

Restricted Elective I (Programming Courses)

Course Code:

RE XX3

Course Period:

Autumn

Course Type:

Core

Credits:

3

Theoric:

3

Practice:

0

Laboratory Hour:

0

ECTS:

5

Course Language:

English

Course Objectives:

The purpose of this course is to help the student learn the general principles of modern programming concepts using the programming language MATLAB® and apply those skills towards the solution of engineering problems. Upon successful completion of this course, the student will be able to:

- Understand basic foundations of computer programming
- Have a basic understanding of how engineers use computers to numerically solve problems
- Have a basic understanding of how to test and debug

computer programs •Have the ability and an appreciation for good documentation of computer programs •Understand basic algorithms for numerical solution of engineering problems

Course Content:

Students must choose one of the courses ES 112, ES 117, ES 118