# ASCE "Raise The Bar" Newsletter December 2006 Vol. 3, No. 4

The ASCE Committee on Academic Prerequisites for Professional Practice (CAP^3) has continued its efforts to raise the educational requirements for the future practice of civil engineering at the professional level (licensure). For more than a decade, ASCE has been presenting, talking, and listening to many stakeholders. As a result, we have been progressively refining our proposed program to "raise the bar" in engineering education. The National Society of Professional Engineers (NSPE) and the



National Academy of Engineering (NAE) have joined in this advocacy.

Below is a summary from each of our committees.

# Curricula Committee

This committee reviewed the first edition of the Body of Knowledge (BOK) and included 25 civil engineering programs across the US. The committee has been sunset.

# Second Edition of the Body of Knowledge (BOK) Committee

The committee continues to work hard via weekly conference calls and e-mail exchanges. The committee is finalizing the candidate educational outcomes. For each of these potential outcomes, the committee has developed a rubric that characterizes the topic in the form of different levels of achievement according to Bloom's Taxonomy as well as a detailed explanation. The committee remains on track to release a draft of the second edition of the BOK for broad distribution and comment in July 2007. It is anticipated that the Second Edition of the BOK will be released in conjunction with Engineers' Week on February 21, 2008, at the National Academy of Engineering (NAE). If you are interested in details about the committee, please contact Rich Anderson at Roape1@aol.com

# Licensure Committee

At the 2006 Annual Business Meeting of National Council of Examiner for Engineering and Surveying (NCEES), the following language was added to the NCEES *Model Law*:

**Licensure by Examination** (Effective January 1, 2015) The following individuals shall be admitted to an 8-hour written examination in the principles and practice of engineering:

- (1) An engineer intern with a bachelor's degree, with an additional 30 credits of acceptable upper-level undergraduate or graduate-level coursework from approved course providers, and with a specific record of an additional 4 years or more of progressive experience on engineering projects of a grade and a character which indicate to the board that the applicant may be competent to practice engineering.
- (2) An engineer intern with a master's degree in engineering from an institution that offers EAC/ABET-accredited programs, or the equivalent, and with a specific record of an additional 3 years or more of progressive experience on engineering projects of a grade and a character which indicate to the board that the applicant may be competent to practice engineering.
- (3) An engineer intern with a doctorate in engineering acceptable to the board and with a specific record of an additional 2 years or more of progressive experience on engineering projects of a grade and a character which indicate to the board that the applicant may be competent to practice engineering.
- (4) An individual with a doctorate in engineering acceptable to the board and with a specific record of an additional 4 years or more of progressive experience on engineering projects of a grade and a character which indicate to the board that the applicant may be competent to practice engineering.

To understand the Model Law, it is important to know the definition of an engineer intern. The Model Law defines an engineer intern as a graduate of an engineering program of four years or more accredited by EAC/ABET, or the equivalent, and have passed an eight-hour written examination in the fundamentals of engineering. The Model Law is not binding for the 55 engineering licensing jurisdictions.

# Accreditation Committee

The accreditation committee has prepared a new version of the civil engineering program criteria along with supporting commentary and advanced level general criteria. These criteria and associated commentary are available at <a href="https://www.asce.org/raisethebar">www.asce.org/raisethebar</a>. The basic level civil engineering program criteria were unanimously passed by Engineering Accreditation Commission and are out for a one year comment period.

#### BOK Educational Fulfillment Committee

Plans are being made to initiate the BOK Educational Fulfillment Committee. The committee will likely begin with a workshop in the March to May 2007 timeframe. It's first task will be to review the draft of the second edition of the BOK.

### Experience Committee

Our master plan calls for "raising the bar" in the area of experience. A new committee will be launched in the spring of 2007 to explore this topic. The intent is to better define how experience can help fulfill the BOK.

Questions, comments, or suggestions, please contact Jeffrey S. Russell at russell@engr.wisc.edu