Baylor University
2007/2008 CSI Board of Advocates Survey

To: Board of Advocates

The Department of Computer Science is requesting that all CSI Board of Advocates members complete the following survey. The feedback collected through this survey process will be used by the Computer Science Department to improve the quality of its programs. Your participation in this survey is anonymous.

Program educational objectives are **broad** statements that describe the career and professional accomplishments that the program is preparing graduates to achieve.

Please indicate, on a scale from 0 to 10, how well you feel the Computer Science department meets each of the following program educational objectives and how **relevant** each objective is to the success of their students.

0 – objective NOT met or NOT relevant
5 – neutral
10 – objective COMPLETELY met or HIGHLY relevant

1. To prepare students with a broad-based technical education in computer science.

_____ how well does the CS department meet this outcome _____ how relevant is this objective

comments:

2. To stimulate students to think clearly, be creative, and communicate effectively.

_____ how well does the CS department meet this outcome _____ how relevant is this objective

comments:

3. To instill a sense of professional ethics and civic responsibility.

_____ how well does the CS department meet this outcome _____ how relevant is this objective

comments:

4. To prepare students for employment in organizations that will utilize their computing skills or to continue their education.

_____ how well does the CS department meet this outcome _____ how relevant is this objective

comments:

Program outcomes are **narrower** statements that describe what students are expected to know and be able to do by the **time of graduation**. Program outcomes relate to the skills, knowledge, and behaviors that students acquire in their matriculation through the program.

Please rate the Computer Science Department, on a scale from 0 to 10, on how well you feel they meet each of the following **Program Outcomes** and how **relevant** each outcome is to the success of their students.

0 – outcome NOT met or NOT relevant
5 – neutral
10 – outcome COMPLETELY met or HIGHLY relevant

1. An ability to apply knowledge of computing and mathematics appropriate to the discipline;

_____ how well does the CS department meet this outcome _____ how relevant is this outcome

comments:

2. An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution;

_____ how well does the CS department meet this outcome _____ how relevant is this outcome

comments:

3. An ability to design, implement and evaluate a computer-based system, process, component, or program to meet desired needs;

_____ how well does the CS department meet this outcome _____ how relevant is this outcome

comments:

4. An ability to function effectively on teams to accomplish a common goal;

_____ how well does the CS department meet this outcome _____ how relevant is this outcome

comments:

5. An understanding of professional, ethical, legal, security, and social issues and responsibilities;

_____ how well does the CS department meet this outcome _____ how relevant is this outcome

comments:

6. An ability to communicate effectively with a range of audiences;

_____ how well does the CS department meet this outcome _____ how relevant is this outcome

comments:

7. An ability to analyze the local and global impact of computing on individuals, organizations and society;

_____ how well does the CS department meet this outcome _____ how relevant is this outcome

comments:

8. Recognition of the need for, and an ability to engage in, continuing professional development;

_____ how well does the CS department meet this outcome _____ how relevant is this outcome

comments:

9. An ability to use current techniques, skills, and tools necessary for computing practice.

_____ how well does the CS department meet this outcome _____ how relevant is this outcome

comments:

Please list any **Program Educational Objectives** or **Program Outcomes** that you feel should be added.

Should any of the existing **Program Educational Objectives** or **Program Outcomes** be modified?

Other comments.

Computer Science Fellows Program Proposal

(Based on Baylor Business Fellows Program, Honors Program, and University Scholars Program)

Computer Science Fellows

The Computer Science Fellows Program is designed for intellectually gifted, highly motivated students entering the School of Engineering & Computer Science with a wide range of interests who desire a more diverse experience across the disciplines. The program seeks to broaden Computer Science Fellows' backgrounds in their chosen area(s) of diversification while preparing them for a graduate studies or for successful careers. The Computer Science Fellows is a major within the School of Engineering & Computer Science where fellows are free to create an individualized course of study with the advice of a program director who mentors them throughout the entire undergraduate experience.

