

COURSE SYLLABUS

Informatics and Programming For Tourism

2021-1-F7601M053

Learning objectives

The aim of the course is to provide to the students the skill for the use of Matlab language to solve problems of medium complexity in their field of specialization and to translate them into automated procedures

Contents

Matlab programming and applications of the language to data manipulation and problem modeling

Detailed program

- matrix property review
- vectorial instructions
- Introduction to MatLab:
 - GUI;
 - MatLab programming: peculiarity.
- MatLab programming:
 - operators, data types, variables and expressions;
 - flow control;
 - functions, parameter passing, local and global variables;
 - script;
 - predefined functions for matrix, vector, polynomial manipulation ;
 - other data structures (basics);
 - data exchange with Excel File;
 - 2D graphics (basics).

Prerequisites

Mathematical-logical knowledge as acquired during high-school, linear algebra and basic concepts on algorithms.

Teaching methods

Frontal lessons. Lessons take place in computer science lab to allow students to immediately apply the concepts explained.

During the Covid-19 emergency period, lessons will take place in synchronous videoconference.

Assessment methods

Learning assessment includes a written exam and possibly an oral exam. The written exam will take place in the teaching laboratories to evaluate the student's skills in using Matlab and their competence in solving simple problems.

In the Covid-19 emergency period, exams will only be online. They will be carried out using the WebEx platform and esameonline platform.

Textbooks and Reading Materials

- G. Naldi, G. Pareschi, Matlab, Apogeo

Semester

First semester

Teaching language

Italian
