

MathWorks Minidrone Workshop @ WEEF&GEDC 2024

Overview

Learn about control systems, navigation, and image processing from the perspective of a drone.

Using this workshop, we are trying to help students develop industry-relevant skills using drones by making education fun! Through this workshop, you will learn how to model, simulate, and fly a drone. The workshop will walk you through control systems, path planning, and image processing for a drone and showcase how you can deploy the Simulink model on the drone hardware.

The workshop will culminate in a hands-on friendly fun game between the participants. Join us to learn how to design a drone-based autonomous system.

Highlights

The workshop will equip the students with the basics of the following key skills which are relevant in the aerospace, automotive, and robotics industry:

- Simulation and Control
- Finite State Machines and Control Logic
- Image Processing and Computer Vision
- Embedded Code Generation and Hardware Deployment

Who can attend?

- Students
- Academicians
- Anyone who is interested in learning about drones


Student Details needed on the application form

- Details to collect could be first name, last name, e-mail ID, organization/university, country, educational qualification (graduate, postgraduate, etc).
- Checkbox on 'Are you willing to complete the pre-work for the workshop?' Details will be sent via a different e-mail after registration.
- Are you over 18+?

Prerequisites

- Complete [MATLAB Onramp](#) and submit the progress report link

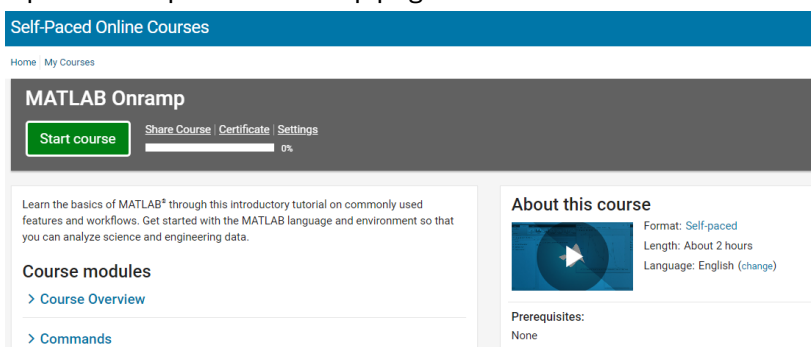
How to access the pre-requisite courses?

1. Sign in to your MathWorks Account or create a new one, if you do not have one.
Link to Sign in to your MathWorks Account or create a new one:
<https://www.mathworks.com/login?uri=%2Fmwaccount%2F>
2. Navigate to the  at the top right of the page
3. Select the 'Online training' option
4. Select 'MATLAB Onramp' and complete the course (Time to complete: ~ 2 hours)

What to submit?

After 100% completion of the two courses (MATLAB Onramp and Simulink Onramp), use the following process to submit the links of your Progress Report:

1. Open the respective Onramp page



2. Click on 'Certificate'
3. Under the dialogue box, select 'Progress Report' and select 'Copy'

