

As part of the department's commitment to continuous improvement in the Bachelor of Science in Industrial Engineering (BSIE) degree program, we recently completed a survey of alumni who are within 6 years of graduation.

The purpose of the survey was to obtain a characterization of recent graduates based on Objectives of the BSIE degree program. These Objectives are to ensure that soon after graduation alumni are:

- 1) Leading the planning, designing, developing, and controlling of integrated systems.
- 2) Applying concepts and tools to improve processes in service and manufacturing systems.
- 3) Modeling complex systems and make inferences for effective decisions.
- 4) Pursuing graduate education in either a research or professional degree program.

With assistance from alumni Crystal Freeman (2000), Amy Greer (2001), Clinton Thomas (2004), and Tommy Qualls (2006) a holistic survey was developed, disseminated, and tabulated during the spring and fall of 2007. Only 15 of 80 graduates could not be located. The response rate was approximately 40% of the graduates surveyed. Responses by graduation year are shown in Figure 1. Figure 2 indicates that although there are a variety of industries represented, most of our graduates are in manufacturing.

Figure 1: Responses by Graduation Year

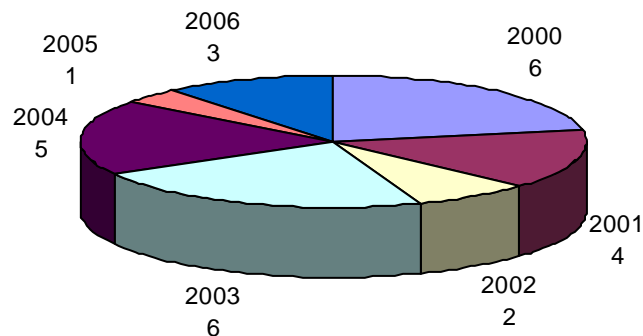
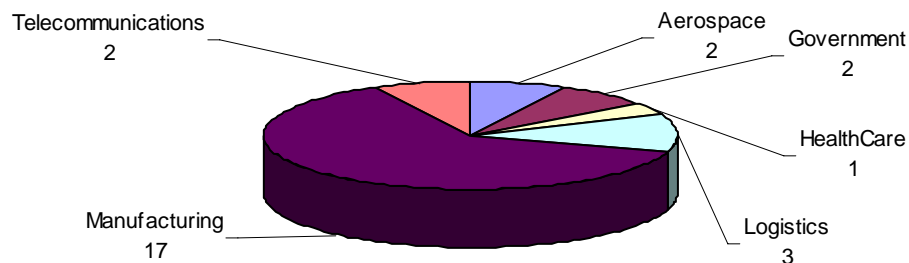
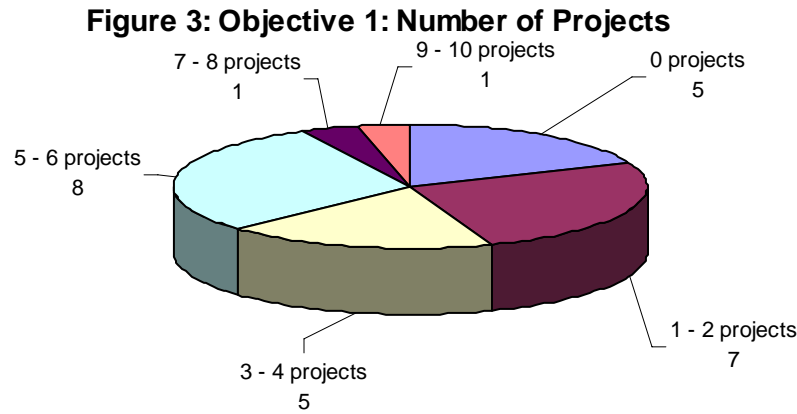


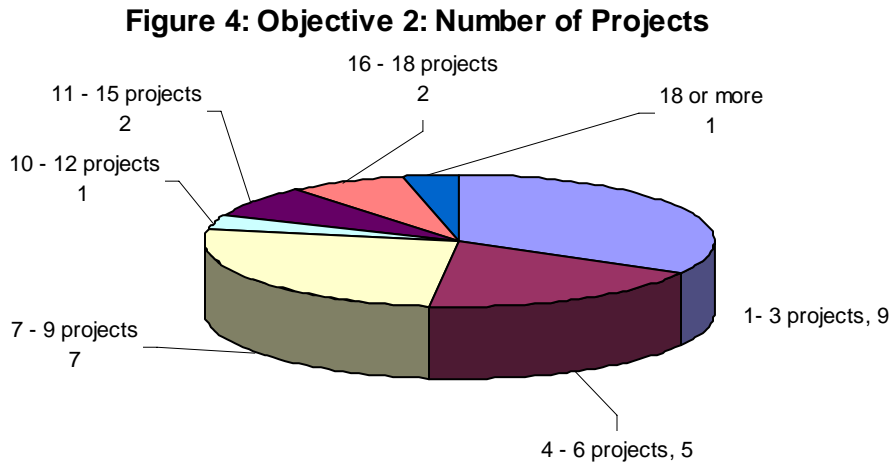
Figure 2: Industries Represented



The criteria applied to Program Objective 1 was leadership in a group project or a situation where the graduate had sole responsibility for a project. Figure 3 indicates that 22 of 27 respondents reported at least some leadership activities and 15 of 27 reported 3 or more significant leadership activities. No effort was made to classify results by graduation year. However, it is interesting to note that in Figure 1, only 4 respondents were within two years of graduation and 5 respondents reported no leadership activities.



For Objective 2, Figure 4 indicates that all respondents have applied concepts and tools to achieve process improvement. Again, notice that 9 respondents were within three years of graduation and 9 respondents reported between 1 and 3 activities. Project activities reported in Objective 1 are not included in Objective 2.



Although it was apparent that there was evidence that graduates are developing and using system models as a basis for decisions. However, there was a large variation associated with interpretation. However, because of interpretation ambiguity, the consensus was not to report results on Objective 3.

For Objective 4, Table 1 indicates that eight of the twenty-seven graduates have earned advanced degrees. The most common degree is the Masters in Business Administration.

However, one graduate has completed a Masters in Divinity Degree and another has obtained a Masters Degree in Nursing.

Table 1: Graduate Degree for BSIE Program Graduates

Degree	Number Awarded
MBA	3
MSIE	2
Manufacturing Operations	1
Masters Degree in Nursing	1
Masters in Divinity	1

From the survey we were also able to determine that:

- Eighteen of 27 graduates reported continuing education activities, in some instances certification, in areas such as project management, Six Sigma, reliability coordination, and negotiating and leadership skills.
- Three graduates are members of IIE and two of those are officers in the Nashville Chapter of IIE. One graduate is a member of the Society for Maintenance and Reliability Professionals.
- Nine of 27 graduates are actively engaged in community service.

Alumni who helped with implementing the survey recommended that Objective 3 should be somehow revised to delineate model development and utilization of existing models for analysis and that a broader statement of Objective 4 should be considered because although there are alumni enrolled in graduate programs and receiving advanced degrees, many more are receiving advanced training and certification in a variety of professional areas related to industrial engineering.

An Industrial Advisory Board Subcommittee that includes Crystal, Amy, Clinton, and Tommy as well as Jeremy Doyle (2004) and Charlie Borders (2006) are helping the Department develop a strategy for these recommendations. The Survey will be conducted again this spring after the recommendations have been addressed.