



**Degree Program  
Assessment of Student Learning Plan  
Kansas State University**

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BY:.....

- Check the box if your program's student learning outcomes have been modified since November 2003. If so, please email ([apr@ksu.edu](mailto:apr@ksu.edu)) or attach a hard copy to this document.

**A. College, Department, and Date**

College:        *Engineering*  
Department:    *Industrial and Manufacturing Systems Engineering*  
Date:            *10/22/2004*

**B. Contact Person(s) for the Assessment Plans**

*Shing Chang, Associate Professor*  
*Margaret Rys, Associate Professor*

**C. Degree Program**

*Minor in Manufacturing Systems*

**D. Assessment of Student Learning Three-Year Plan**

**1. Student Learning Outcome(s)**

- Design and conduct experiments & Analyze and interpret data
- Function on a multidisciplinary team
- Use modern engineering tools

Special rationale for selecting these learning outcomes (optional):

*Not applicable*

Relationship to K-State Student Learning Outcomes (insert the program SLOs and check all that apply):

Program SLOs	University-wide SLOs (Undergraduate Programs)					Program SLO is conceptually different from university SLOs
	Knowledge	Critical Thinking	Communication	Diversity	Academic / Professional Integrity	
1. Design and conduct experiments & Analyze and interpret data	X	X				
2. Function on a multidisciplinary team				X		
3. Use modern engineering tools	X					

**2. How will the learning outcomes be assessed? What groups will be included in the assessment?**

Learning Outcomes	Measures			Who will be assessed?
	Direct	Indirect	Not Sure	
1. Design and conduct experiments & Analyze and interpret data	IMSE 563 – machining experiments			Those who take the course
2. Function on a multidisciplinary team	IMSE 251 – manufacturing processes lab			Those who take the course
3. Use modern engineering tools	IMSE 662 – CNC technology			Those who take the course

**3. When will these outcomes be assessed? When and in what format will the results of the assessment be discussed?**

The SLO will be assessed at the end of the required courses for the minor program – IMSE 251, 563 and 662. IMSE 251 are offered in both fall and spring semesters, IMSE 563 is offered in spring semester, and IMSE 662 is offered in the fall semester. The results of assessment in terms of labs, projects, and exams will be discussed in faculty meetings or faculty retreats usually scheduled during summer before fall semesters begin.

**4. What is the unit’s process for using assessment results to improve student learning?**

During IMSE faculty retreats and meetings, course and curriculum improvement process starts with studying the data provided from those courses related to IMSE SLOs. Faculty members will provide reports and recommendations for each of those courses. Discussions among general faculty will provide suggestions or action items that trigger improvement recommendations. Some of the recommendations may involve other constituents such as IMSE advisory counsel and student organizations. This continuous improvement loop is closed in one of the review sessions in faculty retreats and meetings.