THE RUTGERS SCHOOL OF ENGINEERING (SOE) is among the nation’s top engineering programs preparing exceptional leaders with the ability to solve problems, make meaningful societal advances, and lead through innovation. Our graduates are out front meeting the challenges of our times by innovating solutions and applying cutting-edge science to build a more sustainable world.

Classroom learning and faculty excellence, along with hands-on research and real-world experience, provide the foundation for achievement in fields that include and extend beyond:

- CYBERSECURITY
- SMART ENERGY SYSTEMS
- TISSUE ENGINEERING
- INFRASTRUCTURE SUSTAINABILITY
- ADVANCED MANUFACTURING
- UNMANNED AIRCRAFT SYSTEMS
- WIRELESS COMMUNICATION TECHNOLOGY
- MATERIALS INNOVATION
LEADING-EDGE RESEARCH

Varun—who was awarded a prestigious Goldwater Scholarship in 2015—studied how stem cells can be used to generate bone tissue.

- Conducted research at the Rutgers-hosted New Jersey Center for Biomaterials “There's a big difference between learning the science and doing it. At Rutgers, undergrads work closely with graduate and post-doctoral fellows in the lab on real projects.”
- Mentored undergraduate students in research skills
- Won a competitive research fellowship at the Icahn School of Medicine at Mount Sinai (New York City)
- Plans to pursue a combined M.D./Ph.D. to accelerate the application of tissue regenerative research for clinical use
Women in Engineering Living-Learning Community: leadership and mentoring programs in a close-knit living environment

Rutgers University Women in Engineering Leadership League (RU WELL): leadership development opportunities, seminars

Society of Women Engineers (SWE): student-run group, on-campus activities, professional development

Phi Sigma Rho: student-run sorority, nationally affiliated, active in community service and campus programs

A COMMITMENT TO THE COMMUNITY

Sydnee served as president of the Minority Engineering Educational Task (M.E.E.T.), which takes pride in "producing some of the most elite engineers Rutgers University has to offer," as well as being culturally responsive and giving back to the community.

PARTICIPATED IN NUMEROUS M.E.E.T. SERVICE PROJECTS

"Every month we gather as an organization to take part in community service events, such as our annual Martin Luther King Day of Service, Habitat for Humanity, food or toy drives, and volunteering at a local soup kitchen."

PROVIDED SUPPORT IN HER ROLE AS RESIDENT ASSISTANT IN BARR HALL (FIRST-YEAR ENGINEERING RESIDENCE DORM)

"Helping incoming freshmen become acclimated to campus and mentoring them during their first year as engineering students was truly rewarding."

PLANS TO PURSUE AN MBA AND THEN BECOME A PLANT OPERATIONS MANAGER FOR A FORTUNE 500 COMPANY

"We strive to make sure M.E.E.T. members understand other cultures and embrace the importance of respecting different traditions, languages, and life experiences."
The School of Engineering features nearly 40 RESEARCH CENTERS, LABORATORIES, AND PROGRAMS.

Twenty School of Engineering faculty members were recently awarded PRESTIGIOUS AWARDS by respected organizations for their teaching.

Annual research expenditures of $60 MILLION SUPPORT LEADING-EDGE RESEARCH.

Katherine Lau, ’16
Major: Biomedical Engineering

EXTRACURRICULAR ACTIVITIES

+ ACTED AS CLASS OF 2016 REPRESENTATIVE AND FINANCE COMMITTEE MEMBER, ENGINEERING GOVERNING COUNCIL
+ JOINED PHI SIGMA RHO, THE NATIONAL ENGINEERING SORORITY
+ LIVED IN ENGINEERING LIVING-LEARNING COMMUNITY/DOUGLASS RESIDENTIAL COLLEGE
+ PLAYED IN SCARLET KNIGHTS MARCHING BAND

Katherine led a project to create a 3D printed prosthetic hand for a four-year-old girl born with Poland’s Syndrome, which left her with two non-functional fingers and several stubs.

“I experienced firsthand how effective and life-changing biomedical engineering could be. I knew my work was going to help her lead a safer life, hold her mother’s hand, and pursue her love of baseball.”

PLAN TO COMPLETE RUTGERS’ FIVE-YEAR BS/MS PROGRAM AND THEN WORK IN RESEARCH AND DEVELOPMENT
ENGINEERING THE FUTURE

Trent combined his interest in aerospace engineering and alternative energy by collaborating with a Rutgers professor and fellow students on an ornithopter, which resembles a mechanical bird. The project explores the ways aerial vehicles can harness wind power then generate their own energy, which can significantly improve the efficiency and affordability of long-distance travel.

“Engineering research is one of the biggest innovating factors in technology, and to be exposed to it and work with it so early in my career is extremely valuable.”

TRENT HANDLOVSKY, ’16

Major: Mechanical and Aerospace Engineering

“LED STUDY GROUPS AND HELPED GUIDE STUDENTS IN RECITATIONS AS A LEARNING ASSISTANT “My goal was to encourage students to work together, as well as reinforce important concepts and themes that they learned in class. It was an amazing opportunity to be able to contribute to students’ learning experiences.”

