



Government Degree College, Chintapalli
Affiliated to Andhra University
Chintapalli, Alluri Sitharama Raju -District, AP.

Phone no: 9666739207.

Email.ID: gdcchintapalli@gmail.com



DATE:

To

The principal
Government Degree College,
Chintapalli,
Alluri Sitharama Raju Dist.,

Sir

Sub: Request to grant thee permission to conduct a Certificate Course on Aerial Drone Pilot Training Program

**Ref: Proceedings from the State project director PM-USHA-Procs RC
No:2519744/rusa-13022/16/2024 dated 21/06/2025.**

I hereby submit you that PM USHA GIEI Scheme the college is going to conduct a certificate Course on **Aerial Drone Pilot Training Program** Course Training from **16/02/2026 to 20/02/2026** as per the reference cited above. Through this Certificate course we are going to aware the girl students about the Web designing and creating web pages to them through experts. So, we request you to grant the permission to conduct a 5 Day certificate course on **Aerial Drone Pilot Training Program** Training.

Thanking you sir

Yours Sincerely

In charge of PM-USHA

Govt Degree College, Chintapali,
Alluri Sitarama Raju Dist.



Government Degree College, Chintapalli
Affiliated to Andhra University
Chintapalli, Alluri Sitharama Raju -District, AP.

Phone no: 9666739207.

Email.ID: gdcchintapalli@gmail.com



PM USHA UNDER GIEI SCHEME

Certificate Course

on

“AERIAL DRONE PILOT TRAINING PROGRAM”

2025-2026

Date of Activity: 16/02/2026 To 20/02/2026



Government Degree College, Chintapalli
Affiliated to Andhra University
Chintapalli, Alluri Sitharama Raju -District, AP.

Phone no: 9666739207.

Email.ID: gdcchintapalli@gmail.com



From
The principal
Government Degree College
Chintapalli,
Alluri Sitharama Raju Dist.,

To
Company : EXCELR
vijayawada
Andhra Pradesh

Respected Sir,

Subject: Request to be the Resource Person for Five-Day Certificate Course on
“**Aerial Drone Pilot Training Program**” Course Training.

Respected Sir,

Greetings from Government Degree College, Chintapalli.

We are pleased to inform you that our college is organizing a Five-Day Certificate Course on “**Aerial Drone Pilot Training Program**” from **16/02/2026 to 20/02/2026** at our college. The program aims to create awareness among girl students regarding their Drone designing and creating Drones and available support mechanisms, thereby empowering them with the knowledge to face challenges with confidence.

Considering your expertise and distinguished contribution in the field of drone technology, we would be honoured if you could kindly accept our invitation to be the Resource Person for this Certificate Course. Your guidance and insights will greatly benefit our students in increasing their ability for tech development.

We look forward to your valuable presence and request you to kindly confirm your availability at your earliest convenience.

Thanking you in anticipation.

With regards



Government Degree College, Chintapalli
Affiliated to Andhra University
Chintapalli, Alluri Sitharama Raju -District, AP.

Phone no: 9666739207.

Email.ID: gdcchintapalli@gmail.com



CIRCULAR

Date:

We are pleased to inform to all the faculty members and students that our college is going to conduct a Certificate Course on “**Aerial Drone Pilot Training Program**” under PM-USHA GIEI Scheme from 16.02.2026 to 20.02.2026 at Govt Degree College, Chintapalli. We are inviting **Sri Krishna Rao, Sri Srikanth** Drone development expert, Visakhapatnam. Your active participation is highly encouraged. So let us come together to make this event a impactful one.

With regards,

Principal,



Government Degree College, Chintapalli
Affiliated to Andhra University
Chintapalli, Alluri Sitharama Raju -District, AP.

Phone no: 9666739207.

Email.ID: gdchintapalli@gmail.com



BRIEF REPORT ON AERIAL DRONE PILOT TRAINING PROGRAM

5-day Certificate Course on “Aerial Drone Pilot Training Program”

Held from 16th February 2026 to 20th February 2026

INTRODUCTION:

The 5-day Certificate Course on Aerial Drone Pilot Training Program, organized at Government Degree College, Chintapalli from 16th February 2026 to 20th February 2026, aimed to equip participants with a sound foundation in the Aerial Drone Pilot Training Program is a practical-oriented course designed to provide learners with foundational and applied knowledge of drone creation and management. The course focuses on the design and development of Drones.

