

Risk/Reliability Analysis Technology Infusion in Support of Engineering Education and the Workforce

Executive Summary

A series of courses will be created to cover core probabilistic risk assessment (PRA) techniques which is expected to increase and fuel rapid growth in various industries. Course titles include *Probabilistic Risk Assessment* and *Reliability-Based Systems Design*. The proposed courseware will be designed to be accessible to a broad engineering audience so that students will become familiar with statistical thinking, risk-informed decision making, and reliability/risk assessment technologies. Throughout the proposed courses, along with community outreach and a collaborative environment, students will gain a better understanding of core PRA technologies and their integration at the level of design and implementation of nuclear or other engineering systems. The courseware developed will be adapted for use at multiple educational levels.

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