| Title | Code |
|---|---|
| **Knowledge Engineering** | **1010332431010330700** |
| Field: **Computer science** | Year / Semester: **2 / 3** |
| Specialty: **Informatics technology** | Course: **core** |
| Hours: Lectures: **1** Classes: **-** Laboratory: **1** Projects / seminars: **-** | Number of credits: **5** |
| | Language: **polish** |

## Lecturer:

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## Status of the course in the study program:

Obligatory course, Faculty of Electrical Engineering, field Computer Science, specialty Computer Science Technologies, II level study

## Assumptions and objectives of the course:

Clever using of techniques of knowledge acquisition and methods of knowledge representation. Competence for designing and implementing small expert systems.

## Contents of the course (course description):

The notions of data, information and knowledge. Basic rules of knowledge engineering.

Knowledge sources and methods of knowledge acquisition.

Domain ontologies and taxonomies.

Methods of (certain and uncertain) knowledge representation. Algorithms of reasoning.

Truth maintenance problem.

Expert systems and their application to the diagnostics, classification, construction, simulation and prognosis. Medical expert systems.

Programming tools for designing expert systems (CLIPS, FuzzyCLIPS, JESS, NEURONIX, NETICA).

## Introductory courses and the required pre-knowledge:

Knowledge of basics of artificial intelligence.

## Courses form and teaching methods:

Lecture illustrated with slides and laboratory exercises

## Form and terms of complete the course - requirements and assessment methods:

Written test, an expert system project and implementation

## Basic Bibliography:

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## Additional Bibliography:

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