

## **IHE 7010 – Understanding and Aiding Human Decision Making**

### **Course Description**

Methods, concepts, theories and practice of decision analysis and its role in providing decision-making assistance to human decision makers. Applications-oriented issues are emphasized.

Offered both face-to-face and online  
Graduate level – 3 credit hours

### **Course Learning Objectives**

Students enrolled in this course will learn to:

- Comprehend the importance of systematic approaches to complex decision making
- Understand the components of decision problems
- Apply appropriate decision analysis concepts and methods to analyze decision problems

### **Course Learning Outcomes**

Upon successful completion of this course, students can:

- Comprehend the importance of systematic approaches to complex decision making
- Understand the components of decision problems
- Apply appropriate decision analysis concepts and methods to analyze decision problems

### **Tentative Weekly Schedule**

Week 1	Introduction, Overview of Decision Making, Elements of Decision Making
Week 2	Structuring Decisions –and decision trees
Week 3	Decision Trees
Week 4	Multiple Choices Probability
Week 5	Influence diagrams Multi-Attribute Utility Theory
Week 6	Value of Information Exam 1 – review
Week 7	Value of Information Mid-Term Exam - 1 – Take Home, No class
Week 8	Naturalistic Decision making – 1& 2 Paper Discussion - 1
Week 9	Organizational decision making Paper Discussion - 2
Week 10	Decision Tree Software Review
Week 11	Decision making in HealthCare Paper Discussion - 3
Week 12	Creativity

Week 13 Mid Term Exam – 2, Take Home, No Class  
Graduate Student Presentation

Week 14 Ethics in decision making

Week 15 **Finals Week No Class - Final Report Due**