## **COURSE DETAIL**

3.00

# **INTRODUCTION TO ARTIFICIAL INTELLIGENCE Country** China **Host Institution Fudan University** Program(s) **Fudan University UCEAP Course Level Upper Division UCEAP Subject Area(s) Computer Science UCEAP Course Number** 128 **UCEAP Course Suffix UCEAP Official Title** INTRODUCTION TO ARTIFICIAL INTELLIGENCE **UCEAP Transcript Title** INTRO TO AI **UCEAP Quarter Units** 4.50 **UCEAP Semester Units**

#### **Course Description**

This course is a core course in the field of computer science. The focus of the course is to introduce students to the basic knowledge and algorithms in the field of artificial intelligence, and guide them to use artificial intelligence models to solve real-world problems in the era of big data through practical projects in the course.

Brief Introduction to the Course Content: The content of this course mainly covers several basic modules in the field of artificial intelligence, from simple to complex, gradually explaining the principles and techniques used by intelligent agents to solve real-world problems. Specific content includes: search algorithms (basic search algorithms for trees and graphs, etc.), Markov decision processes (Markov models, etc.), game algorithms (Alpha-Beta pruning techniques, etc.), uncertain information reasoning methods (Bayesian models), and knowledge representation methods (first-order, higher-order, and semantic representations, etc.). Through the combination of course practice, students will be provided with means and methods to solve real-world big data problems.

This course requires students to have the ability to write simple programs using Python or be able to quickly grasp the use of Python. Prerequisites for the course are computer data structures and foundations of probability theory. By studying this course, students will understand some core issues and applications in the field of artificial intelligence, and master the relevant principles and algorithms. In addition, students will acquire the ability to write, maintain, and test Python language, and be able to use Python to solve real-world problems.

#### Language(s) of Instruction

Chinese

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

DATA130008

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

INTRODUCTION TO ARTIFICIAL INTELLIGENCE

## **Host Institution Course Details**

# **Host Institution Campus**

# **Host Institution Faculty**

Zongyu WEI

## **Host Institution Degree**

## **Host Institution Department**

School of Data Science

## **Course Last Reviewed**

2023-2024

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