Course Number and Name	**CE212-2: Civil Engineering Drawing**
Credits hours	3 Credit hours
Contact hours	4 Contact hours; 1for lecture, 3 for practical
Instructor/s name/s	Mr. Afzal Husain Khan
Textbook	Fundamentals of Engineering Drawing, 1978, French & Vierck, McGraw - Hill Publications.
Other supplemental materials	Engineering Drawing (Third Edition), 2010, K. MORLING Elsevier Publications. McGraw-Hill. Lecture notes. Laboratory Manual.
Specific course information	
a. Catalog description	This course is intended to teach students the fundamental concepts in Civil Engineering Drawing dealing with different components viz. Reinforced Concrete and steel structures. Reinforced Concrete structures consists of foundation, beams, columns, slabs and steel structures consists of different steel sections, column base, Beam to beam connections, Column to beam connection, truss.
b. Prerequisite	Engineering Drawing Eng101
c. Required / Elective	Required
Specific goals for the course	
Course Learning Outcomes (CLOs)	By the end of this course, the student will be able to: Recognize fundamentals and study the main elements of the civil engineering structures components. Represent of relationships between various types of civil engineering structures components. Describe plan, elevation, and side-view of various civil engineering structures components. Explain how to read drawings and execute drawings on actual site.
Student outcomes that addressed by the course	The following student outcomes are addressed by the course: SO1: An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics. SO4: An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts SO5: An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
Topics to be covered	

Topic	**Number of weeks**
Reinforced Concrete and steel structures Drawing	
Architectural Plan.	**1**
Structural Plan.	**2**

Footings or foundations.	**3**
Detailing of Beams, Columns & Footings.	**4**
Detailing of Slab.	**5**
B. Use the AutoCAD commands for drawing 2D building drawings required for different Civil Engineering applications.	
Introduction to computer aided drafting and different coordinate system	**6**
Drawing of building components using CAD software like a) Walls b) Lintels c) Doors d) Windows e) Columns f) Beams	**8**
Drawing a plan of a residential building.	**9**
Built-up sections	**10**
Rolled Steel Sections	**11**
Beam-to-Column Connection	**12**
Beam-to-Beam connections	**13**
Column base	**14**

Schedule of Assessment Tasks for Students During the Semester

Assessment task (i.e., essay, test, quizzes, group project, examination, speech, oral presentation, etc.)	Week due	Proportion of Total Assessment
Homework	2,5,8	10%
Quizzes	3,6,9	10%
Midterm-exam I	7	15%
Midterm-exam II	12	15%
Term Project	14	20%
Final Exam	16	30%

CLO-SO Map

	S01	S02	S03	S04	S05	S06	S07
CLO 1	√						
CLO 2	√						
CLO 3	√				√		
CLO 4				√	√		
CLO 5				√			