**NEAR EAST UNİVERSİTY**

**Faculty of Engineering**

Department of Computer Engineering

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| *Course Code* | ***Com502*** | *Course Title* | **Expert systems** | |
| *Academic Year* | ***2015-2016*** | *Fall* | *Course Credit* | *4* |

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| *Assistant(s)* |  |  |  |  |

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| *Course objectives* | In this course students learn basic concepts and approaches of building and application of Expert Systems. This course includes: the main definitions, structure and properties of ES, methods of knowledge acquisition and representations, certainty factors and inference problems in expert systems. Also are conceded programming language PROLOG and practical ES-VP and ESPLAN. |
| *Weekly Schedule* | **Week** 1. Introduction to Expert systems(ES)  **Week** 2. Building of ES  **Week** 3. Knowledge acquisition  **Week** 4.Certainty factors in ES  **Week** 5. Knowledge representation in ES  **Week** 6. The Frames models of knowledge representation  **Week** 7. The Semantic networks model .  **Week** 8.Decision Makingunder uncertainty.  **Week** 9. The inference problem.  **Week** 10. Logical models in ES  **Week** 11. Programming language of ES Prolog.  **Week** 12. Expert system-VP.  **Week** 13. Fuzzy Logıc  **Week** 14. Fuzzy expert system-ESPLAN |
| *Textbook(s)/*  *Required Reading* | James P. Lgnızıo, Introductıon to Expert System The Development and Implementatıonof rule based Expert System, McGraw Hıll Internatıonal Edıtıons, Computer ScıenceSerıes 1991. |
| *Recommended Reading* | Peter Jackson, Introductıon to Expert System, Addıson Wesley Longman Lımıted 1999 |
| *Grading Criteris* | *Midterm exam 35%*  *Presentation 20%*  *Final exam 45%* |