

Program schedule for workshop on autopilot programming of UAVs

(Day1) 14-2-2020

Date	Time	Agenda
14-2-2020 (Friday)	9:30 AM- 9:50 AM	Registration
Tea break		
14-2-2020 (Friday)	10:00 AM- 1:30 PM	Introductory Lecture by Head of the Department, Aerospace Engineering and Applied Mechanics, IEST, Shibpur Workshop basics by invited guest (IITK): <ul style="list-style-type: none">• Coordinate frames and transformation matrix• Theory of PID controller• Sensors• State estimator• Basic understating with Ubuntu
Lunch break		
14-2-2020 (Friday)	2:30 PM- 3:30 PM	Invited Lecture by guest speaker, Professor Manoranjan Sinha, Professor and Head of the Department, Aerospace Engineering, IIT, Kharagpur on Autopilot, Flight Dynamics, Navigation and Control
Tea break		
	3:45 PM- 5:30 PM	Hands-on training by invited guest (IITK): <ul style="list-style-type: none">• Px4 environment and toolchain setup on Ubuntu• Intro to px4 firmware and hardware and ground control station Px4 coding (writing a simple app)• Px4 (How to use matlab with px4 firmware)• Px4 (Advanced: fly a vehicle using px4/ardupilot)

Note :

1. Participants should bring their own laptops with Ubuntu installed (or dual boot mode)
2. Knowledge on C++ is required for programming the autopilot

Program schedule for workshop on autopilot programming of UAVs

(Day2) 15-2-2020

Date	Time	Agenda
15-2-2020 (Saturday)	9:30 AM- 11:30 AM	Hands-on training (contd..) by invited guest (IITK) Testing of autopilot
Tea break		
15-2-2020 (Saturday)	11:40 AM- 2:00 PM	Flight demonstration Valedictory session