



Mechanical Engineering Dept.
ME-Robotics: INTN125
Instructor: Dr. Ayman A. Nada

Cairo University
Faculty of Engineering

Project Statement
Date: Spring. 2021
Time:

Instructions: Use one of the following software MATLAB / Python / C++

Construct the flowchart(s) and the necessary subroutines for simulating the motion of robotic arm of three planar links. The program may include the following modules:

- Direct kinematics Model
- Inverse kinematics Model
- Calculation of working area using Green's theorem
- Plotting the working area
- Generation of straight line trajectory between two points in the working area
- Robot animation

Test your modules with the aid of your solution of PS3-3 and PS4

Discuss the necessary steps to run your code and show the output graphs/results of your testing examples.