## **COURSE DETAIL**

3.00

# **ARTIFICIAL INTELLIGENCE Country** Taiwan **Host Institution National Taiwan University** Program(s) National Taiwan University **UCEAP Course Level Upper Division UCEAP Subject Area(s)** Computer Science **UCEAP Course Number** 114 **UCEAP Course Suffix UCEAP Official Title** ARTIFICIAL INTELLIGENCE **UCEAP Transcript Title** ARTIFICIAL INTEL **UCEAP Quarter Units** 4.50 **UCEAP Semester Units**

#### **Course Description**

This course provides a study of the basic techniques for building intelligent computer systems and how Artificial Intelligence is applied to problems. It covers theory, algorithms, and their applications. The course is divided into four parts. The first part of the course includes an introduction to AI, history of AI, problem solving and search. The second part covers machine learning, linear models, decision trees, and neural networks. The third part studies decision marking and includes topics such as, logical agents, quantifying uncertainty, Bayesian networks, Markov decision process, and reinforcement learning. The final part of the course examines natural language processing, computer vision, and robotics.

#### Language(s) of Instruction

English

#### **Host Institution Course Number**

CSIE5400

#### **Host Institution Course Title**

ARTIFICIAL INTELLIGENCE

#### **Host Institution Campus**

**Host Institution Faculty** 

**Host Institution Degree** 

### **Host Institution Department**

Graduate Institute of Computer Science and Information Engineering

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