

COURSE NUMBER: IE 4041W, 4 credits	COURSE TITLE: Senior Design
TERMS OFFERED: Spring, Fall	PREREQUISITES: Students must have completed or be enrolled in IE 1010, 2010, 2020, 3010, 3020, 3030, 3040, 3050, 4010, 4020, 4030
TEXTBOOKS/REQUIRED MATERIAL: None.	PREPARED BY: William L. Cooper DATE OF PREPARATION: October 28, 2011
COURSE LEADER(S): William L. Cooper	CLASS/LABORATORY SCHEDULE: 2 115-minute classes per week. CONTRIBUTION OF COURSE TO MEETING PROFESSIONAL OBJECTIVES:
CATALOG DESCRIPTION: Each student works in a small team to address an open-ended problem in industrial and systems engineering. Teams work with faculty and/or industry advisors. Each team completes a project that solves its problem. Each team makes midterm and final presentations and produces a final report.	COURSE TOPICS: <ol style="list-style-type: none"> 1. Identifying, formulating, and solving open-ended problems in industrial and systems engineering. 2. Writing project reports. 3. Oral presentations.
COURSE OBJECTIVES <ol style="list-style-type: none"> 1. To enable students to conceive of and implement a solution to a complex open-ended problem in industrial and systems engineering. 2. To enable students to synthesize the knowledge and skills they have obtained during the course of their undergraduate studies 	
COURSE OUTCOMES <ol style="list-style-type: none"> 1. Students are able to formulate quantitative models for decision making. 2. Students are able to implement quantitative models for decision making. 3. Students are able to analyze quantitative models for decision making. 	

<p>4. Students are able to verbally explain solutions to technical and non-technical audiences.</p> <p>5. Students are able to write concise technical and non-technical descriptions of their analyses.</p>	
<p>ASSESSMENT TOOLS: Project, midterm and final presentations, final report, weekly progress reports.</p>	