

ABSTRACT

Nurturing Nuclear Professionals for the 21st Century

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At the dawn of a possible “nuclear renaissance”, Nuclear Engineering departments across the country are gearing up to meet the demands of utilities, reactor vendors, and regulatory agencies for a competently educated and motivated workforce. However, the more complex nuclear threat dimensions of the early 21st Century compel us to strive to educate nuclear professionals who are much more broadly aware of the nuclear security, as well as civilian, applications of their field of specialization. This also adds new imperatives for building a foundation for effective collaborations and partnerships at the technology/policy interface. Both technical and policy communities must evolve the education and development of their respective professional cadres in order to successfully meet the needs of global security, but also to ensure the sustainable future development of the nuclear energy alternative. The United States has a significant challenge to meet in reprising its world leadership position. Texas A&M’s Nuclear Security Science and Policy Institute (NSSPI) embodies many of the characteristics of a nuclear engineering educational program in a multi-disciplinary context, designed to meet the comprehensive professional challenges of the new century.