

## STEM RESOURCES AVAILABLE

Essex County College · Fairleigh Dickinson University · Kean University · Montclair University · New Jersey Institute of Technology · Rutgers University, New Brunswick · Rutgers University, Newark · Williams Paterson University

### ESSEX COUNTY COLLEGE

- “The Essex County **College Chemical Society** provides a dynamic and welcoming social environment as a professional organization and avenue for outreach events that educate and excite the community about chemical science.”
- Click the link below to learn more.

<https://www.essex.edu/studentlife/co/list/>

- “The **Electrical Innovations Club** provides numerous professional development opportunities by exposing students to projects that will be built using electronic prototyping platforms to create interactive electronic objects.”
- Click the link below to learn more.

<https://www.essex.edu/studentlife/co/list/>

### FAIRLEIGH DICKINSON UNIVERSITY

- “The FDU **American Society of Civil Engineers (ASCE) Student Chapter** has the mission of promoting professional development through community outreach, teamwork, social interaction, and professional interaction. The FDU Student Chapter of ASCE offers many activities to enhance the engineering education experience, including guest speakers, bi-weekly meetings, annual competitions, and social activities. We also have two competitive teams, the concrete canoe team and the steel bridge team. These teams provide excellent opportunities to apply the engineering concepts learned in the classroom to hands on projects. Our activities are designed to help our students explore and better understand civil engineering, provide networking opportunities with engineering professionals, and to have fun while attending school.”
- Click the link below to learn more.

<https://www.fdu.edu/academics/colleges-schools/gildart-haase/outcomes-2/>

- “Fairleigh Dickinson’s **School of Computer Sciences and Engineering** has received multi-sponsor grants to fund this exciting program. The TEOP is provided at no cost, thanks to the generosity of the sponsors, including The Machuga Foundation, Greg Olsen (entrepreneur, astronaut), General Electric (GE Equipment Services), TOYOTA, BAE, UPS, BD and Public Service Enterprise Group (PSEG).”
- Click the link below to learn more.

<https://www.fdu.edu/academics/colleges-schools/gildart-haase/outcomes-2/outreach-programs/>

- Click the link below to learn about STEM-related **research opportunities** at Fairleigh Dickinson University.

<https://www.fdu.edu/academics/research/>

- Click the link below to learn about **academic and professional organizations** available at Fairleigh Dickinson University including, Biology Club, Computing/MIS Club, and more.

<https://www.fdu.edu/campuses/florham-campus/campus-life/student-clubs-organizations/academic-and-professional-organizations/>

### **KEAN UNIVERSITY**

- Click the link below to learn about **academic and professional organizations** available at Kean University including American Cancer Society on Campus, American Chemical Society, American Medical Women’s Association, Association for Computing Machinery, Biotechnology Club, Earth Science Club, Women in Cybersecurity, and more.
- These organizations offer a range of mentorship, networking, research, and even funding opportunities. Find one that is right for you.

<https://kean.campuslabs.com/engage/organizations?categories=550>

### **MONTCLAIR UNIVERSITY**

- “**Biology Club** helps students become more active in the science community at Montclair State. The skills gained in the club will create volunteer opportunities and teach lessons to students in a way that the classroom may not.”

<https://orgsync.com/89755/chapter>

- “**Data Driven Student Alliance (DDSA)** is led by a core group of undergraduate students who are dedicated to education and professional development on analytics and big data. The DDSA collaborates with the IT/Business Analytics department at MSU and SBUS faculty, and industry partners.”

<https://orgsync.com/154331/chapter>

- “At the **Environmental Club**, we strive to cultivate a space where everyone feels welcome, heard and included regardless of their background, major, or their level of knowledge on environmentalism and sustainability topics.”

<https://orgsync.com/103684/chapter>

- Click the link below to learn about **academic advising for the College of Science and Mathematics** available at Montclair University.

<https://www.montclair.edu/csam/student-success-center/academic-advising/>

- Click the link below to learn about the **Math Active Learning Center** available at Montclair University.

