H-Form ISE 473

Course Information:	
Code and Title:	ISE 473 Co-op Training
Prerequisites:	Completing 153 credit hours
Co requisite (if any)	
Credit Hours: 6	Lecture Hrs. (0), Tutorial Hrs. (0), Lab (0) **Total Credits** (0), Field (405), supervisor meeting (45)
College/ Department:	College of Engineering/Industrial and Systems Engineering

Course Description:
Cooperative training integrates classroom theory and learning experiences at a workplace. The experience enables students to apply and refine the knowledge and skills acquired in a related curriculum course. The Co-op is a supervised work experience in a position in the government or the private sector which aimed to assist students in making the transition from the classroom to industry. At this level, students are required to finish 450 hours during a period of 15 weeks of industrial employment to work in appropriate firms. Students are evaluated on their performance on the job and are required to submit an extensive formal report on their experience.

Course Objectives:
Upon successful completion of the Coop-training, students will possess the capability to effectively employ theories and concepts acquired in academic classrooms within a professional work environment. They will acquire workplace competencies, comprehend the organizational structure of their employer, understand the management philosophy or corporate culture, and discern various patterns and settings within the work environment. Subsequently, they must analyze the current situation, propose improvement actions, identify strengths and weaknesses, and enhance interpersonal skills. Finally, they are tasked with synthesizing ideas into a professional report and leveraging professional networking opportunities.

Course Learning Outcomes		PLO
Knowledge Understanding		
1.1	Identify the company organization, services, products and goals.	K1
1.2	Match related data, knowledge and experiences to mathematical and basic sciences.	K2
1.3	Translate academic theory into engineering applications in the global context.	K3
1.4	Outline the industrial engineering methodologies for real-world problems	K4
Skills		
2.1	Employ engineering, scientific, and mathematical principles to analyze data and formulate complex industrial problems.	S1
2.2	Conduct appropriate experiments and software to connect the engineering theories with real applications	S2
2.3	Apply engineering design to produce solutions that meet company needs	S3
2.4	Evaluate of relevant constraints and use engineering judgment to draw conclusions	S4
2.5	Communicate the required written reports, mid-term report, final report and to perform a presentation to a jury	S5
Values		
3.1	Support team working spirit by listening, helping, sharing information, pulling ideas together, and taking decisions by consensus.	V1
3.2	Appraise ethical, environmental and sustainability considerations in corporate decision-making and actions.	V2

Textbook: The textbook and references will be determined according to the topic or topics that will be utilized on the Co-op training.			
Title:			
Author(s):			
Publisher:	-	**Year and Edition:**	
Other Useful Resources:			