

## 2017 Scholarship Grant Awards

Institution	Award Amount	Title
University of Tennessee	\$200,000	Scholarship Program for Recruitment, Retention, and Success in Nuclear Engineering Education at the University of Tennessee
University of Missouri S&T	\$200,000	Undergraduate Scholarships in Nuclear Engineering at Missouri S&T (2017-2019)
University of California Berkeley	\$200,000	Nuclear Engineer Scholarships at the University of California, Berkeley supporting expansion and diversity of the undergraduate program
Virginia Commonwealth University	\$197,865	Expansion of the VCU Nuclear Engineering Undergraduate Scholarship Program
University of Rhode Island	\$126,880	NEEPRI-NRC Scholarships
Georgia Institute of Technology	\$200,000	Nuclear and Radiological Engineering Scholarship Program at the Georgia Institute of Technology
Idaho State University	\$177,383	Idaho State University Nuclear Education Scholarship Program A Proposal to the U.S. Nuclear Regulatory Commission
Thomas Edison State University	\$197,900	Thomas Edison State University Scholarship Program for Qualified Students Matriculated in Nuclear Energy Engineering, Electronics Systems Engineering Technology, Radiation Protection, and Cyber Security Degree Programs including MS-Nuclear Energy Technology Management
Rensselaer Polytechnic Institute	\$200,000	Enabling Strong Growth of the Nuclear Engineering Undergraduate Scholarship Program at Rensselaer Polytechnic Institute
University of Illinois	\$200,000	University of Illinois at Urbana-Champaign Nuclear Engineering Education Scholarship Program
Kennesaw State University	\$199,736	Kennesaw State University Nuclear Engineering Scholarships Program
City University of New York (CUNY)	\$174,372	Nuclear Energy Undergraduate Scholarship Program at City College of New York

## **Scholarship Program for Recruitment, Retention, and Success in Nuclear Engineering Education at the University of Tennessee**

### **Executive Summary:**

Through this solicitation, the Department of Nuclear Engineering at the University of Tennessee-Knoxville (UTK) seeks to award the equivalent of at least (35) scholarship units directly targeted to increase its program's excellence while also improving student retention and success. A specific goal of this scholarship program is to promote the enrollment of high-potential US undergraduate students from group of applicants resulting from recruiting those traditionally underrepresented in the nuclear engineering (NE) field; including African-American, Hispanic/Latino, and female domestic students. Likewise, these scholarships will also be employed to reward high-performing students at every level during their undergraduate curriculum, regardless of their ethnic or gender background, but with some consideration given to assist students with a strong financial need who meet the qualifications and expectations; therefore, improving retention and student success.

**Principal Investigator:** J. Wesley Hines, [jhines2@utk.edu](mailto:jhines2@utk.edu)

## **Undergraduate Scholarships in Nuclear Engineering at Missouri S&T (2017-2019)**

### **Executive Summary:**

Missouri University of Science & Technology (Missouri S&T) is pleased to submit this proposal for scholarships for undergraduate students pursuing B.S. degrees in Nuclear Engineering. The NRC funding will provide undergraduate scholarships to defray the cost of fees for 26 full-time students each year for two years. Twenty-six (26) high quality students with a minimum GPA of 3.0/4.0 will be selected from a pool of 81 students who are expected to be in the next year's Juniors and Seniors. The selection criteria will primarily be academic merit (GPA) with consideration given to financial need. The NRC scholarship grant will assist in providing a significant fraction (~4%) of the nation's approximately 650 expected graduates with a B.S. degree in Nuclear Engineering each year who would be capable of supporting the design, construction, operation and regulation of nuclear facilities and the safe handling of nuclear materials, and benefit nuclear safety and security sector.

**Principal Investigator:** Hyoung Lee, [leehk@mst.edu](mailto:leehk@mst.edu)

## **Nuclear Engineer Scholarships at the University of California, Berkeley supporting expansion and diversity of the undergraduate program**

### **Executive Summary:**

The Nuclear Engineering Department at the University of California, Berkeley (UCB-NE) is the only nuclear engineering department in California. Students graduating from UCB-NE work at national labs all over the country, in the broader nuclear industry (power, detection, policy, etc.), as well as, in newly rising startup companies. UCB-NE is planning to double the number of students enrolled in the undergraduate program within the next few years. In order to make this sustainable we need to attract the brightest, most capable, and diverse students into our program. Furthermore, the rather high tuitions in combination with the high cost of living in the bay area, makes more challenging for low income, first time in college, and underrepresented minority students to enroll in our Institution, thus, Nuclear Engineering program; therefore, we propose to establish the Undergraduate Scholarship Program in Nuclear Engineering in support of outstanding undergraduates interested in nuclear engineering and a career in the nuclear power industry. The proposed program would recruit and enroll top-performing, diverse undergraduate students as they enter into the nuclear engineering bachelor's degree program.

