Nuclear Engineering Undergraduate Laboratory Enhancement at the University of Maryland

Executive Summary

The University of Maryland proposes the development of a new laboratory course in radiation detection/measurement and reactor operations. This course will be required in the undergraduate Nuclear Commerce minor, and also available as an elective in the Master of Engineering – Nuclear Engineering (NE) degree program, which is offered to practicing professionals in the field. The course includes hands-on operation of modern radiation detection equipment as well as the opportunity for students to perform experiments using the University of Maryland Training Reactor. Additionally, course modules will be developed to allow distance education students to perform "virtual laboratory" experiments. This aspect of the course will be especially attractive to the Master of Engineering students, who are typically off campus. The benefit of this new course is a laboratory experience, either hands-on or virtual, which supplements theoretical material that students receive in other courses, which enhances the overall educational experience of students in the NE minor or the NE Master of Engineering program.

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