

# IEEE-USA and IEEE Computer Society Teaming Up to Develop Professional Exam for Software Engineering

WASHINGTON (10 September 2009) -- IEEE-USA and the IEEE Computer Society will be working together to develop an examination requested by state licensure boards for prospective use in licensing software engineering professionals.

The National Council of Examiners of Engineering and Surveying (NCEES) approved the development of a Principles and Practice of Engineering examination -- PE exam -- for software engineering in August. NCEES develops and administers the engineering and surveying competency exams used for licensing purposes in all U.S. jurisdictions.

NCEES had received requests for the software engineering exam from engineering licensure boards in 10 states, a requirement that must be met prior to beginning the development of a new exam. These boards contend that because software engineers play a significant and ever-increasing role in the design and operation of safety-critical systems, they should be regulated in the same manner as other engineering disciplines. Projects affecting public safety require licensed engineers to verify that the engineering was done properly.

Software engineers agree. Nearly two-thirds (62.9 percent) of respondents to a September 2008 survey of software engineers conducted by the Computer Society said that they should be licensed if they practice in areas affecting public health, safety and welfare. In addition, 61.5 percent supported development of a path to software engineering licensure through the NCEES Model Law.

The Computer Society has been laying the foundation for greater professionalism in the software engineering field with "The Guide to the Software Engineering Body of Knowledge," or SWEBOK (<http://www2.computer.org/portal/web/swebok>), a 2004 guide that established a baseline for knowledge in the field and is now being updated. Under the new ISO/IEC 24773 standard approved in October 2008, all software certifications must conform to SWEBOK. The Computer Society's two certifications -- the entry-level Certified Software Developer Associate credential and the mid-career Certified Software Developer Professional credential (<http://www2.computer.org/portal/web/getcertified>), are the first two certifications that conform to the new ISO/IEC 24773 standard.

NCEES expects the software engineering PE exam to take between 24 and 30 months to develop. The Computer Society, NCEES, the National Society of Professional Engineers, IEEE-USA and the Texas Board of Professional Engineers will share the cost of developing and maintaining the exam, and will provide subject matter experts to help develop it.