COURSE DETAILS
Course Code: F29XP
Full Course Title: Artificial Intelligence
SCQF Level: 9
SCAF Credits: 15
Available as Elective: No

DELIVERY LEVEL
Undergraduate: Yes
Postgraduate Taught: No
Postgraduate Research: No

COURSE AIMS
Study how to use computers to simulate human intelligence activities such as: perception, reasoning, learning, thinking, and planning

LEARNING OUTCOMES – SUBJECT MASTERY
Explore several philosophical and ethical issues related to artificial intelligence.
Understand and master formal methods and techniques such as problem description, problem modeling and search space analysis.
Select the optimal data structure and algorithm for subprocesses.
Design the heuristic function of sliding blocks.
Inductive chess shape.
Performance test report.
A simple and reasonable model can be built for specific problems.

LEARNING OUTCOMES – PERSONAL ABILITIES
Ability to do complex programming.
F29XP Artificial Intelligence

Ability to work in a team.

Skills of Literature search.

**SYLLABUS**

This course is mainly divided into two parts: theoretical teaching and practical teaching.

**Theoretical Teaching**

The development history and latest progress of artificial intelligence.

Thoughts and characteristics of various search strategies.

The minimax search of game trees and the pruning strategy of $\alpha$-$\beta$.

The minimax search and pruning process analysis of tic-tac-toe.

**Practical Teaching**

The optimal solution for the "sliding block" game.

Design the "Connect6" game program.

**COURSE RELATIONSHIPS**

N/A

**LOCATION AND ASSESSMENT METHODS**

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