## ASCE "Raise The Bar" Newsletter August 2005 Vol. 2, No. 3

The ASCE Committee on Academic Prerequisites for Professional Practice (CAP<sup>3</sup>) has continued its efforts to raise the educational requirements for the future practice of civil engineering at the professional level (licensure). This effort is an on-going, long-term effort. Below is a summary for each of our committees.

# Levels of Achievement Subcommittee

The Levels of Achievement Subcommittee



has completed their work. Their report can be found at <u>www.asce.org/raisethebar/</u> Results presented in the report will be input to the Second Edition of the Body of Knowledge Committee.

# Second Edition of the Body of Knowledge Committee

In the August issue of *ASCE News*, a call was made to seek member selfnominations for the new committee. Nomination form is available <u>www.asce.org/raisethebar/</u> Nominations are due by September 8. The committee will start in October 2005 and finish no later than April 2007. It is anticipated that the Second Edition of the BOK will be released in conjunction with Engineers' Week in February 2007.

## Curricula Committee

The committee will fulfill its charge by the end of this calendar year. The committee continues to work on mapping the BOK outcomes on existing curriculum. This process has identified many suggestions on how to improve the next edition of the BOK.

## Licensure Committee

The licensure committee has been busy assisting in the National Council of Examiners for Engineering and Surveying (NCEES) regional meetings. A presentation was given at the NCEES annual meeting on our overall effort. On Thursday, August 25, NCEES voted by a narrow margin in favor of changes to the Model Law to include additional education beyond the bachelor's



beginning "no earlier than" the year 2010. An NCEES committee will be considering and drafting the specific language to incorporate additional education into the Model Law. This language will require approval at a future NCEES annual meeting and may be possible next year. The licensure committee has also prepared an implementation plan to build a coalition of support to assist in modifying statutory requirements in the 56 licensing jurisdictions over the next 10 to 20 years. Change happens slowly in our profession.

### Accreditation Committee

The accreditation committee has been on the fast track. In July, leaders from the committee met with the ABET, Inc. Engineering Accreditation Commission (EAC) Criteria Committee to discuss our overall effort The committee also gave a presentation at the National Department Heads' meeting in late May outlining their draft products and soliciting feedback. The presentations covered our draft basic level civil engineering program criteria along with supporting commentary and advanced level general criteria. The draft criteria include the following:

### Proposed Changes to the Criteria for Accrediting Engineering Programs Effective for Evaluations during the 2008-2009 Accreditation Cycle

### PROGRAM CRITERIA FOR CIVILAND SIMILARLY NAMED ENGINEERING PROGRAMS

#### 1. Curriculum

The program must demonstrate that graduates can apply knowledge of mathematics through differential equations, calculus-based physics, chemistry, and at least one additional area of science, consistent with the program educational objectives; can apply knowledge of four technical areas appropriate to civil engineering; can conduct civil engineering experiments and analyze and interpret the resulting data; can design a system, component, or process in more than one civil engineering context; and can explain the fundamentals of management, business, and leadership.

#### 2. Faculty

The program must demonstrate that faculty teaching courses that are primarily design in content are qualified to teach the subject matter by virtue of professional licensure, or by education and design experience. The program must demonstrate that it is not critically dependent on one individual.

#### CRITERIA FOR ADVANCED LEVEL PROGRAMS

Advanced Level Programs must develop and publish educational objectives and program outcomes. The criteria for an advanced level program are fulfillment of the basic level general criteria, fulfillment of the basic level program criteria that are appropriate to the advanced level specialization area, and one academic year of study beyond the basic level. The program must demonstrate that graduates can synthesize and evaluate knowledge in a specialized area of engineering related to the program area.

The draft commentary can be found on <u>www.asce.org/raisethebar</u>. If approved by the various ABET committees, the earliest implementation of these criteria would be for evaluations occurring in September 2008.

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