

H-Form ISE 260

Course Information:	
Code and Title:	ISE 260 Human Factors Engineering
Prerequisites:	ISE 250
Co requisite (if any)	-
Credit Hours: 3	Lecture Hrs. (30), Tutorial Hrs. (0), Lab (45), Total Credits (75)
College/ Department:	College of Engineering/Industrial and Systems Engineering

Course Description:
The course delves into the intricacies of Human-Machine Systems, covering key aspects such as Information Theory, Human capabilities, and the design of Displays and Controls. It extends to the consideration of Hand Tools and Devices, Workplace Design, and the influence of Environmental and Thermal factors. Additionally, the course explores the dynamics of Physical Work and Manual Materials Handling, as well as the nuances of Speech Communications within the context of human factors engineering.

Course Objectives:
The course introduces the students to the field of human factors so that they can recognize the abilities and limitations of human beings (operator or user) to enhance certain desirable values such as safety, job satisfaction, efficiency, and wellbeing. It helps the student understand how to optimize the relationship between people and technology.

Course Learning Outcomes		
		PLO
Knowledge Understanding		
1.1	Describe the type of interactions (and the interfaces needed) between humans and any physical entity.	K1
1.2	Explain the process of information processing and how it affects the behavior and capabilities of humans.	K3
Skills		
2.1	Evaluate human capabilities and limitations.	S1
2.2	Measure the ability to make improvements for controls, hand tools, devices, and the workplace.	S2
2.3	Experiment the relation between people and technology	S2
2.4		
Values		
3.1	Evaluate how humans are affected by environmental and thermal factors, lighting, and vibrations.	V2

Textbook:			
Title:	Human Factors in Engineering and Design,		
Author(s):	Sanders & McCormick,		
Publisher:	McGraw-Hill,,	Year and Edition:	1993
Other Useful Resources:			