



H-Form ISE 414

Course Information:	
Code and Title:	ISE 414 Advance topics in supply chain management
Prerequisites:	ISE 311
Co requisite (if any)	-
Credit Hours: 3	Lecture Hrs. (45), Tutorial Hrs. (15), Lab (0) Total Credits (60)
College/ Department:	College of Engineering/Industrial and Systems Engineering

Course Description:
The course provides an overview of state-of-the-art supply chain modelling and research methods. In particular, modelling and optimization approaches with application to multi-echelon inventory management, supply chain design, supply chain risk and supply chain coordination will be presented. Advanced conceptual and methodological practices in designing and planning supply chain systems. Advances and Strategies in supply chain procurement, transportation, distribution and warehousing, globalization, outsourcing, and technology.

Course Objectives:
This course covers the theoretical basis as well as problem solving techniques through hand calculations and computer software. At the end of the course students should have the ability to understand the advanced topics supply chain and design of supply chain networks on the basis of the learned knowledge through the course and carry a design project. Also, students will be exposed to latest research in supply chain management.

Course Learning Outcomes		
		PLO
Knowledge Understanding		
1.1	Recognize advanced topics in supply chain	K3
1.2	Explain advances and strategies in supply chain management	K4
Skills		
2.1	Identify integration of sophisticated methods for modelling risk	S1
2.2	Apply advanced solutions to minimize cost of logistics.	S3
2.3	Communicate effectively with industry	S5
Values		
3.1	Evaluate supply chains, and Report it	V2

Textbook:			
Title:	Supply Chain Management: Design, Coordination and Operations, Handbooks in OR & MS,		
Author(s):	AG de Kok, SC Graves,		
Publisher:	Elsevier	Year and Edition:	2003
Other Useful Resources:			