Engineering Faculty Document No. 34-02 9 February 2005

To: Engineering Faculty

From: Cooperative Engineering Education Committee

Date: 9 February 2005

Subject: Creation of an Advanced Technical Experience Program and Courses

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

9 February 2005

Robert M. Stwalley III, Ph.D., P.E.
Director Cooperative Education Program and
Chairman Cooperative Engineering Education Committee

THREE SESSION UNIVERSITY – INDUSTRY ADVANCED TECHNICAL EXPERIENCE CERTIFICATE PROGRAM

There are presently numerous students who cannot participate or have difficulty participating in the Cooperative Education Program that would like the opportunity to gain some undergraduate professional practice. These individuals include foreign visa students that have INS regulation difficulties, freshman that do not qualify for five session Co-Op due to grade requirements, upperclassmen that change their minds regarding work experience, students who were uncertain of a career choice as second semester freshmen, along with those who have many other numerous personal reasons for not choosing the current Cooperative Education experience. It is extremely difficult and sometimes impossible to accommodate these students within the traditional five session Co-Op program. Additionally, there are several companies and government agencies that are increasingly asking for later start, three session Co-Ops. The Advanced Technical Experience Program (ATEP) 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 five session Cooperative Education Program. The central office will qualify work session programs for the various interested employers and coordinate student recruitment procedures. ATEP 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 ATEP 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 ATEP 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 Technical Experience Program in Engineering". The certificate will identify the student's employer, and this information will be transcript recorded. Additionally, ATEP students who complete one term of work experience overseas shall have an 'International Experience' endorsement added to their certificate.

Plan	YEAR & TERM														
	1 st Year			2 nd Year			3 rd Year			4 th Year			5 th Year		
	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 311 Professional Practice for Advanced Technical Experience I

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

For Advanced Technical Experience Students Only.

Must have junior standing.

Professional practice with qualified employers within industry, government, or small business.

PPE 312 Professional Practice for Advanced Technical Experience II

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

For Advanced Technical Experience Students Only.

Must be preceded by PPE 311.

Professional practice with qualified employers within industry, government, or small business.

PPE 313 Professional Practice for Advanced Technical Experience III

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

For Advanced Technical Experience Students Only.

Must be preceded by PPE 312.

Professional practice with qualified employers within industry, government, or small business.