

H-Form ISE 334

Course Information:	
Code and Title:	ISE 334 Total Quality Management
Prerequisites:	ISE 321 + MATH 265-2
Co requisite (if any)	-
Credit Hours: 3	Lecture Hrs. (30), Tutorial Hrs. (30), Lab (0), Total Credits (60)
College/ Department:	College of Engineering/Industrial and Systems Engineering

Course Description:
This course introduces students to the concepts, tools, and techniques used in Total Quality Management, quality cultures, effective team structures, measurement of quality, productivity, and competitiveness in an industrial environment. The course not only introduces students to the concepts of quality assurance and quality control, but also connects leadership, supplier-customer relationships, employee engagement, data collection and analysis, productivity, statistical process control, and other topics to quality and customer satisfaction. Students gain practical experience in decision-making and basic troubleshooting techniques in relation to quality.

Course Objectives:
In this course, students will explore and articulate the essential elements and obstacles associated with total quality management (TQM), gaining insights into how organizations approach the deployment of TQM. The curriculum will address the impact of attitudes, beliefs, behaviors, and ethics on quality, emphasizing the differentiation between internal and external customers and their perceptions of quality, and the subsequent influence on customer relations. Furthermore, the course will distinguish between quality assurance and quality control, while also highlighting various quality improvement strategies, including TQM, ISO implementation, and Lean Principles. Students will become acquainted with effectiveness and efficiency principles within the context of quality, productivity, and supply chain management. The importance of understanding effective communication and behavioral styles will be demonstrated, along with the application of problem-solving techniques using quality tools..

Course Learning Outcomes		
		PLO
Knowledge Understanding		
1.1	Identify the Principles of Total Quality Management.	K1
1.2	Differentiate between internal and external customers and the impact of perceptions on the organization	K3
1.3	Recognize the impact of documentation, reporting, inspecting, and auditing in product liability and costs to the individual and company.	K4
Skills		
2.1	Apply the six-step problem-solving model to address difficult customer situations	S1
2.2	Judge the purpose and fundamentals of the auditing process and comprehend traceability and chain of custody advantages and disadvantages	S4
Values		
3.1	Develop common charting methods for problem solving and data collection to judge the solution.	V2

Textbook:			
Title:	Total Quality Management		
Author(s):	Dale H.Besterfiled, et al.,		
Publisher:	Pearson	Year and Edition:	2003



Other Useful Resources:

Evans. J. R. & Lindsay. W,M “The Management and Control of Quality”,
(5thEdition),SouthWestern (Thomson Learning), 2002 (ISBN 0-324-06680-5).