electrical Engineering Department to initiate the work of establishing a joint Ph.D. Program in Computer Science and Engineering.	We submitted our areas of distinctions to Dean Dr. LeMaster. We have worked on deciding which program(s) can be best joined with ours to establish an interdisciplinary Ph.D. Program, and we decided to continue this effort next year.

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Increase undergraduate & graduate enrollment by 2%. (2)	1,2,4	Using AY05 as a baseline, the department chair will compute the increase in SCH's and declared majors by May 2006.	• Number of transfer students from community colleges to UTPA that took the courses offered • List of scholarship awards • Web-site, power point presentations & brochures • List of High Schools both visited & invited. High School power point presentation. Travel vouchers	• Undergraduate SCH's for the department decreased in the fall by 2.57% but showed an increase in the Spring of 8.97% for a yearly SCH increase of 2.94%. • Graduate SCH's increased by 2.33% in the fall and by 32.56% in the spring. The yearly increase is 16.7%. • Criterion has been met and exceeded.	There have been two formal meetings and visits between our School of Engineering and Computer Science and TSTC. The chair and Prof. P. Brazier are part of this effort on effectively stream-lining students transferring from TSTC to UTPA. Articulations and agreements were reached.

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Increase the number of peer reviewed publications & presentations by faculty and students by 10%.	5	The chair and staff will calculate the increase of publications & presentations over the base year AY05 by May 2006.	• Number of publications and list of off-campus presentations • Number of grant proposals submitted. List of off-campus funding workshops • Number of students involved in undergraduate research.	• 8 refereed journal and book chapter publications. 15 refereed conference proceeding publications. • 3 external grant proposals were submitted. • The first UTPA Computer Science Student Research Day was held in April with 249 participants. • The increase in publication is 15%. • The expected outcome is met.	The Chair has requested additional travel funds for faculty to present papers at academic conferences and to conduct research. The Chair has implemented the tracking and documentation of scholarly productivity. The UTPA Computer Science Student Research Day was a big success. We have decided to continue it as an annual conference.