| course title |  | semester | $\mathbf{T + U}$ | credit | ECTS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Discrete Structures |  | 6 | $3+0$ | 3 | 3 |
| Prerequisite Courses | None |  |  |  |  |
| Language of the Course | English |  |  |  |  |
| Course Level | Undergraduate |  |  |  |  |
| Course Type | Compulsory |  |  |  |  |
| Course Coordinator |  |  |  |  |  |
| instructors |  |  |  |  |  |
| Course Assistants |  |  |  |  |  |
| The aim of the course | Separate maths of your subjects And these computer engineering of your apps to be examined aims . |  |  |  |  |
| Course Content | This lesson finally student ; <br> 1.Mathematical logic And propositions using given any One problem ( conceptual or corporate ) abstract by thinking analysis by doing expression can the problem of the solution whether not, if solution if so in what way And How that it is by interpreting to be found . <br> 2. Computer in engineering -most important data from the structures someone the one which... with graph $\qquad$ relating to all your features grasping And your lines some important in algorithms of their use understanding |  |  |  |  |
| Course Learning Outcomes | Separate of mathematics of kobnus And these computer engineering of applications examination. |  |  |  |  |
| weeks | Topics |  |  |  |  |
| what's that | Separate to math Introduction, Proposition |  |  |  |  |
| 2 Mathemat | Mathematical Proof Methods |  |  |  |  |
| 3 Mathemat | Mathematical Proof Methods |  |  |  |  |
| Cluster theory And forced |  |  |  |  |  |
| links And Operations, Functions |  |  |  |  |  |
| links And Operations, Functions |  |  |  |  |  |
| 7 Midterm | Midterm Exam |  |  |  |  |
| $8 \quad$ Groups A | Groups And Half Groups, Cage Structures and Boolean Algebra |  |  |  |  |
| 9 Groups A | Groups And Half Groups, Cage Structures and Boolean Algebra |  |  |  |  |
| $10 \times$ Graph Th | Graph Theory |  |  |  |  |
| 11th Graph Th | Graph Theory |  |  |  |  |
| 12 finite stat | finite stateful machines |  |  |  |  |
| Turing Machines |  |  |  |  |  |
| Turing Machines |  |  |  |  |  |
|  |  |  |  |  |  |
| General Competencies |  |  |  |  |  |
| Separate maths concepts And their problems consideration by taking models And analysis it does |  |  |  |  |  |
| resources |  |  |  |  |  |
| Grimaldi, P. (2004). Discrete and Combinatorial Mathematics, Addison-Wesley. Johnsonbaugh, R. (2001). Discrete Mathematics, Prentice-Hall. |  |  |  |  |  |
|  | Eva | System |  |  |  |


|  | WITH PROGRAM LEARNING OUTCOMES |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | COURSE LEARNING OUTCOMES RELATIONSHIP TABLE |  |  |  |  |  |  |  |  |  |
|  | PO1 PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 |
| LO1 | 5 5 | 3 | 5 | 5 | 5 | 5 | 3 | 3 | 3 | 3 |
|  | 5 | 3 | 5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| LO: Learning Outcomes OP: Program Outcomes |  |  |  |  |  |  |  |  |  |  |
| Contri bution Level | 1 Very Low | 2 Low |  | 3 Medi |  | 4 High |  |  | High |  |

Program Outcomes and Related Course relationship

| Lesson | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Discrete <br> Structures | 5 | 5 | 3 | 5 | 4 | 4 | 4 | 3 | 3 | 3 | 3 |

