MAT 574- Statistical Computing

Course Code:	MAT-574
UTAA Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	6.0
Department:	Unmanned and Autonomous System Engineering
Language of Instruction:	English
Level of Study:	Graduate
Offered Semester:	Fall and Spring Semesters.

Course Objectives

The objective of statistical computing is to learn how to use Matlab statistical tools to analyze data in tables in questionnaires, to interpret the obtained results and to use graphics to explore and understand data.

Course Content

Data and scale types, descriptive statistics, discrete and continuous distributions, correlation analysis, T-Tests, analysis of variance, cluster analysis, plotting and visualization.

Course Learning Outcomes

1-Distinguishing between different types of data and scales. Questionnaire analysis.

2-Using Matlab to perform statistical analysis.

3-Determining the relations between data.

4-Interpreting the results obtained by the statistical methods.

5-Using plots to visualize the results of statistical methods.