

November 24, 2015

Charles Hickman Managing Director, Constituent Relations ABET 415 North Charles Street Baltimore, MD 21201

Dear Charles,

On October 30, you sent an ABET information request to the executive directors of ABET member societies, asking for input in four main issue areas, as ABET begins its strategic planning process. As an ABET member society, NSPE appreciates the opportunity to provide input on this important process. To facilitate submission of NSPE's comments, we have provided the input within the framework provided by ABET.

ABET Topic Area 1: Any anticipated changes in the expected knowledges, skills and abilities of new technical graduates entering your particular field(s).

NSPE's Response: In 2013, NSPE published the NSPE Engineering Body of Knowledge: http://www.nspe.org/sites/default/files/resources/nspe-body-of-knowledge.pdf. The EBOK identifies 30 core knowledge, skills and abilities (KSAs), or capabilities that an individual must know and possess to responsibly practice professional engineering. The EBOK was developed for several purposes, including its use to set accreditation criteria. NSPE encourages ABET to incorporate the EBOK into its KSAs.

NSPE also encourages ABET to take the role of technology into account when considering next steps. Technology has had a tremendous impact on engineering, as it has on all learned professions. The ability to work with virtual/remote teams has become an important skill. Furthermore, as emerging technologies continue to develop, individuals entering the profession should be familiar with these technologies, such as unmanned aerial vehicles, 3D printing, and advanced manufacturing. At the same time, academic programs must ensure that students are still adept at critical thinking and judgment.

ABET Topic Area 2: Any changes that you anticipate in the level of enrollment in academic programs serving your particular field(s) of interest.

NSPE's Response: NSPE is not a lead society for any programs, so this question is not applicable to NSPE.

ABET Topic Area 3: Any anticipated changes among academic programs in your field(s) of interest in relative demand for ABET accreditation.

NSPE's Response: The EAC degree continues to be a requisite standard for licensure. NSPE would like to underscore that accreditation is good for licensure but licensure is also good for accreditation. It's crucial that, in assessing its future, ABET and its member societies place a greater emphasis on the value of licensure in engineering.



ABET Topic Area 4: Any other information that, from a society perspective, you believe is pertinent to ABET planning.

NSPE's Response: NSPE appreciates that some of the Society's proposed recommendations to Criteria 3 and 5 were approved by ABET. NSPE sincerely hopes that ABET will reconsider the recommendations in full. NSPE understands that ABET has received some feedback suggesting that these criteria are difficult to meet. However, NSPE urges ABET to ensure that students are adequately prepared to enter the profession with the necessary skills, experience, and judgment. There is significant research and anecdotal evidence showing that the ability to work across disciplines is a critical skill for the professional practice of engineering. The new criteria take out multidisciplinary requirements, replacing them with a team-based approach that does not necessarily require training across disciplines or with diverse teams. We hope this change will be seriously reconsidered.

NSPE appreciates the opportunity to provide this comment. Please contact either me or NSPE staff to discuss this matter further. For immediate questions, please contact Arielle Eiser, NSPE senior manager of government relations, at aeiser@nspe.org.

Sincerely,

Timothy R. Austin, P.E., F.NSPE

President