

**Engineering Faculty Document No. 39-02**  
**9 February 2005**

**To:** Engineering Faculty  
**From:** Cooperative Engineering Education Committee  
**Date:** 9 February 2005  
**Subject:** Creation of an Advanced Leadership Experience Program and Courses

The faculty of the Cooperative Engineering Education Committee has approved the creation of a certificate granting Advanced Leadership Experience Program detailed in the following document. This program is similar to the current Cooperative Education Program, but it requires only three work sessions and will concentrate on leadership experience instead of technical experience. This action is now submitted to the Engineering Faculty with a recommendation for approval.

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9 February 2005

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Director Cooperative Education Program and  
Chairman Cooperative Engineering Education Committee

**THREE SESSION UNIVERSITY – INDUSTRY ADVANCED LEADERSHIP EXPERIENCE**  
**CERTIFICATE PROGRAM**

There are numerous roles within the working world that engineers are often asked to fill that have little to do with technical training. Many times these roles are critical to the success of a particular technical project or an entire company. The skills required for these tasks are not necessarily taught within the traditional academic curriculum, but can be found on campus being cultivated within the various student organizations. Organizational skills, public speaking, committee leadership, and image projection are developed through practice within existing human institutions. In an increasingly technical world, it is critical that engineers play a role in disseminating technical information to the public, solving conflicts which involve technical problems, and providing guidance to policy making bodies regarding complex issues. The people who will take these roles within their careers are the present leaders of student organizations on campus today. These individuals need to be exposed to a wider range of experiences within

the working world while still undergraduates to fully develop their potential. The Advanced Leadership Experience Program (ALEP) is planned to fit this need.

This program is designed to be a faculty and Board of Trustees approved, certificate granting program, similar to the present Cooperative Education Program. The central office will qualify work session programs for the various interested employers and coordinate student recruitment procedures. ALEP students would spend all three sessions with a single employer, like five session Co-Op students, and the central office would only qualify employers that pay students during their work sessions. Students would work for the same employer each work session. Local departmental Faculty Co-Op Coordinators will also handle ALEP students. These students would be recruited during their sophomore year, and they would pay work experience fees while on the job, similar to Co-Op students. The ALEP program would accept those students that maintain an upper 2/3 class rank within their home departments. Students could begin participation at any time during their junior year. Figure 1 illustrates the various possible alternative schedules. Individual Faculty Coordinators will advise students regarding the choice of potential schedules within their particular discipline. Individual Faculty Coordinators shall have the authority to make exceptions to the recommended schedules for compelling academic reasons. Comprehensive work experience reports and employer and student evaluations would be required. No academic credit would be given for participation in this program, but completion would lead to a certificate upon graduation titled “University – Industry Advanced Leadership Experience Program in Engineering”. The certificate will identify the student’s employer, and this information will be transcript recorded. Additionally, ALEP students who complete one term of work experience overseas shall have an ‘International Experience’ endorsement added to their certificate.

Plan	YEAR & TERM														
	1 <sup>st</sup> Year			2 <sup>nd</sup> Year			3 <sup>rd</sup> Year			4 <sup>th</sup> Year			5 <sup>th</sup> Year		
	F	S	SS	F	S	SS	F	S	SS	F	S	SS	F	S	SS
Plan A															
Plan B															
Plan C															

	On Campus
	Work Session
	Optional On Campus

Figure 1 – Potential Three Session Practical Experience Program Schedules.

To handle the issue of registration and certificate progress, it is recommended that the faculty approve the following variable title courses:

**PPE 321 Professional Practice for Advanced Leadership Experience I**

Sem. 1, Sem. 2, and SS. Cr. (0)

For Advanced Leadership Experience Students Only.

Must have junior standing.

Leadership training with qualified employers within industry, government, or small business.

**PPE 322 Professional Practice for Advanced Leadership Experience II**

Sem. 1, Sem. 2, and SS. Cr. (0)

For Advanced Leadership Experience Students Only.

Must be preceded by PPE 321.

Leadership training with qualified employers within industry, government, or small business.

**PPE 323 Professional Practice for Advanced Leadership Experience III**

Sem. 1, Sem. 2, and SS. Cr. (0)

For Advanced Leadership Experience Students Only.

Must be preceded by PPE 322.

Leadership training with qualified employers within industry, government, or small business.