

30223 - Artificial Intelligence

Syllabus Information

Academic Year: 2020/21

Subject: 30223 - Artificial Intelligence

Faculty / School: 110 - Escuela de Ingeniería y Arquitectura
326 - Escuela Universitaria Politécnica de Teruel

Degree: 330 - Complementos de formación Máster/Doctorado
443 - Bachelor's Degree in Informatics Engineering
439 - Bachelor's Degree in Informatics Engineering

ECTS: 6.0

Year: XX

Semester: 330 - First semester

439 - First semester

439 - First semester

439 - First semester

439 - First semester

439 - First semester

439 - First semester

439 - First semester

439 - First semester

439 - First semester

439 - First semester

439 - First semester

439 - First semester

439 - First semester

439 - First semester

Subject Type: 443 - Compulsory

330 - ENG/Complementos de Formación

439 - Compulsory

Module: ---

1.General information

1.1.Aims of the course

1.2.Context and importance of this course in the degree

1.3.Recommendations to take this course

2.Learning goals

2.1.Competences

2.2.Learning goals

2.3.Importance of learning goals

3.Assessment (1st and 2nd call)

3.1.Assessment tasks (description of tasks, marking system and assessment criteria)

4.Methodology, learning tasks, syllabus and resources

4.1. Methodological overview

The methodology followed in this course is oriented towards the achievement of the learning objectives. A wide range of teaching and learning tasks are implemented such as: lectures, programming assignments in laboratory sessions, and homework. The development of the master classes and programming activities in the laboratory requires previous study work and the preparation of the activity.

4.2. Learning tasks

The course includes the following learning tasks:

- Lectures,
- problem-solving sessions (with and without professor assistance),
- programming assignments in the laboratory,
- Autonomous work, study and evaluation activities.

4.3. Syllabus

The course will address the following topics:

- Ideas and techniques underlying the design of intelligent computer systems.
- Topics include search, game playing, knowledge representation, inference, planning, reasoning under uncertainty and machine learning

4.4. Course planning and calendar

Schedule

The timetable will be defined by the centre according to the academic calendar.

Student work

Successful students can spend 10 hours a week on the assignments, depending on their background skills and level of interest, which are distributed in the following way:

- 1) **Lectures (T1)** (30 hours).
- 2) **Problem Solving sessions (T2)** (15 hours).
- 3) **Problem assignments in the laboratory (T2)** (15 hours, five sessions of 3 hours)
- 4) **Autonomous work (T6)** (20 hours).
- 5) **Study (T7)** (60 hours).
- 6) **Evaluation (T8)** (10 hours).

4.5. Bibliography and recommended resources

[BB: Bibliografía básica / BC: Bibliografía complementaria]

- **Zaragoza:**

<http://psfunizar7.unizar.es/br13/egAsignaturas.php?codigo=30223&Identificador=14674>

- [BB] Russell, Stuart J. *Inteligencia artificial : un enfoque moderno* / Stuart J. Russell y Peter Norvig ; traducción, Juan Manuel Cordacho Rodríguez ... [et al.] ; revisión técnica, Juan Manuel Cordacho Rodríguez ... [et al.] ; coordinación general de la traducción y revisión técnica, Luis Joyanes Aguilar . - 2ª ed. Madrid : Pearson Educación, D. L. 2008
- [BB] Russell, Stuart J.. *Artificial intelligence : a modern approach* / Stuart J. Russell and Peter Norvig ; contributing writers, Ernest Davis, Douglas D. Edwards, David Forsyth . - 3rd ed. Boston : Pearson, cop. 2010

Listado de URL

- Transparencias y apuntes de la asignatura. Enunciados de problemas, casos de estudio y Guiones de prácticas[<http://add.unizar.es>]
- **Teruel:**

<http://psfunizar7.unizar.es/br13/egAsignaturas.php?codigo=30223&Identificador=13595>

- [BB] Russell, Stuart J.. *Artificial intelligence : a modern approach* / Stuart J. Russell and Peter Norvig ; contributing writers, Ernest Davis, Douglas D. Edwards, David Forsyth . - 3rd ed. Boston : Pearson, cop. 2010