<https://www.montclair.edu/math-active-learning/>

- “The **New Jersey Center for Water Science and Technology (NJCWST)** is dedicated to the study of water quality, pollution and technological solutions. Our dedicated team researches, monitors, and aids in the management of lakes, rivers, reservoirs, and other waterbodies throughout the state of New Jersey. We provide technical assistance to conservation groups, water managers, and municipalities in a continuous effort to keep our water safe for drinking and recreation, to ensure that our seafood is safe for human consumption, and to preserve native ecosystems and precious water resources.”
- Click the link below to learn more.

<https://www.montclair.edu/water-science/>

- “The **Bristol Myers Squibb Center for Science Teaching and Learning Center** is dedicated to professional development for teachers and strategic planning for school district administrators. A generous donation from the Bristol-Myers Squibb Corporate Philanthropy program made it possible to build the facility and furnish it with state-of-the-art equipment and materials for professional development in mathematics and science.”
- Click the link below to learn more.

<https://www.montclair.edu/prism/bristol-myers-squibb-center-for-science-teaching-and-learning/>

## **NEW JERSEY INSTITUTE OF TECHNOLOGY**

- “**Undergraduate Research and Innovation (URI)** programs give students a chance to flourish in various ways. Students learn how to do research, but also how to pick projects that will improve a societal problem and enhance the quality of life for a community of people. These programs are designed to help students develop the vision to contend with global challenges.”

<https://centers.njit.edu/uri/>

- Follow the link below to learn about **student organizations** at NJIT such as the American Chemical Society.
- These organizations provide opportunities for mentorship, networking, and much more.

<https://njit.campuslabs.com/engage/organizations>

- Follow the link below to learn about **funding opportunities** at NJIT.

<https://research.njit.edu/funding-opportunities>

- Follow the link below to learn about **internships** at NJIT.

<https://www.njit.edu/academics/internships-co-ops>

- “**NJIT's Makerspace** creates the ecosystem for students to participate in the innovation, invention, and product realization processes that American industry depends on, as well as assign space for public and private partnerships to emerge--offering access to an array of state-of-the-art equipment for design, prototyping, testing, and research.”

<https://www.njitmakerspace.com/>

## **RUTGERS UNIVERSITY, NEW BRUNSWICK**

- “**CMSCE** promotes STEM education research at Rutgers University. We encourage collaboration between faculty in STEM disciplines, RWJMS, the schools of Education and Applied Psychology. Our goal is to extend the reach of our high-quality research by building on existing projects and leading new initiatives”
- All students eligible.
- Click the link below to learn more.

<https://stemnet.rutgers.edu/>

- “The overarching goal of the **STEM for Education Scholarship Program (STEM - ESP)** at Rutgers University is to recruit, retain, and graduate a community of engineers and physicists who are dedicated to teaching physics, mathematics and engineering in high-needs, K-12 school districts. With a theme of “STEM for Humanity”, the program enhances Rutgers existing engineering and physics undergraduate program by intertwining seminars that illustrate the great impact science, technology, engineering and mathematics (STEM) has on society.”
- Click the link below to learn more.

<https://soe.rutgers.edu/stem-education-scholarship-program>

- “The **James J. Slade Scholars Program** is a selective, research-focused option open to students in the third year who have maintained a 3.2 university cumulative grade-point average. The Slade Scholars Program honors long-time School of Engineering faculty member James J. Slade: a noted researcher, mathematician, and professor for 36 years. His commitment to teaching, scholarly excellence, and impact on students was legendary and continues to resonate through this prestigious research program.”

<https://soe.rutgers.edu/slade>

- “**TARGET** is a summer program designed for middle school and high school students to increase awareness and familiarize them with career opportunities within engineering. The objective of the program is to eradicate the negative stereotypes commonly associated with women’s ability to pursue careers in math and science related fields. Program mentors and faculty members facilitate workshops, hands-on activities, labs and projects for the duration of the program in hopes of creating an insightful, exciting opportunity for participants to learn more about the many different engineering disciplines. TARGET is available to all qualifying students regardless of their sex, gender or gender identity.”

