

Nuclear Security Science Graduate Certificate at Texas A&M University

Executive Summary

This project will consist of the development and implementation of a graduate-level certificate program in nuclear security science. This certificate will be available via distance learning and will provide education in the area of nuclear security for Masters-level graduate students and senior-level undergraduate students. The certificate will require satisfactory completion of four graduate-level courses: (1) an introductory course on nuclear security and nuclear nonproliferation, (2) a laboratory-based course on radiation detection and nuclear materials measurements, (3) a course on nuclear fuel cycles and nuclear material safeguards, and (4) a course on physical protection sciences. These four courses will build upon and expand course material (both full courses and small modules) currently available at Texas A&M University. Implementation of the courses via distance-learning will allow these courses to serve as a core component to a Masters of Science degree in nuclear engineering or health physics, enhancement of an undergraduate degree in nuclear engineering, or continuing education for current professionals in the nuclear industry. This proposed project is a unique opportunity to provide technical education in nuclear security to a nationwide clientele and to forward the state of nuclear security knowledge within the U.S.

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