INTERNED AS A MECHANICAL ENGINEER IN THE PLANT COMPONENTS DIVISION AT LINDE ENGINEERING “Rutgers has given me the strong technical background knowledge I need, as well as a wide range of useful engineering skills.”
MAJORS AND PROGRAM HIGHLIGHTS

The school offers a full range of degree programs that prepare students for exciting and diverse career opportunities. Within the nine undergraduate majors, students also have the opportunity to pursue a discipline concentration or certificate. Students are encouraged to enhance their degrees with non-engineering minors or double majors through an extensive array of options available through the School of Arts and Sciences, School of Environmental and Biological Sciences, Rutgers Business School, and Mason Gross School of the Arts, among others.

Applied Sciences in Engineering
  - Multidisciplinary Engineering
  - Packaging Engineering

Bioenvironmental Engineering
  - Air Pollution Engineering
  - Bioresource Engineering
  - Hazardous Waste Treatment
  - Land and Water Resources Engineering

Biomedical Engineering
  - Biomechanics and Rehabilitation Engineering
  - Biomedical Computing, Imaging, and Instrumentation
  - Tissue Engineering and Molecular Bioengineering

Chemical Engineering
  - Biotechnology and Bioengineering
  - Chemical Materials and Manufacturing
  - Pharmaceutical Science and Engineering
  - Process Systems and Reaction Engineering

Civil Engineering
  - Construction Management
  - Geotechnical Engineering
  - Structural Engineering
  - Transportation Engineering
  - Water, Resource, and Environmental Engineering

Electrical and Computer Engineering
  - Control and DSP
  - Electronic Materials and Devices
  - Networks and Communications
  - Robotics and Computer Vision
  - VLSI Design

Industrial Engineering
  - Financial Engineering
  - Production and Manufacturing
  - Quality and Reliability Engineering

Materials Science and Engineering
  - Biomaterials
  - Energy Conversion and Storage Materials
  - Glass, Ceramics, and Hard Materials
  - Polymers and Sustainable Materials

Mechanical Engineering
  - Aerospace Engineering
  - Energy Systems and Thermal Engineering
  - Micro Fluidics
  - Rapid Prototyping and Integrated Design
  - Robotics, Mechatronics, and Control

University Career Services connects students with internships, externships, and cooperative education opportunities, as well as maintains a network of alumni who offer advice, networking opportunities, internships, and jobs to new graduates. The office sponsors job and internship fairs every year that attract hundreds of recruiters from New York, New Jersey, and Pennsylvania.

INTERNSHIPS/CO-OPS

More than 60 percent of SoE students undertake an internship/co-op during their undergraduate years. Recent internship/co-op sites:

- Alcoa Power and Propulsion
- Ashland Chemical
- AT&T
- Bank of America
- Bechtel
- Boeing Company
- Bristol-Myers Squibb
- Chromocell
- Corning
- Coursera
- Goldman Sachs
- Google
- J.P. Morgan
- Johnson & Johnson
- Kraft Foods
- Merck
- Mondelēz International
- NASA
- National Renewable Energy Laboratory
- Novartis Pharmaceuticals
- Pfizer
- Raytheon
- Siemens
- Stryker Corporation
- Unilever
- United Health Group

GRADUATE SCHOOLS

A sampling of schools where recent SoE graduates have gone on to earn advanced degrees:

- California Institute of Technology
- California Polytechnic State University
- Carnegie Mellon University
- Columbia University
- Drexel University
- Duke University
- Georgetown University
- Georgia Tech
- Harvard
- Johns Hopkins University
- Massachusetts Institute of Technology (MIT)
- New Jersey Institute of Technology
- NYU Stern School of Business
- Princeton University
- Purdue
- Rensselaer Polytechnic Institute
- Rutgers University
- Stanford University
- Syracuse University
- University of California
- University of Colorado
- University of Illinois
- University of Michigan
- University of Pennsylvania

EMPLOYMENT

A sampling of companies and organizations where SoE graduates have found employment:

- Accenture
- Army Materials Technology Lab
- Bloomberg
- Booz Allen Hamilton
- Chrysler
- Corning Glass Works
- Credit Suisse
- Deloitte
- Exxon Research
- Ford Motor Company
- GE
- Google
- Goldman Sachs
- Hewlett Packard
- Johnson & Johnson
- JPMorgan Chase
- Kraft Foods
- Lockheed Martin
- L’Oreal
- Merck & Co.
- MetLife
- Phillips GE
- Port Authority of New York and New Jersey
- Raytheon
- Tektronix
- U.S. Environmental Protection Agency

Rutgers, The State University of New Jersey, is dedicated by law and by purpose to serving all people on an equal and non-discriminatory basis. For more information, see compliance.rutgers.edu.

For more information about the School of Engineering, visit: soe.rutgers.edu