

TO: Engineering Faculty  
FROM: The Faculty of Agricultural and Biological Engineering  
RE: Changes in Undergraduate Level Course ABE 205 title and pre and co-requisites

The faculty of the Department of Agricultural and Biological Engineering has approved the following change in prerequisites and corequisites to an undergraduate level course. This action is now submitted to the Engineering Faculty with a recommendation for approval.

**From: ABE 205 – Engineering Computations for Biological Systems**

Sem. 1. Class 2, lab 2, cr. 3.

Prerequisites: CS 152, CHM 115, PHYS 152. Authorized equivalent courses or consent of instructor may be used in satisfying course prerequisites.

Development of engineering problem solving skills. Use of computers for data analysis/numerical modeling and descriptive statistics using electronic spreadsheets. Introduction to elementary mass and energy balances for reacting and non-reacting processes, emphasizing applications in biological systems.

**To: ABE 205 – Computations for Engineering Systems**

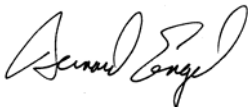
Sem. 1. Class 2, lab 2, cr. 3.

Prerequisite: ENGR 126.

Corequisite: PHYS 172.

Development of engineering problem solving and design skills. Use of Excel, Matlab, and MathCad for problem solving, data analysis, numerical modeling, and statistics. Introduction to elementary statics, dynamics, materials, thermodynamics, fluid mechanics, and energy topics.

**Reason:** The proposed changes are requested due to a restructuring of the course to focus on ABE Machine Systems and Environmental students. The prerequisite and corequisite changes removes courses that are not directly related to ABE 205, allowing more students to begin taking ABE courses their second year even if they still need to complete several of the courses required by the First Year Engineering program.



Bernard A. Engel  
Professor and Head  
Agricultural and Biological Engineering Department