

Suggested Schools To Research

Boston University (MA)
Bucknell University (PA)
Carnegie Mellon University (PA)
Columbia University (NY)
Cooper Union (NY)
Cornell University (NY)
CUNY City College (NYC)
CUNY College of Staten Island (NYC)
CUNY NY City Tech (NYC)
Drexel University (PA)
Hofstra University (NY)
Lafayette College (MA)
Lehigh University (PA)
Manhattan College (NY)
MIT (MA)
New Jersey Institute Technology (NJ)
New York Institute Technology (NYC)
New York University (NY)
Northeastern University (MA)
Penn State University (PA)
Princeton University (NJ)
Rensselaer Polytechnic Institute (NY)
Rochester Institute of Technology (NY)
Rutgers University (NJ)
Stevens Institute of Technology (NJ)
SUNY Binghamton (NY)
SUNY Buffalo (NY)
SUNY Canton (NY)
SUNY Maritime (NY)
SUNY New Paltz (NY)
SUNY Oswego (NY)
SUNY Polytechnic Institute (NY)
SUNY Stony Brook (NY)
Syracuse University (NY)
Tufts University (MA)
University of Pennsylvania (PA)
University of Maryland (MD)
University of Michigan (MI)
University of Notre Dame (IN)
Yale University (CT)

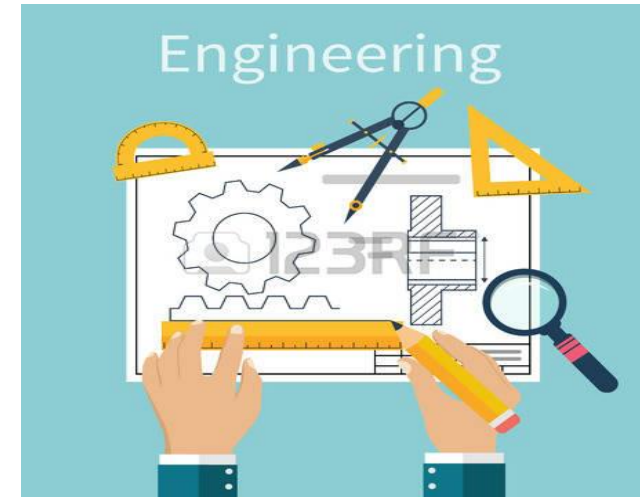


For Additional Information

- **American Society of Mechanical Engineers (ASME)**
Tel: 800-843-2763
www.asme.org
- **American Association of Civil Engineers (ASCE)**
Tel: 800-548-2723
www.asce.org
- **Association for Computer Machinery (ACM)**
Tel: 212-869-7440
www.acm.org
- **Institute of Industrial Engineers (IIE)**
Tel: 800-494-0460
www.iienet.org
- **Institute of Electrical and Electronics Engineer (IEEE)**
Tel: 212-419-7900
www.ieee.org



Explore Engineering



New Utrecht High School
College Office



Types of Engineering Programs

- ✚ Aeronautical/Aerospace Engineering
- ✚ Agricultural & Biological Engineering
- ✚ Architectural Engineering/Technology
- ✚ Biomedical Engineering
- ✚ Chemical Engineering
- ✚ Civil Engineering/Technology
- ✚ Computer Engineering/Technology
- ✚ Electrical Engineering/Technology
- ✚ Industrial Engineering
- ✚ Materials Engineering
- ✚ Mechanical Engineering/Technology
- ✚ Computer Engineering Technology
- ✚ Construction Technology
- ✚ Drafting and Design Technology

What is it about?

- ✚ Engineering is the application of science and math to solving problems in the real world.
- ✚ Engineering technology is the practical application of science and engineering to a wide range of real world problems.
- ✚ The differences between engineering and engineering technology are not always obvious. Engineering technology classes will emphasize the application of engineering techniques, and the engineering courses will focus on the development of concepts.
- ✚ Engineers/Technologists are problem solvers, organizers, communicators, and designers.
- ✚ They research, develop, produce, construct, operate, manage, consult, and/or teach systems and processes to improve quality of life.
- ✚ Engineering skills rely heavily on rational thinking, logical decision making, and creativity.
- ✚ Jobs in this field cover specifying materials and processes, supervise manufacturing and construction, conduct failure analysis, provide consulting services, and teach engineering courses in college and universities.

You might consider this major if you are good at/like:

- ✚ Attention to detail
- ✚ Creative
- ✚ Critical reading/thinking
- ✚ Leadership, making decisions
- ✚ Math and Science
- ✚ Quantitative analysis
- ✚ Patience
- ✚ Communication skills
- ✚ Team work

Recommended High School Prep

- ✚ English
- ✚ Algebra, Trigonometry, Geometry,
Pre-Calculus, Calculus
- ✚ Physics, Chemistry, Geology, Biology,
Environmental Science
- ✚ AP Courses in Math and Science

**These are courses that will be valuable to you prior to applying for the engineering programs.

**Expect heavy math, science, statistics, and lab work for first two years followed by applied science and engineering courses later.



What program should I apply to?

Consider the following when researching and selecting college program(s):

- Academic admissions criteria, SAT/ACT scores, location, environment, tuition fees, financial aid, school size, curriculum, etc.
- Judge the quality of facilities like design, computing and testing laboratories and libraries.
- What are recent graduates doing? What percent of recent graduates got hired right away?

Career Trends

* Career trends vary based on program interest. Careers listed are not limited to the following:

- Architect
- Analytical/Design Engineer
- Consulting Engineer
- Construction Engineer
- Engineer Manager
- Educator/Professor
- Forensic Engineer
- Industrial Researcher
- Government Agencies/Government Laboratory
- Manufacturing/Materials/Production Manager
- Operations Analyst
- Project Engineer
- Product Development Engineer
- Quality Control
- Research & Development Engineer
- Sales/Technical Representative