

BE 463 - Dairy Manure System Design (3)

PENNSTATE



Fall 2013

This is a capstone course in which the student will learn to apply their knowledge of the subject areas of hydraulics, open-channel flow, electricity, 3D computer-aided design, computer modeling, and project management to the design of commercial dairy manure handling and treatment systems. The following topics will be covered: Pumping systems and pipelines, manure collection and transport methods, reception pits, settling basins, liquid manure storage ponds and treatment lagoons, facility design and layout, manure processing equipment selection, and electrical control systems. At the end of this course, the successful student will complete a final project involving the design of a comprehensive dairy manure handling and treatment system for a commercial dairy farm.

