

# **MAPPING IT SKILLS TO ABET PROGRAM OUTCOMES**

**Cheryl L. Aasheim, Georgia Southern University, PO Box 8150,  
Statesboro, GA 30460-8150, [caasheim@georgiasouthern.edu](mailto:caasheim@georgiasouthern.edu)**

**Han Reichgelt, Southern Polytechnic State University, 1100 South  
Marrietta Parkway, Marietta, GA 30060-2896, [hreichge@spsu.edu](mailto:hreichge@spsu.edu)**

**Bart Longenecker, University of South Alabama, 307 University Blvd  
N., Mobile, AL 36688, [hlongenecker@usouthal.edu](mailto:hlongenecker@usouthal.edu)**

Many computing programs are interested in accreditation by the Computing Accreditation Commission of ABET, Inc (ABET CAC). The ABET accreditation guidelines require programs to formulate a set of program level outcomes that graduating seniors are supposed to have achieved, based on the needs of their constituencies, and to assess the extent to which graduating students have achieved these. The criteria provide some guidelines on the program level outcomes as they include a set of minimal outcomes on which program can build but from which they cannot subtract. This raises two questions, namely how does a program (i) assess the degree to which a student has achieved these outcomes and (2) determine the specific skills that an important constituency for any program, namely employers, seek in new hires that are relevant to these outcomes.

This paper describes a process used to develop a skills/knowledge survey instrument that IT programs can use to administer to companies that hire their graduates to assess the degree to which graduates have achieved the outcomes formulated by the program. In addition, this survey instrument can be administered to IT managers world-wide to determine which skills are important for new graduates to have. The process used to develop the set of skills/knowledge areas involves having faculty map a comprehensive list of skills/knowledge areas from previous research to the program outcomes set forth by ABET CAC. The final result will be a set of skills/knowledge areas that can be directly mapped to specific ABET CAC program outcomes. These skills/knowledge areas can be used in surveys for assessment purposed in departments seeking ABET CAC accreditation.