Fire Protection Safety Technology
Division of Engineering Technology
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Degree Program(s) Assessed	Assessment Methods	Number of Individuals Assessed
Bachelor of Science. Engineering Technology, Fire Protection and Safety	Exit Interviews National Exams Portfolios Alumni Listserv	20 3 36 NA

Analysis and Findings

The assessment plan was revised in the spring of 2002. It is still too son for some of the revised methods to yield meaningful results For example, portfolio data was collected for the freshman class in FPST 1213 in 2003. However that data will not be correlated with performance in other classes or yield meaningful insights until those students have taken several subsequent FPST courses. Midlevel assessment will begin in 2005. The enrollment management plan for the department was approved to begin with the freshman class of 2003. No graduate survey was performed during this period.

National Exams: National exams are a broad assessment of the quality and depth of the student's preparation.

Two students took the Fundamentals of Engineering Exam (FE) and reported their impressions (scores not yet reported). Engineering technology students typically do not take this exam and may not be allowed to take the exam in many states. Success in this exam indicates exceptional preparation through the choice of optional engineering courses and often additional independent study.

One current student the Associate Safety Professional (ASP) exams and passed (scores not revealed).

The students talking the FE felt ill prepared in dynamics, and somewhat deficient in thermodynamics.

The student taking the ASP felt generally well prepared and felt that the OSU education was sufficient in coursework and content in order for them to be successful in that exam.

Listserv: This is a continuous communication/feedback mechanism that includes recent graduates and alumni from all periods up to and including some who have retired. The trends in subjects are monitored in order to remain abreast of issues that those in the profession feel are most relevant.

Model code issues are frequently addressed, as are regulatory issues. Fire alarm questions are often basic questions that indicate a lack of adequate preparation. Issues regarding suppression system design are often related to interpretation of codes and are complex.

A significant amount of discussion concerns pursuing professional certification. Many still feel that certification and licensure should have been emphasized more in the curriculum.

Graduates feel the program should place increased emphasis on issues and techniques surrounding model fire and building codes.

Additionally more emphasis is being placed upon use of predictive fire models and appropriate use in building design and code compliance

Exit Interviews: The graduates rated themselves against the published departmental objectives as summarized in the tables below:

General Education Objectives	High -5	4	3	2	1	0	NA
Understand and apply systematic problem solving	9	10	1				
Understand common industrial processes	4	13	3				
Ability to conduct training on loss control topics	2	10	6	2			
Function effectively on teams	13	5	1	1			
Communicate effectively	12	6	1	1			
Recognize the need for life long learning	13	6	1				
Understand professional, ethical and social responsibilities	14	4		1		1	
Respect diversity	14	4		1		1	
Awareness of contemporary professional issues	6	9	3	1	1		
Commitment to quality, timeliness and continuous improvement	12	6	1		1		

Technical Educational Objectives	High -5	4	3	2	1	0	NA
Recognize Hazards	10	10					
Evaluate Hazards	8	10	2				
Conduct risk analysis and risk management activities	5	8	7				
Formulate control and mitigation strategies (design and test)	7	7	5	1			
Anticipate probable hazards	8	9	3				
Apply and interpret codes and standards	10	9					
Conduct incident investigations and associated Legal responsibilities	6	9	4	1			

Uses of Assessment Results

- Beginning in Spring 04, new lab facilities are being brought on line, new equipment installed and all Lab courses being revised to use new facilities and equipment. This has been ongoing and was hampered by construction delays which have placed the building more than 1 year behind scheduled completion. The fire alarm laboratory is a significant improvement over current facilities. This should enhance student experience in an area which has been consistently identified as a weakness.
- The department held a strategic planning session to integrate the results of prior assessment periods into individual courses and build continuity throughout the curriculum. Assessment results were also discussed with our Industrial Advisory Board in November 2003.
- FPST 3143 *Structural Design for Fire and Life Safety* was revised to include much more material from the International Building Code.
- FPST 4333 *System Safety* was revised o include more detailed instruction in methodology of some techniques including fault tree analysis. Cause-consequence analysis was also added to the course.
- Instructors have been given the results of the exit interviews and changes will be made in individual courses as appropriate.
- The department has developed an advising track through the curriculum that will better prepare those students who wish to pursue the FE/PE certifications as a career objective. This involves taking more rigorous alternatives for some courses.
- Students preparing for national exams were encouraged to utilize the College of Engineering's review sessions. This, coupled with course advisement tailored to student career objectives will benefit student success on these exams.

- Starting Fall 03, the number of upper division controlled electives have been increased from 2 (6 hours) to 3 (9 hours) to allow more choice in areas of specialization.
- Internship program will be reviewed during the 2003-2004 academic year.
- Fire Alarm course material has completely revised coupled with new Fire Alarm Panel workstations from Notifier. This is in conjunction with moving into the new lab facilities.
- All items will be reviewed during the faculty's next curriculum retreat in August 2004.