INTRODUCTION TO ARTIFICIAL INTELLIGENCE
(NHẬP MÔN TRÍ TUỆ NHÂN TẠO)
503043

INTRODUCTION

Acknowledgement

- The contents of these slides have origin from School of Computing, National University of Singapore.
- We greatly appreciate support from Dr. Min-Yen KAN for kindly sharing these materials.

COURSE DESCRIPTION

- Module's name: *Introduction to Artificial Intelligence*
- Code: *503043*
- Credits: *3*
- Prerequisite: *Data Structure and Algorithm I; Discrete Structure*
- Lecturers: *Le Anh Cuong, Nguyen Minh Tuan, Nguyen Thanh Hien*

OBJECTIVE OF THE COURSE

1. Learners obtain the knowledge about:

- Foundations of Artificial Intelligence
- Problem solving by searching and searching strategies
- Propositional logic, First-order logic, and Inference
- Knowledge representation
- Machine learning approaches and some basic methods

2. Learners can apply the learnt techniques and methods to practice.

SYLLABUS

1. Introduction to AI and Agents
2. Solving problem by searching
3. Informed search
4. Constraint satisfaction
5. Adversarial search
6. Logical agents and propositional logic
7. First-order logic and inference
8. Knowledge representation
9. Uncertainty
10. Probabilistic reasoning
11. Learning
12. Human computer communication

TEXT BOOKS

1. Stuart Russell, Peter Norvig. Artificial Intelligence : A Modern Approach, 2nd edition. New Jersey, McGraw-Hill, 2005
2. Tom Mitchell. Machine Learning. New York, McGraw-Hill, 1997.
3. Manning and Schuetze, Foundations of Statistical Natural Language Processing, MIT Press. Cambridge, MA, 1999.

COURSE MATERIALS

You can find all lectures, tutorials, labs and solutions on Sakai:

sakai.it.tdt.edu.vn

Assessment

- 10% - Exercise in class
- 20% - Mid-term exam
- 20% - Assignment
- 50% - Final exam (Project)