

# **AI720 PROBLEM SOLVING METHODS**

**Credits: 3**

## **1. Recommended Background**

Basic computer science background or instructor's permission.

## **2. Course Outline**

Problem Solving: Solving Problem by Searching, Informed Search and Exploration, Constraint Satisfaction Problems, Adversarial Search.

Planning: Planning, Planning and Acting in the real world.

Uncertain Knowledge and Reasoning: Uncertainty, Probabilistic Reasoning, Logical Reasoning.

Search Techniques, informed search, Heuristics, Game-playing, Satisfiability

## **3. Reading Material**

1. N.J.Nilsson: Principles of Artificial Intelligence, Narosa Publications.
2. D. W. Patterson: Introduction to AI & Expert System, PHI.
3. S. Russell and P. Norvig. AI: A Modern Approach, 2nd Edn., McGraw-Hill, 2003.