

**ASCE "Raise The Bar" Newsletter  
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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). For more than a decade, ASCE has been refining our proposed program to “raise the bar” in engineering education. The National Society of Professional Engineers (NSPE), the National Council of Examiners for Engineering & Surveying (NCEES), and the National Academy of Engineering (NAE) have joined in this advocacy. A summary of some activities since our last newsletter:



**Second Edition of the Body of Knowledge (BOK)**

ASCE released the *Civil Engineering Body of Knowledge for the 21st Century, Second Edition* (abbreviated as "BOK") on February 19, 2008 at a special event at the National Academy of Engineering (NAE). A comprehensive report of the NAE event and the new BOK is included in the March 2008 edition of the *ASCE News*. A copy of the BOK has been mailed to every civil engineering and technology department in the nation – as well as to every dean of engineering. We invite you to download a free copy of the Second Edition as a pdf file from [www.asce.org/raisethebar](http://www.asce.org/raisethebar). You may purchase a bound copy of the complete report from [www.asce.org/bookstore/book.cfm?book=8241](http://www.asce.org/bookstore/book.cfm?book=8241).

A frequent question is “**What is the BOK?**” The BOK is defined in ASCE Policy 465 as “the necessary depth and breadth of knowledge, skills, and attitudes required of an individual entering the practice of civil engineering at the professional level in the 21<sup>st</sup> century.” For civil engineers, entry into professional practice normally equates to becoming licensed. The BOK uses outcomes -- and it is designed to be a dynamic, comprehensive, aspiration and future-focused document. Each outcome is associated with a level of achievement. The BOK is fulfilled through a combination of formal education and practical experience.

Another question is “**How is the BOK related to accreditation criteria and licensure law/rules?**” From ASCE’s perspective, it is understood that the BOK represents a strategic direction for the profession. Under today’s accreditation and regulatory processes/procedures, some of the elements of the BOK may not be translated into accreditation criteria and licensing requirements in the near term. To say it another way, the BOK describes the “gold standard” for the aspiring civil engineering professional. Since input into the accreditation and licensing processes comes from a considerable number of stakeholders beyond just ASCE, it is unlikely that these processes will reflect all aspects of ASCE’s BOK. ASCE is optimistic that the accreditation and licensing processes could change over time to adopt a more BOK-centric approach. As this occurs, a greater proportion of the BOK could be reflected in the accreditation and licensure requirements.

### **Educational Fulfillment of the BOK**

The BOK Educational Fulfillment (BOKEdFC) was formed in early 2008. The committee has had two conference calls and a face-to-face meeting. Ken Fridley (Chair) and Jeff Evans (Vice Chair) are leading the committee. There are 11 full members and 31 corresponding members. If you are interested in becoming a corresponding member, please contact Ken Fridley at [kfridley@eng.ua.edu](mailto:kfridley@eng.ua.edu).

### **Accreditation Criteria and Removal of the Prohibition on Dual Level Accreditation**

The Accreditation Committee of CAP<sup>3</sup> prepared a new version of the civil engineering program criteria and masters level general criteria along with supporting commentary. These criteria and associated commentary are available at [www.asce.org/raisethebar](http://www.asce.org/raisethebar). These new criteria were unanimously passed by the ABET Board of Directors (on its second and final reading) on November 3, 2007. These criteria are effective for visits scheduled for the 2008-2009 accreditation cycle of ABET.

A dedicated group of ASCE accreditation champions, led by Phil Borrowman, Rich Anderson, and Ernie Smerdon, carefully executed a well thought-out plan on how to get ABET to remove its **prohibition on dual level accreditation of engineering programs**. The ban kept engineering programs in a given discipline at the same university from being accredited at both the baccalaureate and the master's level. With the help of ASCE's top leadership, ASCE's ABET Board appointees, members of the committees of CAP<sup>3</sup> and the Educational Activities Department of ASCE, and numerous partners external to ASCE; the effort to remove the prohibition was successful. In a significant positive development for ASCE's "raise the bar" initiative, the ABET Board of Directors removed the prohibition on March 29<sup>th</sup> by a vote of 28-12 (with two abstentions). The ABET Board of Directors and the ABET leadership are to be congratulated on their historic and future-focused decision.

What does the lifting of this prohibition mean to our long-term effort to implement the Body of Knowledge and ASCE Policy 465? It opens up multiple practical paths to the fulfillment and validation of the civil engineering Body of Knowledge. And, within the next decade, ASCE hopes that more universities (by their own choice) will have ABET-accredited practice-oriented master's degree that better prepare the engineering practitioners and leaders of tomorrow. For more on dual-level accreditation see [www.abet.org/dual.shtml](http://www.abet.org/dual.shtml) and/or [www.asce.org/raisethebar](http://www.asce.org/raisethebar).

### **Licensure**

In late 2007, the National Council of Examiners for Engineering & Surveying (NCEES) formed the Bachelor's +30 Task Force with the a primary goal of developing definitions for **approved credits** and **approved course providers** for inclusion in the NCEES Model Rules. Given the complexity of the assignment, it is anticipated that the Task Force will work on this issue for at least two years. For up-to-date information about this Task Force, please see [www.ncees.org/licensure/licensure\\_exchange/](http://www.ncees.org/licensure/licensure_exchange/).

### **Questions, Comments, or Suggestions**

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