

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 14th & 15th – 2020

Venue – Indian Institute of Technology (IIT, Mandi)



AIRCRAFT
DESIGN



STRUCTURE
FABRICATION



ELECTRONICS
CONTROL SYSTEM



FLIGHT TEST ON SKY
@ IIT Mandi



Workshop Date – March 14th & 15th ,2020

Fees – 999/Student

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

Booking starts from – 4th Feb (Tuesday)

For further queries Contact : +91-9677803678 , Mail ID: 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 13th Workshop will get 30% fee concession for

Five days Aeronautics Internship Program ,Starts from December April 25th @Bangalore campus


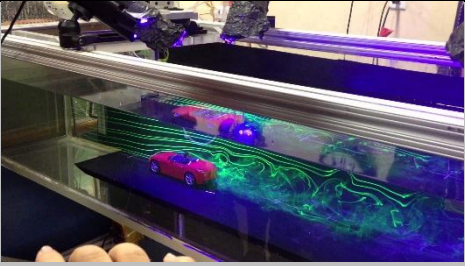
PRIZE MONEY FOR BEST STUDENTS


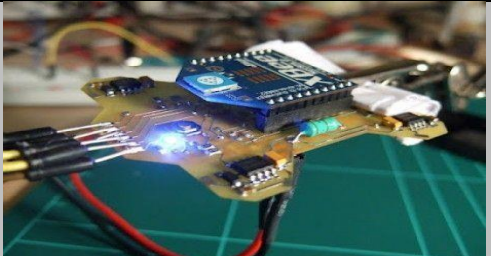
- Best Aircraft Making Team
- Best Flight Performance Team
- Best Student For Objective Type Contest



WORK SCHEDULE -DAY -1

| ACTIVITY | TECHNICAL CORE | TRAINING METHODOLOGY | THEME |
|---|---|---|---|
| INAGURATION | | |  |
| *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 |
|--|--|---|---|
| Aerodynamics – Fighter Aircraft | | |  |
| 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 |  |
| Aero Design Contest | | | |

| ACTIVITY | TECHNICAL CORE | TRAINING METHODOLOGY | THEME |
|--|--|---|---|
| Aircraft Avionics – Electrical Engg | | |  |
| Servo Motors Flight Controller ESC-Speed | Electronic and Electrical Power Unit &Control | Technical Presentation Live components Model Video Fie | |
| 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