

Course: AGEN 100: Introduction to Biological and Agricultural Engineering

Credits: 1 credit hour; one 50-minute lecture per week

Instructors: Roger Hoy, Santosh Pitla, Nicole Iverson, Curtis Tomasevicz

Textbook: No required textbook for this course

Description: Description of careers in biomedical, environmental, water resources, food and bioproducts, and agricultural engineering. The human, economic and environmental impacts of engineering in society. Communication, design, teamwork, and the role of ethics and professionalism in engineering work.

Prerequisites: There are no prerequisites for this course

Required course.

Course Goals: A student will be able to:

- Enact professional behavior, including adhering to deadlines, following format requirements, and using proper grammar.
- Seek out and apply new knowledge/skills to improve the quality of and performance during the final project.
- Describe the defining characteristics of one of the Agricultural Engineering emphasis areas.
- Apply an engineering problem solving processes.
- Communicate clearly with an audience that has a broad range of engineering knowledge in both a formal and informal setting.
- Diagram the ethical implications of a real-life situation.
- Apply an engineering design process to the design of a solution for a problem of an agricultural engineering nature.
- Demonstrate each of the five behaviors of an effective team member (contribute to the team's work, interact with teammates in a positive and supportive manner, keep the team on track, expect quality, and have relevant knowledge, skills and ability to help the team achieve its goals).

Student Outcomes addressed by course: see other side.

Topics: Ethics

Arduino & Electricity

Career Interests

Emphasis Area Interest

Vehicle Performance