

Preparing Engineering Professionals to Meet Industry Expectations

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ABSTRACT

At this session, the presenter will share information and findings of a study funded by NSF and conducted by ASEE to develop a clear understanding on the knowledge, skills and abilities (KSA) industry expects in the next generation engineering professionals. The study involved convening a group of 36 industry representative to identity key KSAs. Subsequent to that, in the next phase of the study a group of engineering students were invited to hear their perspectives on where and how these KSAs are being implemented in their academic, extra-curricular, social and family environments. In the final phase of this study a representative group of professional society members and faculty discussed and identified what role and effort they would play in implementing the changes suggested in the previous phases of the study.

Although the focus of this study was towards traditional four-year engineering programs and graduates, it is believed that findings and recommendation of this study are applicable to all engineering related educational programs and professionals. It would be opportune to replicate this study for academic programs such as engineering technology, computer science and engineering, and other technical professional degrees.