

BIOLOGICAL ENGINEERING, B.S.

Begin Campus: Any Penn State Campus

End Campus: University Park

Career Paths

With a bachelor of science in Biological Engineering, you can gain a broad background in engineering fundamentals and specialized training needed to succeed in industry, government, or graduate education. Specific career paths vary by option within the Biological Engineering major: Agricultural Engineering, Food and Biological Processing Engineering, and Natural Resources Engineering.

Careers

Agricultural Engineering

You can learn power and machinery systems and structural analysis, with a focus on the design of off-road equipment for agricultural production, construction, and food processing. You might work as a design or test engineer for agricultural or construction equipment companies.

Food and Biological Processing Engineering

You can learn to design microbiological systems for production of pharmaceuticals, renewable fuels, and vitamins and to engineer processing systems for production of safe, high-quality food. You might work as a process engineer or project manager for food, pharmaceutical, commodity, or consumer goods companies.

Natural Resources Engineering

You can learn to apply best management practices to minimize non-point source pollution, such as sediment loss or nutrient runoff, and to apply low-impact development strategies for stormwater management. You might work as a design engineer in a government agency or an engineering consulting/design firm.

Opportunities for Graduate Studies

As a Biological Engineering graduate, you may pursue an advanced degree in agricultural and biological engineering or related science and engineering disciplines, such as biomedical engineering, civil and environmental engineering, or food science. You may also pursue licensure as a professional engineer by passing the appropriate examinations and gaining practical engineering experience.

Professional Resources

- American Society of Agricultural and Biological Engineers (<https://www.asabe.org>)