

# INDIAN INSTITUTE OF TECHNOLOGY, IIT (Mandi)



AstraX - 2020

In association with

**SKY AEROSPACE**



ENGINEERING RESEARCH & SKILL DEVELOPMENT ORGANIZATION – BANGALORE, INDIA

Conducting .....

AstraX'20

**INDIA'S FIRST EVER LIVE PRACTICAL WORKSHOP ON**

**RC F22 RAPTOR FIGHTER AIRCRAFT MAKING & FLIGHT SKY TEST**

**GET READY TO MAKE YOUR OWN RC FIGHTER AIRCRAFT ON March 13<sup>th</sup> & 14<sup>th</sup> – 2020**

**Venue – Indian Institute of Technology (IIT, Mandi)**



AIRCRAFT  
DESIGN



STRUCTURE  
FABRICATION



ELECTRONICS  
CONTROL SYSTEM



FLIGHT TEST ON SKY  
@ IIT Mandi



**Workshop Date – March 13<sup>th</sup> & 14<sup>th</sup> ,2020**

**Fees – 999/Student**

**To book your ticket – Login <http://www.theskyaerospace.com>**

**Booking starts from – 4<sup>th</sup> Feb (Tuesday)**

**For further queries Contact : +91-9677803678 , Mail ID: [info@theskyaerospace.com](mailto:info@theskyaerospace.com)**

**Highlights of this Aeronautics Workshop ?**

- Aircraft Design session by Aerospace Engineering Industrial Experts
- Live RC KIT Making Training to all students
- RC Materials given to all Individual Team
- Aim of the Workshop – At End of the Workshop ,Every Students Team should have to Make their
- Own RC Plane
- Fly Test – Only by RC Pilot

**Selected Best students from March 13<sup>th</sup> Workshop will get 30% fee concession for**

**Five days Aeronautics Internship Program ,Starts from December April 25<sup>th</sup> @Bangalore campus**


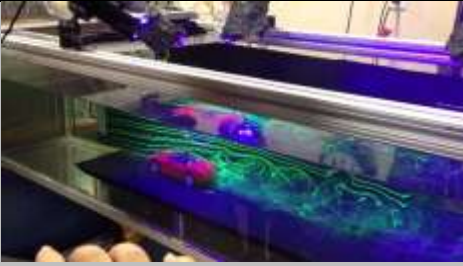
**PRIZE MONEY FOR BEST STUDENTS**



- Best Aircraft Making Team
- Best Flight Performance Team
- Best Student For Objective Type Contest

**WORK SCHEDULE -DAY -1**



ACTIVITY	TECHNICAL CORE	TRAINING METHODOLOGY	THEME
<b>INAGURATION</b>			
*Secrets of Science Behind Birds Fly *Design of Paper Plane Aero science	Aerodynamics of Light weight Aircraft	Bird Models Depron Wing  Visual File 2D- Presentation	
Design and Selection of Aircraft Aerodynamic Parts	Wing Position – Shape –NACA Airfoil Science – Fuselage –Tail configuration -	Aircraft configuration-  Visual Presentation	

## DAY-2

ACTIVITY	TECHNICAL CORE	TRAINING METHODOLOGY	THEME
<b>Aerodynamics – Fighter Aircraft</b>			
Aerodynamic Forces- Analysis	Lift- Drag- Thrust Design Ratio Drag polar Drag Divergence	Aircraft Model Airfoil Video File	
Entire Aircraft Design	2D Drawing Sheet Model-Cutting Measurement Engineering Graphics	Raw Material – Practical Session	
<b>Aero Design Contest</b>			

ACTIVITY	TECHNICAL CORE	TRAINING METHODOLOGY	THEME
<b>Aircraft Avionics – Electrical Engg</b>			
Servo Motors Flight Controller ESC-Speed	Electronic and Electrical Power Unit & Control	Technical Presentation Live components Model Video File	
Entire Electrical circuit Engineering	Connections Board Pins Circuit Board Design Layout	Raw Material Practical Session	



ACTIVITY	E.TECHNICAL CORE	TRAINING METHODOLOGY	THEME
Flight Mechanics & Maneuver			
Range –Climb  Endurance  Flight Mechanics Stability Yaw- Roll- Pitch	Flight Maneuver through Computer simulation	Flight Simulator - Software Touch &Feel Practical Session  Live components Model	
Sky Test of RC Plane	Live Feel of Flying with Hand Pilot Control of Transmitter – Machine	RC –Piloting	
Certificate Distribution			

## FLIGHT TEST-DAY 02



**KIT INCLUDES - HIGH STRENGTH DEPRON MATERIAL FOR AIRCRAFT PARTS, ELECTRONICS, PROPELLER, TRANSMITTER, RECEIVER, PROPELLER, MOTOR, CONTROL SYSTEM**

**NATIONAL LEVEL WORKSHOP CERTIFICATE WILL BE ISSUED ON THE SAME DATE OF EVENT**