## MA 562-Advanced Theory of Airfoil and Propeller

| Course Code:                                     | MA-562                                  |
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| UTAA Credit (Theoretical-Laboratory hours/week): | 3(3-0)                                  |
| ECTS Credit:                                     | 6.0                                     |
| Department:                                      | Mechanical and Aeronautical Engineering |
| Language of Instruction:                         | English                                 |
| Level of Study:                                  | Graduate                                |
| Offered Semester:                                | Fall and Spring Semesters.              |

## **Course Objectives**

To provide our students with knowledge on basic aerodynamics, atmospheric physics and flight theory. In addition, the aim of this course is to gain the necessary knowledge about propeller terms, propeller structure, storage and propeller maintenance.

## **Course Content**

This course; Covers atmospheric physics, aerodynamics, flight theory, flight stability, propeller terms, propeller structure, propeller pitch control, propeller ice protection, propeller maintenance and propeller storage

## **Course Learning Outcomes**

- 1-Aircraft mechanical and electrical systems / components recognize the working principles.
- 2-The formation of the lift in aircraft flight and knows the theory.
- 3-The formation of the lift in aircraft flight and knows the theory.
- 4-Know the basic issues related to aircraft maintenance and repair and apply.