

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

INTRODUCTION

Acknowledgement

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- 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 Duc Cuong

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

- 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.
- 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 Lab
- 20% Mid-term exam
- 20% Assignment
- 50% Final exam