

# BIOLOGICAL SYSTEMS ENGINEERING: MACHINERY SYSTEMS ENGINEERING

Machinery systems engineering is what many students initially perceive biological systems engineering to be. These engineers are trained to design machines for production agriculture and construction. Concepts covered in this field include power transmission, traction, hydraulic power, and crop handling, such as planting and harvesting.

Over the past 50 years, machines have improved production efficiency in all aspects of life. Machinery systems engineers have played a key role in moving society from the highly manual culture of the early 20th century to the highly technical culture of the late 20th century. Even with these advances, the job of the machinery systems engineer is not complete. Concern for our natural environment and worker safety, and the constant desire to reduce costs and energy consumption while improving production efficiency, will continue to challenge machinery systems engineers.