**Principal Investigator:** Peter Hosemann, [peterh@berkeley.edu](mailto:peterh@berkeley.edu)

## **Expansion of the VCU Nuclear Engineering Undergraduate Scholarship Program**

### **Executive Summary:**

The primary objective of VCU's Nuclear Engineering Undergraduate Scholarship Program is to attract and retain talented students into VCU's unique ABET accredited Nuclear Engineering Major Concentration Option in the Mechanical Engineering BS program, and to facilitate their future success in a career in the nuclear industry. In particular, the scholarships will provide additional incentive for students to choose and remain in the nuclear engineering option. Furthermore, given VCU's student demographics and its situation as an urban university, the program is expected to attract a higher than average population of traditionally underrepresented minorities and female students. At the same time, due to the large presence of nuclear industry stakeholders in the proximity of VCU and the strong tradition of collaboration between VCU's nuclear program and the local nuclear companies, these stakeholders are expected to be able to provide relevant internships or co-ops, which are required for the BS degree, and permanent employment opportunities in the nuclear industry to the scholars enrolled in the program.

**Principal Investigator:** John E. Speich, [jespeich@vcu.edu](mailto:jespeich@vcu.edu)

## **NEEPRI-NRC Scholarships**

### **Executive Summary:**

The Nuclear Engineering Education Program for Rhode Island (NEEPRI)-NRC Scholarships program will enable the Nuclear Engineering minor program at the University of Rhode Island to offer ten scholarships per semester to students enrolled in the nuclear engineering minor. The nuclear engineering minor consists of an additional 18 semester credits (six courses) in nuclear engineering courses added to requirements for mechanical, chemical, electrical, industrial, civil, or ocean engineering BS degrees which are all ABET accredited. The proposed scholarship program leverages the existing NRC education grant funded program, faculty, staff, and facilities to recruit and encourage a much wider population of students to participate in the nuclear option under NEEPRI. The scholarships will be offered to students that meet the eligibility requirements as established by the NRC and the NEEPRI program. The program will implement a comprehensive and inclusive recruiting and selection process. Comprehensive formative and summative evaluation plans have been formulated to assess the effectiveness of the scholarship program. The program will be supported by the Rhode Island Nuclear Science Center by providing access to the classroom, laboratory, and reactor facilities as well as staff support.

**Principal Investigator:** Bahram Nassersharif, [bn@uri.edu](mailto:bn@uri.edu)

## **Nuclear and Radiological Engineering Scholarship Program at the Georgia Institute of Technology**

### **Executive Summary:**

The Nuclear and Radiological Engineering (NRE) program in the Woodruff School at Georgia Tech is proposing to create a NRC scholarship program in nuclear and radiological engineering. The proposed scholarship program will provide 10 two-year scholarships for highly qualified students at Georgia Tech. The proposed scholarships will cover up to the cost of tuition, mandatory student fees, books and supplies as determined by the Georgia Tech Bursars Office. The scholarships will be used to retain top NRE students and to recruit highly qualified students into the Nuclear and Radiological Engineering Program.

**Principal Investigator:** Nolan E. Hertel, [nolan.hertel@me.gatech.edu](mailto:nolan.hertel@me.gatech.edu)

## **Idaho State University Nuclear Education Scholarship Program**

### **Executive Summary:**

Idaho State University (ISU) is requesting from NRC funds for eight two-year scholarships for undergraduate students in nuclear engineering (6) and health physics (2). Funds are also requested to support the professional development of the scholars via a technical tour and participation in a professional technical conference. Previous NRC program scholarship funds have substantially contributed to the growth and maintenance of ISU's Nuclear Engineering BS program and indirectly to re-invigorating its long-standing graduate program in nuclear science and engineering.

The ISU Nuclear Engineering and Health Physics Programs are well suited to successfully recruit, select and mentor students that will receive NRC scholarships because of the close ties to the INL and the participation in the Center for Advanced Energy Studies (CAES). Through the Scholarship Program, a selection and management committee will assure that only the most qualified students will receive a scholarship award. The committee will also track the progress of the scholars both in school and after. The ISU administration and the state of Idaho are committed to effectively support nuclear science and engineering education in the state of Idaho. This has been evidenced by state funding to CAES to supplement faculty at the three universities. Specifically at ISU, five new faculty ISU/INL Joint Appointment positions were created in 2015, two new faculty members have been hired, and additional offers are being tendered. A strong partnership with Idaho National Laboratory (INL) has resulted in the development of programs specifically designed to educate students to serve in the nuclear energy profession. Ultimately, ISU believes that this scholarship program will contribute to the development of successful graduates that will become an integral part of the nuclear workforce.

