FY2021 Scholarship Awards

Academic Institution	Amount Awarded	Title of Proposal
Thomas Edison State University	$199,523.00	Thomas Edison State University Scholarship Program for Qualified Students Matriculated in Nuclear Energy Engineering, Electronics Systems Engineering Technology, Radiation Protection, Cyber Security, Technical and Information Technology Degree Programs
Louisiana State University	$199,998.00	LSU Nuclear Multidisciplinary Scholarship Program
Western Carolina University	$200,000.00	Undergraduate Research Learning Community Fostering Nuclear Workforce Development
Idaho State University	$192,390.00	Idaho State University and NRC Nuclear Science Scholarship Program

Thomas Edison State University Scholarship Program for Qualified Students Matriculated in Nuclear Energy Engineering, Electronics Systems Engineering Technology, Radiation Protection, Cyber Security, Technical and Information Technology Degree Programs

Executive Summary:

Having successfully implemented and managed three NRC Scholarship grants by awarding 120+ scholarships, Thomas Edison State University now seeks funding from the NRC to administer another two-year scholarship program that will award 40+ $2,000 - $10,000 scholarships based on financial need and academic performance, to qualified University students seeking career required technical baccalaureate degrees and matriculated in Nuclear Energy Engineering, Electronics Systems Engineering Technology, Radiation Protection, Cyber Security, Technical and Information Technology Degree Programs. The scholarships will support qualified, high-potential students who are active-duty Navy Nuclear and other Military Service members, veterans; graduates of the Nuclear Uniform Curriculum Program (NUCP) from 28 active Community College partners; and graduates of the University's non-ABET accredited Nuclear Engineering Technology program who now wish to upgrade their degree status in order to graduate from the University's ABET-accredited Nuclear Energy Engineering Technology degree program. The University's transfer policy and acceptance of nuclear industry/military assessed training enables many students to transfer 60-80 credits toward a baccalaureate degree. In addition, the University's students usually work in nuclear energy, such as military, commercial nuclear facilities, DOE national laboratories, or are attending community college programs linked to the industry by NUCP or RCNET and are seeking career required technical baccalaureate degrees. The objective of the scholarship program is to increase student retention, help students graduate in a timely manner, and enter or experience professional growth in the nuclear safety and security sector. The proposed scholarship program and the University's curriculum meet all the NRC's areas of interest and outlined challenges to enhance the NRC's transition as a modern, risk-informed regulator.

Principal Investigator: Richard Coe, rcoe@tesu.edu

LSU Nuclear Multidisciplinary Scholarship Program

Executive Summary:

We propose a nuclear multidisciplinary scholarship program to support the development of a nuclear workforce capable of supporting the design, operation, regulation, safety, security, environmental, and economical aspects of nuclear facilities, as well as the safe handling of nuclear materials. Students will take nuclear and nuclear-related courses in the fields of Nuclear Power Engineering, Nuclear Science, Health Physics, Environmental Sciences, Energy Economics, and Energy Policy, which cover the aforementioned operational topics. The PI/co-PIs of the proposed program will provide the students with mentorship across various academic and cultural backgrounds to support all students through the successfully completion of the coursework. In contrast to conventional nuclear scholarship grants, the students will not only be exposed to the technical aspects of nuclear fields, but also exposed to nuclear energy's role in the global environmental issues and broader energy economy. Internship and research participation opportunities will be optionally offered for those who need internship and research experience to better prepare for advanced nuclear careers including graduate studies. Various recruiting and marketing strategies will be used to create a large and diverse applicant pool. Success will yield several benefits to both LSU and the nuclear industry by: (i) growing qualified and well-rounded nuclear workforces, (ii) enhancing the diversity of the local nuclear industry by increasing the number of female and minority nuclear workers, as well as that of nuclear workforces with diverse academic backgrounds, (iii) expanding the national and regional applicant pool of graduate studies in nuclear-relevant fields, and (iv) fortifying LSU's continuous effort to build strong national-level nuclear science and engineering programs. With the ratification of the Paris Accord, global corporations implementing Environmental and Social Governance (ESG) goals, and governments across the world implementing policies aimed at decarbonization, the need for a qualified nuclear workforce to support a low- and zero-carbon source of energy is as important as ever.

Principal Investigator: Yong-Ha Kim, yonghakim1@lsu.edu

Undergraduate Research Learning Community Fostering Nuclear Workforce Development

Executive Summary:

Western Carolina University (WCU) proposes this two-year program to fund six scholarships per semester for specially selected, highly motivated, full time junior, senior and/or sophomore engineering students specializing in electric power, mechanical and electrical disciplines, jointly called EPME, students who are pursuing an educational emphasis in nuclear power and who desire to contribute to the nuclear-related national workforce. The main objective is to use these scholarships to recruit and retain students into a learning community who will sustain our existing program for serving nuclear-related industry and academia. This will be achieved by leveraging junior-level undergraduate research (UgR) and a year-long senior capstone project. Our secondary objective is to increase the diversity, quality and quantity of students seeking these engineering degrees. This undergraduate research program will, by design, benefit WCU's ongoing programs of recruiting, retaining and educating students, who include traditionally underrepresented groups (including but not limited to minorities, women, economically disadvantaged, first generation, and persons with disabilities), into the nuclear sector. A fraction of the proposal also covers support for faculty and costs to cover administration, mentoring, recruiting, marketing, and curriculum related activities.

Principal Investigator: H. B. Karayaka, hbkarayaka@wcu.edu

Idaho State University and NRC Nuclear Science Scholarship Program

Executive Summary:

The objective of the Idaho State University (ISU) Nuclear Education Scholarship Program is to provide financial support and professional development opportunities to undergraduate students in nuclear engineering and health physics ABET-accredited BS degree programs. ISU is requesting from NRC funds for eight two-year scholarships and to support the professional development of the scholars via opportunities including technical tours, participation in professional technical conferences, and training as an operator for ISU's nuclear reactor. In addition to the obvious financial benefits experienced by the scholars themselves, this scholarship program will benefit the broad nuclear industry by contributing to the education and development of successful graduates who enter the nuclear work force. Previous NRC scholarship awards to Idaho State have been successfully administered and have played a significant role in attracting and retaining students in our nuclear science and engineering degree programs.

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