Course Number and Title:	IDE 215/Engineering Mechanics			
Credit Hours:	3+0			
Pre Requisite	-			
Instructor (s):	Engr. Waqas Asghar			
Lab Engineer:	N/A			
Compulsory/Elective:	Compulsory			
If Elective: Depth Core/ Breadth Core:	N/A			
Course Schedule:	Lecture:	3 Hours/Week		
	Lab:	N/A		
	Office hours:	3 Hours/Week		
Course Assessment:	Assignments/ Course project:	2		
	Quizzes:	2		
	Lab work:	N/A		
	Exams:	Mid-Semester and Final		
Grading Policy:	Quizzes:	10%		
	Assignments/ Course project:	10%		
	Lab work:	00%		
	Mid-Semester:	20%		
	End-Semester:	60%		
Text Book:	Engineering Mechanics Statics by Bedford and Fowler, fifth edition			
Reference Book(s):	VECTOR MECHANICS FOR ENGINEERS by Ferdinand P. Beer and E. Russell Johnston, Ninth edition			
Course Objective:	This course gives basic understanding about various engineering structures in equilibrium and helps to understand the .physical phenomena in mathematical terms. It became easier for the students to implement laws of motions to components / structures under the influence of forces			
Course Learning Outcome	CLO Statement		PLO	Bloom
CLO-1:	Develop a general understanding of concepts of vectors, conditions of equilibrium for particles and rigid bodies in two and three dimensions, moment of a force. **(Knowledge & comprehension)**		PLO-1	C1 C2
CLO-2:	Learn the techniques for structural analysis and apply these concepts in analysis of trusses and machines. **(Problem Analysis)**		PLO-2	C3 C4
Topics covered in the course and level of coverage:	❖ Introduction to mechanics, Fundamental concepts and principles.		3 Hours	
	❖ Forces in 2-Dimensions + Problem solving		6 Hours	
	❖ Equilibrium of particles in 2-Dimensions + Problem solving		6 Hours	
	❖ Forces in 3-Dimensions + Problem solving		9 Hours	
	❖ Equilibrium of particles in 3-Dimensions + Problem solving		6 Hours	
	❖ System of forces and moments		6 Hours	
	❖ Trusses		6 Hours	

	❖ Introduction to Dynamics, Rectilinear and Curvilinear motion	6 Hours
Program learning outcomes and how they are covered by specific course outcomes:		
	❖	
	❖	
	❖	
	❖	
	❖	
	❖	

Mapping of CLOs with PLOs and Bloom's Taxonomy Cognitive Levels:

PLO	1	2	3	4	5	6	7	8	9	10	11	12
CLO-1	C1 C2											
CLO-2		C3 C4										

Mapping of CLOs with Assessment Methods:

CLOs/Assessment	CLO-1	CLO-2	CLO-3
Assignments:	√	√	
Quizzes:	√	√	
Mid-Semester:	√	√	
End-Semester:	√	√	