



TechieNest



Transforming Engineers to Technocrats

QUADCOPTER
WORKSHOP

2017-2018

in collaboration with



Celebrating the alliance

with the most prestigious institutes of our country



TechieNest
Transforming Engineers to Technocrats

TechieNest takes proud on its Success everyday...

Certified by the **Standards of ISO** and **leading Institutes** of the Nation we have proven to be a symbol of faith and dignity for our students.

**Our
QUALITY
NETWORKs**



IIT Bombay



IIT Kanpur



IIT Roorkee



IIT Mandi



IIT Jodhpur



IIT Indore



IIT Hyderabad



MANIT Bhopal



MNIT Jaipur



NIT Raipur



NIT Srinagar



NIT Jalandhar



IIIT Kalyani

— OUR FORTE —

INTERNET OF THINGS (IOT)

AEROMODELLING

EMBEDDED SYSTEMS

ROBOTICS

MATLAB & MACHINE VISION

VLSI & VHDL

ANDROID APP DEVELOPMENT

NETWORKING

AUTOMATION (PLC & SCADA)

ARDUINO

PCB DESIGNING

RASPBERRY PI

IMAGE PROCESSING

MSP430 (TEXAS INSTRUMENTS)

IC ENGINE

Introduction to Flight

- History of manned and Unmanned flight
- Types of flying models (Rubber-powered, engine-controlled and electro-power controlled)
- Multi-rotor technology
- Helicopter to Quadcopter
- Operation, advancements and advantages of Quadcopters

❖ Quadcopter modeling (Dynamics)

- PD and PID controller for stability and control

❖ Components of a Quadcopter

- Frame (types, configuration and sizing)
- Propeller (design, sizing, forces acting on it and analysis of parameters such as pitch, diameter and RPM)
- Battery (Li-ion and Lipo batteries)
- Electronic speed controller (PWM, start-up, troubleshooting and working)
- Sensors (Accelerometer, Gyroscope and GPS)

DAY 2
(Session 3&4)/7 Hours

Quadcopter

Assembling

- Introduction to Microwave communication
- RF communication for flying models
- Accelerometer and gyroscope (introduction and interfacing)

Calibrations and oscillation check

Fly your Quadcopter

- Building techniques
- Outdoor flying
- Queries and Feedback

Query Session

All above Kits include:

1. *Frame
2. *Flight controller
3. *Motor
4. *ESC
5. *Battery
6. *Connectors
7. *Propeller set (4 Nos)


Note : *All kits will taken back after the completion of workshop. There are no take ways.

- ✓ A seminar hall/Class room with seating capacity of 100 students
- ✓ One projector.
- ✓ 2 Collar mike with sound system.
- ✓ White board and marker.
- ✓ Workshop coordinators(3-5)
- ✓ Laptop charging points.
- ✓ One laptop/PC to each group.

Workshop Arrangements

By college coordinator

Take Aways



Certificate of Participation
Certificate of Coordination
Certificate of Appreciation to College
Memento to College from TechieNest
Relevant Software.
Study Material (Soft Copy) FREE.

- ✓ Acquaint yourself with practical knowledge.
- ✓ Workshop taken by Exceptionally Qualified and Professional Trainers actively involved in Research & Development.
- ✓ Learn your Area of Interest directly from Industry Experts.
- ✓ Scales up your CV/ Resume in Technical while boosting your Logical Abilities.
- ✓ Brings Confidence in you for Technical rounds of Interview.
- ✓ Lifetime assistance on any of your projects.

**Associated
Benefits
of our workshops**

TechieNest in Motion (PAN India)



PEC Chandigarh

IPEC Ghaziabad

AMU Aligarh

Modern College of Engg, Pune

MIT Pune

BMS Bangalore

Mody Laxmangarh

Manipal University, Jaipur

Amity University, Jaipur

Banasthali University

JECRC Foundation & JECRC University, Jaipur

BITS Mesra, Jaipur

AIET Jaipur

Vignan Hyderabad

GITAM Hyderabad

KITS Warangal

Thejus Thrissur, Kerala

SGSIT Indore

KIIT Bhubaneswar

Santosh Rungta Bhilai, Raipur

GEC Barton Hills, Thiruvananthapuram



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