

Summary and Trends from Alumni Surveys

Department of Computer Sciences

Fall 2005

Introduction

To improve the programs offered by the College of Engineering, Florida Tech surveys alumni every two years. The survey is sent to those student who graduated either 3 or 7 years before the date of the survey. The survey was first given in 2001 and subsequently in 2003 and 2005. Because of the limited response in 2001 from alumni in the department, data is only tracked from 2003. The table below summarizes responses from alumni of the department and the college. Alumni are asked if:

1. they are as well prepared as their peers,
2. Florida Tech contributed to their ability to work on a team,
3. Florida Tech contributed to their ability to make ethical decisions,
4. Florida Tech contributed to their understanding of professional responsibilities,
5. they would recommend their program to others,
6. they are employed in their major.

Trait	2005 Alumni Survey		2003 Alumni Survey	
	Computer Science	College	Computer Science	College
Well prepared	100%	96%	89%	89%
Team work	83%	93%	84%	92%
Ethical decisions	83%	77%	63%	69%
Professionalism	100%	90%	89%	75%
Satisfied with program	100%	96%	95%	88%
Employed in field	100%	80%	100%	81%
Number of responses	7	31	16	64

Conclusions and Improvements

1. There is opportunity to improve our graduate's ability to work on a team. Efforts are being made, especially in the senior project courses, to provide students with information about teams and being a productive member of a team.
2. There has been a significant improvement in our graduate's ability to make ethical decisions. This may have been influenced by the required course CSE 3030 Ethical, Social and Legal Issues in Computing, which some of the alumni surveyed in 2005 may have taken, but would not have been available to those surveyed in 2003. There remains an opportunity to continued improvement of this trait.
3. Efforts should be make to increase the number of responses to the survey. The department is collecting contact information for all alumni.
4. The survey should be reviewed and updated to provide better answers to whether or not educational objectives are being achieved by alumni.

Comments from the surveys

Free-form responses from alumni also provides interesting data that can be used to improve the department's programs. The exact words are kept in the bi-annual reports, but are edited below. Responses, noting actions take are given in parenthesis.

Comments from 2005

1. More group/team work (more emphasis on team work is taking place in senior projects).
2. More Internet-related applications (web technologies classes are being offered yearly).
3. Continue to concentrate on programming languages and design (programming language remains a required course in Computer Science; software design is required in Software Engineering).
4. Teach commercial IDEs (Use of Eclipse and Visual Studio .Net is encouraged).
5. UML is a must for undergraduate curriculum as well. (UML is introduced in software engineering and covered throughly in software design)
6. I never liked the quality of education at FIT, but I've realized that comparing to others, it is acceptable.

Comments from 2003

- Demand more from pure computer science students: Force them to take classes like algorithms, formal languages, compilers, graphics, and then provide specializations in the area they like best (algorithms and formal languages are required, although several faculty would like to require compilers, the number of electives is small and would become smaller).
- Provide courses in consulting skills, project management, and technical writing (technical writing remains a required course, although project management is not currently offered as a course, it is covered in some newer software engineering courses).
- Software needs to be maintained; change control management, code robustness is important (a current member of the faculty conducts research in software evolution and teaches a course in the subject).
- Quality software documentation is invaluable and always overlooked (style guidelines are introduced in early courses; the same faculty member mentioned about is active in software documentation research and incorporates this into the classes he teaches).
- Computer security is important and needs emphasis (introductory and advanced computer security classes are offered).
- In-depth assembly language was inadequate (there is now a member of the faculty who champions assembly language and the course is improving).
- Provide training in resume and interviewing skills (students are required to develop a resume and interview with potential employers in their first term; the Career Services office provides resume writing and interview skills workshops throughout the year).
- Encourage student participation in professional societies (the ACM chapter has seen a resurgence of activity).
- Balance theoretical classes with complementary practical courses (the software engineering curriculum provides practical, applied course work).
- Have professors go through advanced teaching (it is easier for a camel to go through the eye of a needle).

- Advisor need to be knowledgeable about the program in which students are enrolled (faculty advisors are assigned based on the student's program, some exceptions happen; alternative advising structures are being considered).
- Real-time software development should be covered (this remains a goal to achieve).