

**Executive Summary:**

This proposal requests funding to provide stipends, tuition, and fringe benefits to four graduate students who will be enrolled in the Master's with Nuclear Certificate and PhD with Nuclear Certificate programs of the Mechanical Engineering Department of Virginia Tech. Over the four years of the grant, three Master's students and one PhD student will be supported. The awardees will be named Virginia Tech Nuclear Engineering Fellows, and, from matching funds provided to this grant by the Department, in addition to receiving a stipend and having their tuition paid, each awardee will have access to funds which will enable the student to travel to at least one technical meeting per year and will receive a state-of-the art tablet PC at the start of his/her studies. The programs require taking a series of nuclear engineering courses that are coordinated with the normal coursework and research required by the regular Master's and PhD degree candidates. The University's and Department's recruitment and mentoring programs, including programs for under-represented groups, the Department's nuclear research activities, and its connections with the nuclear industries in Virginia and National Labs will ensure that the project's goal of attracting, preparing, and retaining individuals in nuclear careers will be fully met.