**Principal Investigator:** Mary Lou Dunzik-Gougar, [mldgil@isu.edu](mailto:mldgil@isu.edu)

**Thomas Edison State University Scholarship Program for Qualified Students  
Matriculated in Nuclear Energy Engineering, Electronics Systems Engineering  
Technology, Radiation Protection, and Cyber Security Degree Programs including MS-  
Nuclear Energy Technology Management**

**Executive Summary:**

Thomas Edison State University (University) seeks funding from the NRC to establish and administer a two-year scholarship program that will award 40 scholarships ranging 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, Information Technology, and Cyber Security Degree Programs including MS-Nuclear Energy Technology Management. 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 30 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.

**Principal Investigator:** Richard Coe, [rcoe@tesu.edu](mailto:rcoe@tesu.edu)

## **Enabling Strong Growth of the Nuclear Engineering Undergraduate Scholarship Program at Rensselaer Polytechnic Institute**

### **Executive Summary:**

The project will directly and greatly contribute to developing and maintaining the nuclear workforce by promoting two important goals. Firstly, it places emphasis on improving the interest and engineering thinking of students through innovative nuclear-related education and research. Secondly, it is committed to creating and supporting a community diverse in many ways: diversity students and students from various and different backgrounds. The Nuclear Engineering program and Rensselaer Polytechnic Institute are committed to utilizing this opportunity to power up the next generation nuclear workforce.

**Principal Investigator:** Li (Emily) Liu, [liue@rpi.edu](mailto:liue@rpi.edu)

## **University of Illinois at Urbana-Champaign Nuclear Engineering Education Scholarship Program**

### **Executive Summary:**

The objectives of this program are to attract and retain superior undergraduate students to educate in nuclear engineering. This will be accomplished with financial resources from the NRC and academic and administrative resources from the Department of Nuclear, Plasma and Radiological Engineering (NPRE) at the University of Illinois at Urbana-Champaign (UIUC). This program will ensure that the best and brightest students will join the nuclear workforce following a very strong, competitive education in nuclear engineering. The specific goals are to support at least ten (10) undergraduate students each year under this program.

**Principal Investigator:** James Stubbins, [jstubbin@illinois.edu](mailto:jstubbin@illinois.edu)

## **Kennesaw State University Nuclear Engineering Scholarships Program**

### **Executive Summary:**

Kennesaw State University (KSU) is applying for the NRC scholarship grant in order to award 12 undergraduate student scholarships per year for a total of 24 scholarships over the two year grant period. The scholarship program is to attract top quality and gifted engineering students to enroll in the Nuclear Engineering minor program. The scholarships will be awarded based on applicants who have enrolled in Nuclear Engineering Minor program and meet the NRC requirements. The degree track program in nuclear engineering at KSU is specifically designed to educate and train a workforce that is capable of supporting the design, construction, operation, and regulation of nuclear facilities and safe handling of nuclear materials. In the recent past, KSU has received several educational grants from the US NRC in support of the development of an undergraduate nuclear engineering program. Since the start of the program in 2011, the number of students enrolling in the program on an annual basis has increased steadily by more than seven fold; from 11 to 78. The recent merger of the nuclear program with the Mechanical Engineering Department with over 1200 students will result in a substantial increase in the student flow into the nuclear minor program. It is anticipated that in two years the nuclear program on an annual basis will have about 200 enrolled students.

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## **Nuclear Energy Undergraduate Scholarship Program at City College of New York**

### **Executive Summary:**

Financial support is requested from the NRC Scholarship and Fellowship Education Grant program for the “**Nuclear Energy Undergraduate Scholarship Program**” in the Grove School of Engineering at City College of New York (CCNY). Ten scholarships will be awarded to 10 qualified undergraduate students in each semester over two years. Under the **Nuclear Engineering Concentration** launched in 2010, a total of 62 undergraduate students have received between one and three scholarships from two NRC Scholarship grants in 2010-16. As CCNY is a Minority and Hispanic Serving Institution, the nuclear education and research program developed and NRC scholarships have provided minority students with an opportunity to gain the knowledge, experience and skills needed to enter professional careers in the nuclear industry. A major fraction (70%) of the new NRC scholarship grant will be used as scholarships to attract a significant number of students in Mechanical, Chemical and Environmental Engineering majors to study nuclear engineering. Additionally, 10% of the grant will be used to enhance the scholarship program by inviting guest speakers from the nuclear industry, organizing field trips to nuclear power plants and nuclear laboratories such as the Brookhaven National Laboratory, and sending the scholarship students to participate in ANS Student Conferences.

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