



Title:	<h1>Surveying with RTK Drone</h1>	Why Khagolam: <ul style="list-style-type: none"> • Specialize and Dedicated institute to geospatial technologies • Job oriented curriculum • Comprehensive training material • 100% placement assistance • Professional Trainers • Exposure to live projects • Convenient batch timings • Exposure to 3D GIS • Practice aptitude and interview rounds • Library facility
Duration & Fees Structure:	<p>5 Days</p> <p>45,000 INR, for resident Nationals of India, Nepal, Bhutan, Bangladesh, Sri Lanka and Maldives, & Myanmar.</p> <p>1125 USD, For Non-Residents of India</p> <p>Instalments:</p> <p>5,000 on registration</p> <p>40,000 - before course start</p>	
Category:	<p>Value Addition Course / Job-Oriented Course</p> <p>Classroom / Online</p> <p>Full-time (Weekdays) / Part-time (Weekend)</p>	
Prerequisites:	<ul style="list-style-type: none"> ✚ Good knowledge of computers, surveying concepts and instruments ✚ Experience in Total Station and DGPS surveying 	

<p>Who Should Attend?</p>	<ul style="list-style-type: none"> ✚ Land surveyors ✚ Mapping professionals ✚ Agriculture Professionals ✚ Forest Surveyors ✚ Mining Surveyors
<p>Overview:</p>	<p>In India Drone are taking over on the traditional surveying methods like total station surveying. Drone Surveying save time and cost of project. Drones are being employ on many application like: Volume or earth work calculation in mining, change detections with LiDAR, Topographic Surveying of Roads, Dams, Bridges, 3D Modelling of archaeological, heritage site / monuments, power grid surveying, mining, forest surveying and change detection, Fishery surveys, Thermals Surveys of Solar panels, to generate high accuracy cadastral maps and many more.</p> <p>Training will take you through advance aerial surveying concepts with Drone, aerial surveying, GNSS/GPS, Photogrammetry fundamental concepts with hand on exercise on, flight planning, simulation, data downloading, image processing using different photogrammetric software's, exploring output like DEM, DTM, Point Cloud, Point cloud editing, removing noise, ortho-photo editing and much more. This Drone Surveying course also covers very important concept and end to end workflow of RTK/PPK drone surveying. Complete field and office procedure explained with practical. You will processing PPK data and apply correction and use corrected / Fix PPK solution data in image processing with photogrammetric software.</p>
<p>You will learn:</p>	<p>After completion of this course you will be able to:</p> <ul style="list-style-type: none"> ✚ Understand Drones, History of Drone/UAS/UAVs, drone assembly, Safety, payload, battery life, specs for good results ✚ Explain application of drone for Surveying & Mapping like Construction, Agricultural, Engineering Land Survey, mining and Architecture uses ✚ Know regulations of DGCA and Drone license, registration in India ✚ Perform surveying site flight planning with different app like Drone, Deploy, Pix4D capture, GS RTK App ✚ Executive surveying flight with safety ✚ Know to aerial Photogrammetry, Aerial Triangulation and how it effect accuracy ✚ Post-process data with different app like Drone, Deploy, Pix4D ✚ Consideration for post-processing RTK & PPK flight data ✚ Analyse output data, contouring, DSM and Volumetric Measurement Calculation ✚ Produce traditional topographic map as like Total Station ✚ Know the kind of map/outcome can produce form drone surveying ✚ Understand fundamentals of GNSS RTK & PPK Surveying, Map accuracy: Relative vs. Absolute Accuracy Survey-Grade Accuracy, Factors that Improve Map Accuracy, Techniques of controlling errors ✚ Employ GNSS RTK & PPK technologies in Drone Surveying ✚ Consideration for hardware selections, payload, comparison of surveying drone and its accuracy

- ✚ Consideration, planning strategies of GCP Check points in vertical and horizontal accuracies
- ✚ Planning and estimation of drone surveying job
- ✚ Use D-RTK 2 Mobile Station in Drone RTK Surveying and mapping,
- ✚ Explain what is NTRIP (Network Transport of RTCM via Internet Protocol), NTRIP for configuring your GNSS base station and utilize own custom RTK network
- ✚ End to End surveying workflow: RTK Flight & PPK Flight. Field and office procedures with practical exercise on field
- ✚ Using Survey of India CORS network data for drone PPK processing
- ✚ Know general requirement in various government and private drone land surveying tenders

Tools & Skills:

DEMANDING SOFTWARE & HARDWARE TOOLS:

1. RTK Surveying Drone
2. Mobile GNSS Station
3. Pix4D
4. Drone Deploy

EMPLOYABLE SKILLS MEASURED:

1. DGCA UAV/Drone Policy
2. Flight safety
3. Geographic Coordinate System. Projected Coordinate system and geoid
4. Flight Planning parameters
5. Flight planning types, for liner, area and terrain aware area
6. Payload and their applications
7. Flight Execution:
 - a. Normal GNSS Mode
 - b. RTK Mode
 - c. PPK Mode
8. GCP Collection & Planning Strategies
9. Post-processing, photogrammetry, aerial triangulation and accuracy
10. LiDAR Point Cloud Editing & Classification
11. Ortho-photo, DEM, DTM Generation, Volumetric calculation
12. Drone output data interoperability in various formats (csv, kml, dwg, CAD, shp, tif)

How to Apply:

Step 1: register at: <https://www.khagolam.com/home/register>

Step 2: Check mail for course & bank details

Step 3: Transfer payment & share transaction receipt on What's App

Step 4: You will receive registration confirmation, by SMS/Call/Whats App.

REGISTRATION SHALL CLOSE 4 DAYS BEFORE START DATE. SPOT REGISTRATIONS ARE NOT ALLOWED.