

Survey of Artificial Intelligence for Non-Majors

CSE 5052

Credit Hours:

3.00 - 3.00

Course Components:

Lecture

Course Description:

Survey of the basic concepts and techniques in artificial intelligence, including problem solving, knowledge representation, and machine learning.

Prerequisites and Co-requisites:

Prereq: 1211, 1221, 1222, 1223, or 2221, or Grad standing

Course Goals / Objectives:

- Master basic search techniques for problem-solving, including systematic blind search, heuristically-guided search, and optimal search
- Be familiar with game tree search methods and the requirements for expert-level game play
- Be familiar with using logic and proof as a basis for knowledge representation and automated reasoning
- Be exposed with multiple knowledge-representation formalisms
- Be exposed to problems in common sense reasoning and language understanding
- Be exposed to integrated AI architectures as a platform for building AI systems
- Be exposed to machine learning techniques and the kinds of problem they solve
- Be exposed to state-of-the-art AI applications related to robotics, machine vision, speech recognition, and computer games
- Be familiar with the implications of widely deployed AI technology for society in general and for a sample of other academic disciplines