



# ESOGÜ Mathematics and Computer Sciences COURSE INFORMATION FORM

|                 |        |
|-----------------|--------|
| <b>SEMESTER</b> | Spring |
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|                    |           |                    |          |
|--------------------|-----------|--------------------|----------|
| <b>COURSE CODE</b> | 821618028 | <b>COURSE NAME</b> | Maple II |
|--------------------|-----------|--------------------|----------|

| SEMESTER | WEEKLY COURSE PERIOD |          |           | COURSE OF |      |                               |          |
|----------|----------------------|----------|-----------|-----------|------|-------------------------------|----------|
|          | Theory               | Practice | Labratory | Credit    | ECTS | TYPE                          | LANGUAGE |
| 8        | 2                    | 2        | 0         | 3         | 5    | COMPULSORY ( ) ELECTIVE ( X ) | Turkish  |

### COURSE CATAGORY

|                    |                 |  |                       |
|--------------------|-----------------|--|-----------------------|
| <b>Mathematics</b> | <b>Computer</b> |  | <b>Social Science</b> |
| X                  | X               |  |                       |

### ASSESSMENT CRITERIA

|                   | Evaluation Type | Quantity | %  |
|-------------------|-----------------|----------|----|
| <b>MID-TERM</b>   | 1st Mid-Term    | 1        | 50 |
|                   | 2nd Mid-Term    |          |    |
|                   | Quiz            |          |    |
|                   | Homework        |          |    |
|                   | Project         |          |    |
|                   | Report          |          |    |
|                   | Others (.....)  |          |    |
| <b>FINAL EXAM</b> |                 | 1        | 50 |

|                        |       |
|------------------------|-------|
| <b>PREREQUIEITE(S)</b> | None. |
|------------------------|-------|

|                           |   |
|---------------------------|---|
| <b>COURSE DESCRIPTION</b> | Maple Program<br>Maple and Mathematics,<br>Programming in MAPLE |
|---------------------------|---|

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| <b>COURSE OBJECTIVES</b> | The aim of this course is to introduce the Mathematical Program, MAPLE-V, and solving Some Basic Math Problems in MAPLE. |
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| <b>ADDITIVE OF COURSE TO APPLY PROFESSIONAL EDUATION</b> | Ability of using computer programming and solve fundamental mathematical problems |
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| <b>COURSE OUTCOMES</b> | Be able to solve some Math problems in MAPLE. |
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|                 |  |
|-----------------|--|
| <b>TEXTBOOK</b> | 1-) Maple V : B. W. Char; K. O. Geddes; G. L. Gonnet – Springer Verlag<br>2-) Maple ve Matematik : Basri Çelik |
|-----------------|--|

|                         |                          |
|-------------------------|--------------------------|
| <b>OTHER REFERENCES</b> | Maple V Computer Program |
|-------------------------|--------------------------|

|                                      |       |
|--------------------------------------|-------|
| <b>TOOLS AND EQUIPMENTS REQUIRED</b> | None. |
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## COURSE SYLLABUS

| WEEK  | TOPICS                        |
|-------|-------------------------------|
| 1     | What is the MAPLE? (A Review) |
| 2     | MAPLE and Mathematics         |
| 3     | Graphing in MAPLE             |
| 4     | Graphing in MAPLE             |
| 5     | Graphing in MAPLE             |
| 6     | Graphing in MAPLE             |
| 7     | Applications                  |
| 8     | Mid-term Exam                 |
| 9     | Programming in MAPLE          |
| 10    | Programming in MAPLE          |
| 11    | Programming in MAPLE          |
| 12    | Programming in MAPLE          |
| 13    | Applications                  |
| 14    | Applications                  |
| 15,16 | Final Exam                    |

| NO | PROGRAM OUTCOMES  | 3 | 2 | 1 |
|----|---|---|---|---|
| 1  | The ability to apply knowledges of Mathematics - Computer,  | X |   |   |
| 2  | To have sufficient theoretical and practical knowledge of Mathematics at international level,   |   | X |   |
| 3  | The ability of describing, modelling and solving of mathematical problems at Mathematics and related subjects,  |   | X |   |
| 4  | The skill to solve and design a problem process in accordance with a defined target,  |   | X |   |
| 5  | Skills to analyze data, interpret and apply to other datum and using these data on computer,  |   | X |   |
| 6  | The skill to use the modern techniques and computational tools needed for mathematical applications,  |   | X |   |
| 7  | The skill to make team work within the discipline and interdisciplinary,  |   | X |   |
| 8  | The ability to improve oneself by following the developments on other modern, scientific and technological subjects as well as Mathematics - Computer,                          |   | X |   |
| 9  | The skill to communicate orally and in written way, in a clear and concise manner by having individual work skills and ability to independently decide and analytical thinking, |   |   | X |
| 10 | The skill to have professional and ethical responsibility,  |   | X |   |
| 11 | The skill to have consciousness for quality issues and scientific research,   |   | X |   |
| 12 | The skill to be sensitive to environmental issues related with problems and development of living area and consistent in the social relations,                                  |   |   | X |
| 13 | Ability to solve problems in the working life faced to find an appropriate algorithms via mathematical modeling and to write computer programs,                                 |   | X |   |
| 14 | The skill to developed design of software systems at different complex levels,  |   |   | X |
| 15 | The credence of necessity of life-long learning and ability to apply the formation long-life learning.  | X |   |   |

1:None. 2:Partially contribution. 3: Completely contribution.

**Instructor(s):** Assoc. Prof. Ahmet Faruk ASLAN

**Signature:**

**Date:**