TRANSCEND THE DETAILS OF ANY ONE JOB. SUCH IS THE RESULT OF AN EDUCATION THAT IS APPROPRIATE TO WIDELY DIFFERENT TECHNOLOGIES, SKILLS THAT SUCH CHANGING TIMES REQUIRE OF ENGINEERING GRADUATES ENDOWED WITH THE FLEXIBILITY TO CRAFT A PROGRAM THAT SUITS THEIR INDIVIDUAL INTERESTS, CAREER OR GRADUATE EDUCATION PLANS. BOTH BACHELOR OF SCIENCE IN ENGINEERING (BSE) AND BACHELOR OF APPLIED SCIENCE (BAS) DEGREES ARE OFFERED, ALONG WITH SPECIALIZED DUAL-DEGREE PROGRAMS, AN ARRAY OF MAJORS AND MINORS, SPECIAL PROGRAMS, AND STUDY-ABROAD OPPORTUNITIES.

PENN ENGINEERING IS A PIONEER IN INTERDISCIPLINARY EDUCATION, ALLOWING STUDENTS THE FLEXIBILITY TO CRAFT A PROGRAM THAT SUITS THEIR INDIVIDUAL INTERESTS, CAREER, OR GRADUATE EDUCATION PLANS. BOTH BACHELOR OF SCIENCE IN ENGINEERING (BSE) AND BACHELOR OF APPLIED SCIENCE (BAS) DEGREES ARE OFFERED, ALONG WITH SPECIALIZED DUAL-DEGREE PROGRAMS, AN ARRAY OF MAJORS AND MINORS, SPECIAL PROGRAMS, AND STUDY-ABROAD OPPORTUNITIES.

FACULTY TEACH ALL CORE UNDERGRADUATE COURSES, AND EACH STUDENT HAS A FACULTY ADVISOR.

TWO KEY ELEMENTS DISTINGUISH THE PENN ENGINEERING EXPERIENCE FROM THAT PROVIDED BY MANY OTHER INSTITUTIONS: EXCEPTIONAL ACADEMIC PROGRAMS, AND PRACTICAL DESIGN AND RESEARCH EXPERIENCE.

OUR UNDERGRADUATE PROGRAMS EMPHASIZE BOTH THEORY AND PRACTICE WHILE FORMING INTELLECTUAL LINKAGES ACROSS A BREADTH OF DISCIPLINES. THE OPPORTUNITY FOR HANDS-ON RESEARCH, OVER THE FOUR YEARS, ALLOWS UNDERGRADUATES THE CHANCE TO LEARN ABOUT THE CREATION OF KNOWLEDGE, FURTHER EXPLORE THEIR CHOSEN FIELD, AND THEREBY BECOME COLLABORATORS IN THE SEARCH FOR KNOWLEDGE. THE DESIGN EXPERIENCE OVER THE FOUR YEARS, CULMINATING IN THE SENIOR DESIGN PROJECT, CHALLENGES STUDENTS TO UTILIZE THEIR ACADMIC TRAINING AND PROBLEM-SOLVING SKILLS IN PRACTICAL WAYS, AND PROVIDES THEM WITH DIRECT EXPERIENCE WITH REAL-WORLD PROBLEMS THAT THEY WILL ENCOUNTER AS PRACTICING ENGINEERS.

TECHNOLOGY IS TRANSFORMING OUR TIMES AND OUR LIVES, NO LONGER ON A SCALE OF DECADES BUT OF YEARS AND EVEN MONTHS. A SUCCESSFUL CAREER THROUGH SUCH CHANGING TIMES REQUIRE SKILLS THAT ARE APPLICABLE TO WIDELY DIFFERENT TECHNOLOGIES, SKILLS THAT TRANSCEND THE DETAILS OF ANY ONE JOB. SUCH IS THE RESULT OF AN EDUCATION THAT PAYS MUCH MORE ATTENTION TO THE FUNDAMENTAL THAN TO THE TRENDY, TO THE CREATIVE MORE THAN TO THE ROUTINE. ENGINEERS MUST ALSO BE FIRMLY EDUCATED AS RESPONSIBLE CITIZENS, CONCERNED WITH THE IMPACT OF THEIR WORK ON SOCIETY.

PENN ENGINEERING IS AN INTEGRAL PARTNER IN PENN'S INITIATIVES TO PREPARE STUDENTS FOR LEADERSHIP IN A HIGH-TECH WORLD. OUR GOAL IS TO PREPARE STUDENTS FOR LEADERSHIP ROLES IN ENGINEERING AND APPLIED SCIENCE AS WELL AS IN OTHER FIELDS, SUCH AS MEDICINE, BUSINESS, AND LAW, FOR WHICH CREATIVITY, CRITICAL QUANTITATIVE THINKING, EFFECTIVE COMMUNICATION SKILLS, AND A STRONG COMMITMENT TO HUMAN VALUES ARE ESSENTIAL.

MISSION OF THE SCHOOL
1. THE CREATION AND DISSEMINATION OF SCHOLARLY RESEARCH IN BOTH BASIC AND APPLIED AREAS TO BE AN INTERNATIONAL CENTER OF ENGINEERING EXCELLENCE AND THE REGIONAL CYSTAL FOR TECHNOLOGICAL INNOVATION;
2. THE DESIGN AND DELIVERY OF ENGINEERING EDUCATION KNOWN FOR ITS RIGOR, BREADTH AND RELEVANCE TO PREPARE ITS STUDENTS TO BECOME GLOBAL LEADERS IN TECHNOLOGY-BASED FIELDS.