A Computer Science Fellows Director will advise each Fellow through out his or her college career. The Director will in turn call upon the expertise of professors in other departments for assistance in serving the needs of the Fellow.

Admission to the Program

Admission to Computer Science Fellows Major is competitive and is separate from and subsequent to admission to Baylor University. Although the major is designed to appeal to students with high ACT/SAT scores and class rank, or National Merit designees, admission is not based solely on scores and grades. Consideration is given to genuine intellectual curiosity and a desire to excel in computer science studies as well as achieve a broad education in the humanities.

For new students, after admission to the University, the applicant must apply in writing to the Director of the Computer Science Fellows Major. The application includes two letters of recommendation from current or former teachers and an essay explaining how the applicant would benefit from the major. Acceptances are made on a rolling basis, and letters of admission are sent in the month following receipt of a complete application.

The major is open to incoming freshmen, transfer students with less than 36 Baylor credit hours after previous school credits have transferred, current Baylor students with less than 36 Baylor credit hours at time of application, or current students in good standing transferring from the University Scholars Program.

Maintaining Computer Science Fellow Status

Computer Science Fellows will be required to maintain a 3.5 GPA through their sophomore-level courses (including CSI 3471, "Software Engineering I", CSI 3344, "Introduction to Algorithms", and MTH 1322, "Calculus II"). Once admitted to the Upper Division of the Computer Science Fellows program (courses beyond those listed above), they must have at least a 3.25 GPA to graduate. If dismissed from the program, students must then fulfill the general requirements of the University as well as requirements for a major.

The Independent Reading List

In addition to the assigned texts in the Computer Science Fellows courses, each Fellow will, with the advice and approval of their Research Advisor, compose a list of computer science texts and related works. The Fellow will study the additional works independently throughout their junior year in ECS 3101, "Independent Readings I," and 3102, "Independent Readings II," in preparation for their Senior thesis and project. Computer Science Fellows will undergo an exit interview (ECS 3001, "Independent Reading Survey") over these texts in the spring semester of their junior year.

The Readings Exit Interview

Scholars will take ECS 3001, "Independent Reading Survey," an exit survey in the spring semester of the junior year. They will meet with a committee composed of two faculty members (including their Research Advisor) and a senior Computer Science Fellow to demonstrate their knowledge of the selected texts and related works. Upon approval of the Fellows Committee, the student will be permitted to proceed with work on their senior thesis.

The Senior Thesis

During their senior year, Computer Science Fellows will be approved to sign up for ECS 4v01 and ECS 4302, "Senior Computer Science Fellows," preparing and submitting an extended study on a research topic based on the readings and research conducted during their junior year. The program directors, including the respective Research Advisor, will approve the topic or project and evaluate the completed thesis.

Course Requirements

The BSECS degree has the following course requirements:

- REL 1310 and 1350
- Two semesters of Chapel
- MTH 1321, 1322, 2311
- STA 3381
- Computer Science courses:
  - CSI 1430, 1440, 2334, 2350, 3334, 3471, 3344
  - 5 additional upper-level CSI courses
- ECS 3101, "Independent Readings I," and 3102, "Independent Readings II," junior independent readings courses
- ECS 3001, "Independent Reading Survey," an exit survey to summarize a student's independent readings, and ascertain readiness for the senior thesis
- ECS 4v01, "Research/Fellows Thesis I," and 4302, "Fellows Thesis" (presentation in the annual ECS Scholar's Day is mandatory for the fulfillment of ECS 4302)
- ECS 4001, "Senior Exit Survey," the exit survey for all Computer Science Fellows graduates
- Completion of 124 hours, including 36 hours of "3000"-"4000" level credits
- The requirement for advanced credit, residence, chapel, and maximum credit are the same as for the Bachelor of Science in Computer Science degree. Additional information about requirements is listed under the "General University Regulations." Computer Science Fellows cannot declare additional majors. Committee approval is required for graduation.