# Expert System

| Course code | student workload | credits (according to ECTS) | semester | frequency | duration |
|---|---|---|---|---|---|
| CIF61057 | 90 hours | 4,5 | Sem. 5 & 7 | each odd-semester | 16 meetings |

| 1 | Types of courses | contact hours | independent study | class size |
|---|---|---|---|---|
| | *Elective* | 63 hours | 27 hours | 40 students |

**5 Prerequisites for participation**

Have completed Algorithms and Data Structures

**2 Learning outcomes**

IF-ILO-3

Graduates are able to develop professional careers in the field of computer science based on quality aspects, data-based decision making, be responsible, and make continuous improvements.

IF-ILO-7

Mastering the theoretical concept and principles of computer science, especially in the aspect of algorithms, programming, intelligent systems, information management, parallel and distributed computing, information security, human-computer interaction, software engineering, and fundamentals of computer systems and networks.

IF-ILO-10

Graduates are able to analyze, design, build and evaluate an intelligent system that has the ability to learn from the environment.

**3 Subject aims**

Students are able to know and understand the basic concepts of expert systems

Students are able to use expert system preparation methodology

Students are able to use the knowledge acquisition method, knowledge representation method

Students are able to use inference engine preparation methods and explain inference results

Students are able to use methods to overcome data uncertainty

Students are able to use a variety of current expert system development methods

**4 Teaching methods**

lectures, case study, class discussion, presentation

**6 Assessment methods**

assignment, mid-term examination, end-term examination, project evaluation, practical-skill assessment

**8 This module is used in the following degree programmes as well**

**10 Responsibility for module**

| 11 | **Other information** |
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| | 1. Marakas, George M., Decision Support Systems in the 21st Century, 2nd Edition, Prentice Hall, 2008<br>2. Russell, Stuart J. and Peter Norvig, "Artificial Intelligence A Modern Approach", Second Edition, Pearson Education, Inc., Upper Saddle River, New Jersey 07458, 2003.<br>3. Turban, Efraim & Aronson, Jay E., "Decision Support Systems and Intelligent Systems", 8th edition, Prentice Hall, Upper Saddle River, NJ, 2007 |