

Executive Summary:

The Pennsylvania State University's Department of Mechanical and Nuclear Engineering is committed to maintaining its rich history by strengthening its prominent nuclear engineering program. This proposal describes a plan to create four master's level graduate fellowships in nuclear engineering utilizing funds from the U.S. Nuclear Regulatory Commission's (NRC) Nuclear Education Program Fellowship Grant Program. Each fellowship will be for a two year period. Two fellowship awards will begin in Fall 2010 semester and continuing through the Spring 2012 semester. Two new fellowships will be awarded for the Fall 2012 semester and will continue through the Spring 2014 semester. Each Fellowship will provide a stipend of \$20,000 (approximately equivalent to our graduate research assistant stipend) and will provide the fellows with full tuition and fees coverage. Recipients will be selected based on prior academic performance as demonstrated in their application to graduate school. Consideration will also be given to minorities and women to encourage them to enter our nuclear engineering graduate program. The current nuclear engineering graduate admissions committee, the Professor-In-Charge of Mechanical and Nuclear Graduate Programs and the Program Chair of Nuclear Engineering will serve as the selection committee.

Penn State offers the Master of Science (thesis and non-thesis options), the Master of Engineering and the Doctor of Philosophy degrees in nuclear engineering. Our graduate program's size, coupled with our strong curriculum in nuclear power, means each year Penn State produces a large number of new engineers that enter the nuclear power workforce. These new Fellowships will attract academically strong students to enter graduate studies in nuclear engineering at Penn State. We are confident that the recipients of these Fellowships will become the future leaders in nuclear science and engineering.

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