<https://soe.rutgers.edu/target>

- “**The Rutgers Engineering Honors Council (REHC)** is composed of Honors Academy and Honors College representatives and honor society presidents to provide a uniform voice to all sectors of the honors community in the School of Engineering. Honor students find unique opportunities to be mentored by industry professionals, engage with successful alumni, and exchange talents with their peers.”

<https://soe.rutgers.edu/honors-council>

- “**Rutgers SWE** is a community that strives to consistently promote diversity in an inclusive environment, enabling its members to achieve their full potentials in careers as engineers and leaders, while upholding our core pillars of professional development, community, outreach, and mentorship to ensure the respect of everyone’s individual, personal, and career choices.”

<http://swe.rutgers.edu/>

- “**RISE at Rutgers** is a nationally acclaimed summer research program for outstanding undergraduates from diverse backgrounds. Scholars participate in 10 weeks of cutting-edge research in the biological, physical, and social/ behavioral sciences, math, engineering, and exciting interdisciplinary areas under the guidance of carefully matched faculty mentors. A comprehensive professional development component, including GRE preparation, complements the research.”

<https://www.rise.rutgers.edu/>

- “The **SUPER-Grad (Summer Undergraduate Pipeline to Excellence at Rutgers Graduate)** program awards competitive first year graduate fellowships to outstanding alumni of our summer undergraduate research programs. Alumni of the RISE at Rutgers program, partner REU sites, and other summer programs are automatically eligible if they are admitted to a Rutgers doctoral program.”

<https://gsnb.rutgers.edu/supergrad>

- **“NRMN-CAN Mission:** To provide professional development, grant writing, and mentor training to Early Stage Investigators, especially those from underrepresented populations in the biomedical workforce, and to assist mentors in developing core competencies for mentor facilitating and grant writing coaching.”

<https://nrmnet.net/nrmn-cic-academic-network-nrmn-can/>

- **“Scholarships and Resources for Students with Disabilities.** If you’re a student with a disability and you’re looking for some extra help paying for college or want to take advantage of the many academic and career support programs available, you’ve come to the right place. This guide highlights 40 scholarships to help you reach your academic and career goals, including paths focused on public service such as teaching, law, nursing, and firefighting. Read on to find the funding sources that fit your individual goals and learn about professional resources, advocacy organizations, and opportunities for networking.”

<https://www.publicservicedegrees.org/financial-aid/students-with-disabilities-scholarships-resources/>

- **“Women in Engineering ProActive Network WEPAN** was founded as non-profit educational organization in 1990. It is the nation’s first network dedicated to advancing cultures of inclusion and diversity in engineering higher education and workplaces. WEPAN connects people, research and practice. It offers power initiatives, projects and professional development that equips advocates with the tools to create sustainable, systems-level changes that allow ALL in engineering to thrive.”

<https://www.wepan.org/>

- “Established in 1986, the **Douglass Project for Rutgers Women in STEM** provides support and encouragement for undergraduate women pursuing degrees and careers in science, technology, engineering, and mathematics. The unit’s ultimate goal is to increase the participation of Rutgers women in STEM. The Douglass Project provides women in the STEM-related fields with personal, professional, and leadership development opportunities and provides support systems that encourage women to recognize their abilities, attain their educational goals, and ultimately pursue careers in the STEM fields.”

<https://douglass.rutgers.edu/life-at-douglass/douglass-project-women-stem>

- **Internship and Full-Time Position Opportunities for STEM Vets**
- “Deloitte is a multinational professional services network, and is looking to recruit highly motivated students in STEM for their Federal Technology Consulting Practice. We will

be recruiting on-campus for full-time and internship positions this fall from September 9<sup>th</sup>-27<sup>th</sup>.”