MISSION STATEMENTS OF BACHELOR OF SCIENCE IN ENGINEERING PROGRAMS (ABET-ACREDITED)
• BIOENGINEERING (HTTP://WWW.BE.SEAS.UPENN.EDU/ABOUT-ACADEMICS/)
• CHEMICAL AND BIOMOLECULAR ENGINEERING (HTTP://WWW.CBE.SEAS.UPENN.EDU/ABOUT-UGRAD/)
• COMPUTER SCIENCE (HTTP://WWW.CIS.UPENN.EDU/UGRAD/ABET.SHTML/)
• COMPUTER ENGINEERING (HTTP://WWW.SEAS.UPENN.EDU/CMPE/ACCREDITATION.PHP)
• ELECTRICAL ENGINEERING (HTTP://WWW.ese.upenn.edu/about-ugrad/)
• MATERIALS SCIENCE AND ENGINEERING (HTTP://WWW.MSE.SEAS.UPENN.EDU/ABOUT-UGRAD/ACCREDITATION.PHP)
• MECHANICAL ENGINEERING AND APPLIED MECHANICS (HTTP://WWW.ME.UPENN.EDU/ABOUT-UG/ED/ACCREDITATION.PHP)
• SYSTEMS SCIENCE AND ENGINEERING (HTTP://WWW.ese.upenn.edu/about-ugrad/)

OUR EXTRAORDINARY FACULTY-TO-STUDENT RATIO PROVIDES GREAT OPPORTUNITIES FOR UNDERGRADUATE STUDENTS TO WORK IN STATE-OF-THE-ART RESEARCH LABORATORIES DURING THE ACADEMIC YEAR AND IN THE SUMMER. BELOW ARE EXAMPLES OF STUDENT RESEARCH, ALONG WITH HELPFUL INFORMATION TO GUIDE UNDERGRADUATES TOWARD FINDING RESEARCH POSITIONS AT PENN ENGINEERING.

FOR MORE INFORMATION, VISIT: HTTPS://RESEARCH.SEAS.UPENN.EDU/UNDERGRADUATE-RESEARCH/.

FINDING A RESEARCH MENTOR AND RESEARCH EXPERIENCES
STUDENTS ARE ENCOURAGED TO EXPLORE THE PENN ENGINEERING FACULTY EXPERTISE DIRECTORY (HTTP://WWW.SEAS.UPENN.EDU/DIRECTORY/DEPARTMENTS.PHP), FEATURING THE SCHOOL'S STANDING FACULTY AND WHICH IS SEARCHABLE BY DEPARTMENT, RESEARCH CENTER AFFILIATION, AND RESEARCH EXPERTISE KEYWORD. USERS CAN IDENTIFY WHICH FACULTY ARE CONDUCTING RESEARCH IN A SPECIFIC AREA AND CONTACT FACULTY MEMBERS WHOSE RESEARCH INTERESTS THEM.

LITTLEJOHN UNDERGRADUATE RESEARCH PROGRAM
THANKS TO A GENEROUS GIFT BY ANGUS LITTLEJOHN, THE SCHOOL OF ENGINEERING IS ABLE TO OFFER SUMMER RESEARCH OPPORTUNITIES TO PENN ENGINEERING STUDENTS. THE PROGRAM IS OPEN TO RISING SOPHOMORES, JUNIORS, AND SENIORS.

THE PROGRAM INTENDS TO PROVIDE STUDENTS THE OPPORTUNITY TO GET INVOLVED IN HANDS-ON ENGINEERING RESEARCH UNDER THE SUPERVISION OF A FACULTY.
member. Topics of research include all areas covered by the departments in the School of Engineering and Applied Science.

**Rachleff Scholars Program**

This program offers Penn Engineering undergraduates the opportunity to gain valuable research experiences with standing faculty and to participate in a community of peers who share a common interest in research and scholarly inquiry.

The following BSE programs are accredited by the Engineering Accreditation Commission of ABET (http://www.abet.org (http://www.abet.org/)).

- Bioengineering (http://www.be.seas.upenn.edu/about-academics/)
- Chemical and Biomolecular Engineering (http://www.cbe.seas.upenn.edu/about-ugrad/)
- Computer Science (http://www.cis.upenn.edu/ugrad/abet.shtml/)
- Computer Engineering (http://www.seas.upenn.edu/cmpe/accreditation.php)
- Electrical Engineering (http://www.ese.upenn.edu/about-ugrad/)
- Materials Science and Engineering (http://www.mse.seas.upenn.edu/about-ugrad/accreditation.php)
- Mechanical Engineering and Applied Mechanics (http://www.me.upenn.edu/about-ug-ed/accreditation.php)
- Systems Science and Engineering (http://www.ese.upenn.edu/about-ugrad/)

The BSE program in Computer Science is accredited by the Computing Accreditation Commission of ABET (http://www.abet.org (http://www.abet.org/)).

For more information, visit: http://www.seas.upenn.edu/undergraduate/handbook/programs/abet-accreditation.php.

Each student is assigned a faculty advisor with whom they are required to meet at least twice per year. No student is permitted to register for classes in any semester without first meeting with an advisor. The only exception is the fall semester of a student’s first year. Students who take the time to prepare for these meetings generally find them beneficial and informative. Faculty advisors are the best source of information about electives within the major, research opportunities, and options for graduate study.

For more information, visit: https://ugrad.seas.upenn.edu/student-handbook/advising/.