

Executive Summary:

The Nuclear Engineering and Engineering Physics Program (NEEP) in the Engineering Physics (EP) Department at the University of Wisconsin-Madison proposes a Graduate Fellowship Program in Nuclear Engineering, in support of outstanding doctoral students interested in nuclear power systems engineering and a career and employment in nuclear power related fields. Recipients will serve six months for each year of academic support. Employment may be with the NRC, other Federal agencies, State agencies, Department of Energy laboratories, nuclear-related industry, or academia in the recipients' sponsored fields of study. The proposed program will be administered by Prof. Douglass Henderson, Professor of Nuclear Engineering and Director of the Graduate Engineering Research Scholars (GERS) program through the Engineering Physics department. Prof. Henderson is currently managing the NRC Scholarship and Fellowship Education Grant awards from 2008 and 2009, and the GERS program in the College of Engineering (since 1999). This proposed program will recruit and enroll top-notch, diverse students from all engineering disciplines, and award two doctoral fellowships to obtain a Ph.D. degree in Nuclear Engineering and Engineering Physics. The recruitment, selection and program administration of the students and their progress will use proven techniques from the GERS program and the EP department. The expected time duration to obtain a Ph.D. degree will be about 48 months, depending on the students' background, and the GERS and NEEP programs will supplement the fellowships during that time, as appropriate, to complete the degrees. The evaluation of program success will be accomplished in two ways. First, Prof. Henderson and the EP department chair will utilize Engineering Physics faculty to provide an ongoing review of each student's progress toward their degree, as well as interactions with the nuclear power industry during summer internships. Second, the program will be reviewed by GERS program faculty annually as part of the UW-Madison Graduate School requirements for program quality and outcome assessment. A concerted effort will be made to recruit traditionally under-represented students into the NE program from our traditional minority serving institution partners.

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