<https://veterans.rutgers.edu/node/152>

## **RUTGERS UNIVERSITY, NEWARK**

- **“CoDas Lab.** Are you interested in getting involved with research? Our lab is currently seeking undergraduate-, post-baccalaureate- and masters-level Research Assistants for projects that span mathematics, computer science, and cognitive sciences as well as education and development.”

<http://shaftolab.com/info.html>

- **“Tech Talk.** Need some tech guidance? Join SASN staff to learn how to use RU-N software such as Degree Navigator, Course Schedule Planner, Webreg, & more! This is open to new students as well as current students who may need a refresher.”

<https://sasn.rutgers.edu/news-events/events/tech-talk>

- **“Newark STEAM Coalition.** Newark is globally recognized as a STEAM hub of creativity, innovation, and inclusiveness creating pathways and preparing all learners for college and/or careers, attracting and inventing new business, and enabling an opportunity for prosperity for all in our community.”

<https://stemecosystems.org/ecosystem/newark-steam-coalition/>

- **“The Health Professions Learning Community** is designed for first-year students who have an interest in one of the health fields (i.e. medicine, dentistry, and optometry). The learning community assists students in their transition from high school to college by enabling them to share common first-year courses such as English Composition and General Chemistry, while receiving academic and personal advisement that guides students interested in health professions. Additionally, extra-curricular experiences specific to the health profession interest are provided.
- Click the link below for more information.

<https://www.newark.rutgers.edu/learning-communities>

- **STEM Research**
- “Top-level researchers in RU-N academic departments not only undertake groundbreaking studies, but also offer many valuable opportunities for both undergraduate

and graduate students to participate first-hand in exciting discoveries. Go to our **Areas of Study/Departments** to learn more about our studies in anthropology, biology, chemistry, environmental geology and science, geoscience engineering, neuroscience, nursing, physics, psychology, technology and management, and zoology.”

<https://www.newark.rutgers.edu/science-technology-health>

- **Neuroscience Research**
- “For more information please visit the **Center for Molecular and Behavioral Neuroscience**, the **Department of Psychology**, and the **Department of Biological Sciences**.”

<https://www.newark.rutgers.edu/inside-brain>

### **WILLIAM PATERSON UNIVERSITY**

- Follow the link below to learn about **student organizations** at WPU such as the Audio Engineering Society, Bioethics Club, Chemistry Club, Computer Science Society, and many more.
- These organizations provide opportunities for mentorship, networking, and much more.

<https://wpunj.campuslabs.com/engage/organizations>

- **The Robert Noyce Teacher Scholarship Program** seeks to encourage talented undergraduate science and mathematics majors *to become K-12 mathematics and science teachers*. The program provides funds to support scholarships, stipends, mentoring and networking opportunities for undergraduate science, technology, engineering and math (STEM) majors who commit to teaching in high-need K-12 school districts.

<https://www.wpunj.edu/cosh/student-opportunities.html>

- **Peer tutoring** is available through the **Science Enrichment Center**. Nursing has a **Nursing Student Success Plan**. Also see the Universty's **Academic Support Center**.

<https://www.wpunj.edu/cosh/student-opportunities.html>

- **Summer Research Stipends**
- Available through the **Center for Research** and through individual faculty grant awards.

<https://www.wpunj.edu/cosh/student-opportunities.html>



- **Undergraduate Student Research Symposium** » sponsored by the Biology & Chemistry Departments as a regional conference where students can share their research results.
- Click the link below for more information.

<https://www.wpunj.edu/cosh/student-opportunities.html>

- **Student Travel.** Available for academic projects on a selective basis.
- Click the link below for more information.

<https://www.wpunj.edu/cosh/student-opportunities.html>

- **Rosetta Ford Sands Student Emergency Revolving Loan Fund.** This restricted loan fund is established to provide a source of money from which students may make interest-free emergency short-term (one or two semester) loans.

<https://www.wpunj.edu/cosh/student-opportunities.html>

- Follow the link below to learn about **scholarships, research, awards, and off-campus experiences for biology.**

<https://www.wpunj.edu/cosh/departments/biology/student.html>