

Intelligent Systems

General Engineer
Subjects Elective
2 credit

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1. Course Description

We overview classical artificial intelligence and discuss its limitations. Also, this course deals with the following topics: soft-computing, pattern recognition and machine learning.

2. Course Objectives

The aim of the course is to learn fundamental concepts and techniques of intelligent systems.

3. Grading Policy

Students are evaluated with two reports (50%, 50%).

4. Textbook and Reference

Textbook

No textbook is used.

The following book written in English is recommended.

-Stuart Russel, Peter Norvig, Artificial Intelligence: A Modern Approach, Global Edition, Pearson Education Limited, ISBN978-1292153964, 2016.

5. Requirements(Assignments)

Basic skills of programming and the knowledge of computer science are required for students.

6. Note

7. Schedule

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| [1] | Introduction |
| [2] | Classical artificial intelligent I |
| [3] | Classical artificial intelligent II |
| [4] | Classical artificial intelligent III |
| [5] | Limitations of AI |
| [6] | Subsumption architecture |
| [7] | Soft-computing I |
| [8] | Soft-computing II |
| [9] | Soft-computing III |
| [10] | Soft-computing IV |
| [11] | Pattern recognition and machine learning I |
| [12] | Pattern recognition and machine learning II |
| [13] | Reinforcement learning I |
| [14] | Reinforcement learning II |
| [15] | Summary |