

AGRICULTURAL AND BIOLOGICAL ENGINEERING

Graduate Program Head	Suat Irmak
Program Code	ABENG
Campus(es)	University Park (Ph.D., M.S.)
Degrees Conferred	Doctor of Philosophy (Ph.D.) Master of Science (M.S.) Dual-Title Ph.D. and M.S. in Agricultural and Biological Engineering and International Agriculture and Development Dual-Title Ph.D. and M.S. in Agricultural and Biological Engineering and Operations Research
The Graduate Faculty	View (https:// secure.gradsch.psu.edu/gpms/? searchType=fac&prog=ABENG)

Agricultural and Biological Engineering (ABENG) offers students the opportunity to gain expertise in several areas that relate to the world's most important sociotechnological and sustainability challenges including energy, environment, crop/food production and health. Specific focus areas include agricultural machinery, mechatronics, remote sensing, natural resources, water quality, climate change, fermentation, food production, food safety, biological and agricultural bioproducts, life cycle analysis and techno-economic analysis. The ABENG M.S. degree is research based and requires a thesis.

Excellent facilities, including equipment and instrumentation, are available for research. Extensive additional fabrication and characterization equipment and facilities are available through Penn State institutes and user facilities including the Institutes of the Environment and Energy, Huck Institutes of the Life Sciences, Materials Research Institute, Materials Characterization Laboratory, Nanofabrication Facility, Institute for CyberScience, PA Housing Research Center, Center for Food Manufacturing, USDA Pasture Systems and Watershed Management Research Lab, Mushroom Research and Demonstration Facility and a 1,500-acre agricultural research center for cooperative work with agronomic and horticultural production systems as well as animal production systems.