Course Prefix and Number:  ARC 222  Credits: 3

Course Title:  Architectural CAD Applications Software II

Course Description:  Uses advanced features of architectural CAD software to teach students to develop working drawings and details that adhere to the practices and techniques of architectural drawing principles. Prerequisite: ARC 221. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

General Course Purpose:  The primary purpose of this course will be to expand and enhance the student’s knowledge base of the fundamentals of Building Information Modeling. The course serves as a requirement for the Architectural and Engineering Technology AAS, Contemporary Technology for Design Specialization and an elective for the Building Construction Management Specialization.

Course Prerequisites and Co-requisites:  Prerequisite: ARC 221

Course Objectives:  Upon completing the course, the student will be able to:
   a. Create topological models for building sites;
   b. Execute space planning via the BIM model;
   c. Execute detailed building sections that define structural systems; and
   d. Produce detailed rendered “ walkthroughs” and animations.

Major Topics to be Included:  
   a. Project “callouts”
   b. Pad, wall, and roof elements
   c. Split regions
   d. Adding “details” to sheets
   e. Defining camera views
   f. Rendering using ray tracing and cloud services
   g. BIM customization

Effective Date of Course Content Summary:  October 16, 2015