

**Graduate Program Review Appeals Committee**  
**Informational Session: June 22, 2006**

**Computer Science Ph.D.**

**Program representatives:** Tim Greene (dean), Mohsen Guizani (professor and chair), Dionysios Kountanis (graduate program director), J. Donald Nelson (associate professor)

**Program's Appeal Summary**

1. The number of graduates from the program since its inception in 1993 does not fully represent the involvement and activities of our department faculty in working with Ph.D. students. There is a history with the Department of Mathematics prior to having our own Ph.D. program.
2. While the number of graduates from the program since 1993 has been low, there has been a dramatic increase in the number of graduates (five total) from the program since 2003, with a projected number of five more by April 2007. Ph.D. production from 1993 was hampered by the fact that no new tenure-track research faculty members were hired from 1989 to 1998, and by very large undergraduate and master's degree responsibilities.
3. We currently have 22 students enrolled in the program and are poised to produce approximately 4 graduates per year through December of 2010.
4. Since 2001, we have had in excess of \$1.36M dollars in externally funded research. From 2002 to the present, external funding has supported graduate research assistants in the amount of \$304,480, which represents 73% of all the grant funding allocated for DAs in the CEAS.
5. Since 1999 six new faculty members have been hired, all of whom came here to work in a Ph.D. program and conduct funded research.
6. Loss of the Ph.D. program would have a serious negative impact on research and external funding.
7. There has been no information provided that explains how or why the decision to close the program was made. Furthermore, no information has been provided that would indicate how much money, if any, would be saved for the University should the program be closed.
8. Our graduates have been very successful in obtaining employment.

**Committee's Questions \***

1. What are the differences between the master's and the Ph.D.?  
There are many. The master's, which is very large, requires 33 hours and has three different tracks. On the other hand, the Ph.D. requires at least 12 credit hours of research work. Our researchers' publication rate is very high compared to other institutions, and they publish in very good-quality journals.
2. If a master's student took research for six hours and then went into a doctorate for 12 hours, what different things would he or she learn?  
The Ph.D. is about depth of research, as well as time. It actually represents about a year-and-a-half of dedicated study. It also opens up doors in terms of employment prospects.
3. Was the hiring of new faculty something that happened because of turnover or because the provost or dean deemed it necessary?  
It's to replace retirees, a number of whom left at around the same time, but the main push came when we were moving into the CEAS. It used to be that faculty hires were people returning from industry. Then we started bringing in recent doctoral graduates who are from good schools and who have good publication records.
4. You've said that there is strong marketplace demand for computer science doctoral graduates. What other colleges offer the Ph.D.?

It's cyclical, that demand. Right now, IT is at the top of the list. There are computer science Ph.D.s at Michigan State, Wayne, Michigan Tech, etc. You'd be hard pressed to find a four-year institution in this state that doesn't have a computer science department.

5. What was the impetus behind the plan to move the program?  
The recommendation was to merge four doctorates as engineering concentrations. We were vehemently opposed. Employers are looking for a Ph.D. in Computer Science, as are potential students.
6. Your graduate student number has gone up recently. Why?  
It's to do with the success of our graduates and the care we show our students. The word got out. Our reputation at the Ph.D. level is especially high.
7. With 104 master's students, what's the advising role at the graduate level as a whole?  
It's distributed across the faculty. Most of those master's students choose the coursework rather than the thesis track because they want to graduate more quickly. We encourage that because it means we don't overburden the faculty with thesis work.
8. Imagining a worst-case scenario in which you receive no new resources, no new or replacement faculty hires, and no additional support for TAs, and have to self-fund 100 percent of your growth, what would your program look like three to five years from now?  
In CEAS, we're studying all our doctoral programs to determine faculty's willingness to advise Ph.D. students. It looks as though that willingness is greater than enrollment. So the bottom line is that we'd expect our Ph.D. program in Computer Science to grow to 30 students. We have 16 faculty and a faculty specialist. We'd still have a very good student-to-faculty ratio.
9. How would you sum up the basis for your appeal?  
Growth. We expect to continue growing without having to request new resources. We'll continue to bring in research money and to enhance our reputation, etc.

*\* Q&A text is not verbatim*