## CE5100 - Construction Software Lab

**Credit Distribution:** C:6 L:1 T:0 P:2 E:0 O:3 TH:0

**Course Type:** Lab

**Description:** To give the students exposure to software tools and applications that can improve performance and productivity on construction sites.

**Course Content:** The course is divided into two modules - Building Information Modeling and Application Development. Topics covered under each module are given below: A. Building Information Modeling: Uses of BIM, Challenges to Implementation, BIM Execution Plans, Representing Models in BIM, Architectural, Structural, Mechanical and Electrical objects, Clash Detection, 4D Modeling, Sustainability Analysis, Global BIM. B. Application Development: Object Oriented Programming basics, .NET framework and Visual Basic, Front end programming, Data Structures, Databases, Algorithms.

**Textbooks**

- BIM Handbook: A Guide to Building Information Modeling for Owners, Managers, Designers, Engineers and Contractors" by Chuck Eastman, Paul Teicholz, Rafael Sacks and Kathleen Liston

**Reference Books:** NIL

**Prerequisite:** NIL