Educational Objectives of the Program

Graduates for the Diploma of Agricultural Engineering program at USEK will be highly competent in:

1. Performing engineering tasks at the appropriate level of expertise and collaborative skills, and also willing to accept ethical responsibility for the social and environmental impact of engineering practices.
2. Formulating and/or designing a system, process or program to meet desired needs, in order to solve technological problems in the various branches of agricultural sciences.
3. Using disciplinary knowledge and educational depth and breadth to deal with changing career opportunities in agricultural and closely related industries.
4. Promoting sustainable agriculture through the conservation of natural resources and providing advisory assistance and extension services to local and regional farmers regarding proper livestock production, processing and crop and animal production/protection, ecology/environment, landscaping and climate change.

Program Outcomes

Graduates of the Diploma of Agricultural Engineering program at USEK will have:

a. The ability to apply knowledge of mathematics, science, and engineering.
b. The ability to design and conduct experiments, as well as to analyze and interpret data.
c. The ability to design a system, component or process to meet desired needs, within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
d. The ability to function on multidisciplinary teams.
e. The ability to identify, formulate, and solve engineering problems.
f. An understanding of professional and ethical responsibilities.
g. An ability to communicate effectively.
h. The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
i. A recognition of the need for, and an ability to engage in life-long learning.
j. A knowledge of contemporary issues.
k. An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.