

# H-Form ISE 406

Course Information:	
<b>Code and Title:</b>	ISE 406 Engineering Management
<b>Prerequisites:</b>	ISE 305
<b>Co requisite (if any)</b>	-
<b>Credit Hours: 3</b>	Lecture Hrs. (45), Tutorial Hrs. (0), Lab (0), <b>Total Credits ( 45 )</b>
<b>College/ Department:</b>	College of Engineering/Industrial and Systems Engineering

Course Description:
This course is a general course designed to teach engineers the basic management skills they will need to be effective throughout their careers. It covers organization structure and the role of engineers in management of organizations. The management process, management and planning strategies, managerial functions related to production, inventory and human resources. Topics cover the basic elements of project planning and control including process of project management, strategic and intermediate term planning, organizing, leadership, motivation, finance, budgeting and operations management. Case studies pertaining to engineering problems will be utilized.

Course Objectives:
This course aims to equip engineers with key management principles and skills, they will need. The skills and knowledge covered in this course include necessary exposure to common engineering management topics such as planning, organizational structure and design, project and financial management and control, leadership, motivation, ethics and professionalism and the role an engineer can play in managing an organization. It also aims to expose students to qualitative tools to manage organizations and give them a chance to work in teams and give oral presentations and write a report.

Course Learning Outcomes		
		PLO
Knowledge Understanding		
1.1	Define the basic principles of management as applicable to engineering problems	K1
1.2	Recognize the impact of adopting organizational practices in alignment with ethics and social responsibility by identifying suitable adoptive organizations.	K3
Skills		
2.1	Examine qualitative tools and techniques to manage organizations like surveys, research, voting and other methods	S2
2.2	Apply the techniques, skills, and modern engineering tools necessary for basic engineering management practices	S3
2.3	Communicate effectively in written/oral presentation	S5
Values		
3.1	Support work teams effectively	V1

Textbook:			
<b>Title:</b>	Principles of Operation Management		
<b>Author(s):</b>	Jay Heizer and Barry Render,		
<b>Publisher:</b>	Pearson	<b>Year and Edition:</b>	2016
<b>Other Useful Resources:</b>	MGMT, Chuck Williams, Cengage Learning, 2014		