Day 1 & 2:-

Types of Drones in Agriculture

1. Multi-Rotor Drones

- Most common type (quadcopters, hexacopters)
- Used for:
 - Crop monitoring
 - Spraying pesticides and fertilizers
- Examples: Quadcopter (4 rotors), Hexacopter (6 rotors)

Advantages:

- Easy to operate
- Highly stable and precise
- Suitable for small and medium farms

Limitations:

- Short flight time (20–40 minutes)
- Limited coverage area

2. Fixed-Wing Drones

- Similar to airplanes (have wings instead of rotors)
- Used for:
 - Large-scale field mapping
 - Crop health analysis

Advantages:

- Long flight time (up to several hours)
- Covers large areas quickly

Limitations:

- Requires runway or launcher
- Less precise for spraying

3. Single-Rotor Drones

- Similar to helicopters (one main rotor + tail rotor)
- Used for:
 - Heavy-duty spraying
 - Carrying large payloads

Advantages:

- Longer flight time than multi-rotor
- Can carry more weight

Limitations:

- Complex to operate
- Expensive and requires maintenance

4. Hybrid Drones (VTOL – Vertical Take-Off and Landing)

- Combine features of fixed-wing and multi-rotor drones
- Used for:
 - Mapping large farms with vertical take ability

Advantages:

- No runway needed
- Long endurance and wide coverage

Limitations:

- Costly
- Complex technology

Characteristics of Agricultural Drones

1. High-Resolution Imaging

- Equipped with RGB, multispectral, or thermal cameras
- Helps detect:
 - Crop health
 - Pest infestation

- Water stress
2. GPS and Navigation Systems
 - Accurate positioning using GPS/RTK
 - Enables:
 - Automated flight paths
 - Precision farming
 3. Payload Capacity
 - Ability to carry:
 - Pesticides
 - Fertilizers
 - Seeds
 - Varies depending on drone type
 4. Flight Time (Endurance)
 - Typically ranges:
 - Multi-rotor: 20–40 minutes
 - Fixed-wing: 1–3 hours
 5. Autonomous Operation
 - Pre-programmed flight routes
 - Minimal human intervention
 6. Sensors and Data Collection
 - Multispectral sensors for vegetation indices (NDVI)
 - Soil and crop analysis
 7. Spraying Mechanism
 - Precision spraying systems
 - Reduces chemical usage and environmental impact
 8. Real-Time Data Transmission
 - Live monitoring through mobile apps or software
 - Helps farmers make quick decisions
 9. Weather Resistance
 - Designed to operate in moderate wind and temperature conditions

Conclusion

Agricultural drones improve precision farming, reduce labour, save time, and increase crop yield. Choosing the right type depends on farm size, purpose (spraying, mapping), and budget.

Day 3 & 4:

Practical Session Morning as well as Afternoon:-

The practical session on Drone Technology conducted at Government Degree College Chintapalli during Day 3 and Day 4 provided students with in-depth knowledge and hands-on experience in advanced drone operations and data processing. These sessions were designed to enhance both technical skills and practical understanding of drone applications in real-world scenarios.

On Day 3, the focus was on advanced flight operations and mission planning. Students were given the opportunity to operate drones in manual mode, which helped them understand the importance of precise control, balance, and navigation. They practiced key flying techniques such as hovering, directional movement, altitude adjustment, and safe landing. This hands-on training improved their confidence in handling drones beyond basic automated settings. In addition, students were introduced to mission planning software, where they learned how to design flight paths using waypoints. This included setting parameters such as altitude, speed, and grid patterns for mapping purposes. The concept of aerial mapping and surveying was also explained in detail. Students captured images with proper overlap and coverage, which are essential for creating accurate maps. Safety measures were emphasized throughout the session, including emergency procedures such as return-to-home functions, handling low battery situations, and managing signal loss. These practices ensured that students understood the importance of safe and responsible drone operation. Day 4 focused on processing and analysing the data collected during the previous day. Students learned how to transfer images and flight data from the drone to computers and organize them systematically for further processing. They were introduced to image processing software used to generate orthomosaic maps, which combine multiple aerial images into a single, accurate representation of an area. Basic concepts of 3D modeling were also discussed, giving students an idea of how drones can be used to create detailed terrain models. Furthermore, students were trained to interpret the processed data, including identifying land features and understanding spatial measurements.

The session also highlighted various real-world applications of drone technology. Students explored how drones are used in agriculture for crop monitoring, in disaster management for search and rescue operations, in land surveying for mapping large areas, and in infrastructure inspection for monitoring buildings and roads. The practical concluded with a demonstration or assessment where students applied their knowledge by planning and executing a complete drone mission.

Overall, the Day 3 and Day 4 sessions provided comprehensive exposure to both the operational and analytical aspects of drone technology. Students developed essential skills in flying, mapping, data processing, and application, preparing them for future opportunities in this rapidly growing field



Government Degree College, Chintapalli
Affiliated to Andhra University
Chintapalli, Alluri Sitharama Raju -District, AP.

Phone no: 9666739207.

Email.ID: gdcchintapalli@gmail.com



PM USHA UNDER GIEI SCHEME

Invites You to a Certificate Course on

“AERIAL DRONE PILOT TRAINING PROGRAM”

Chief patron :

Dr.Narayan Bharath Gupta, IAS

Dr. P. V. Krishnaji

Dr.M.Vijaya Bharathi

Director of Collegiate

RJDCE of Zone-I

principal

Education, Govt. of Andhra Pradesh

Date :

16th February

To

20th February

Resource person

Sri Krishna Rao, Sri Srikanth

Company : Excelr

Vijayawada

Program Highlights

- Expert training session on Technology for women & girls
- Overview of key-topics related to drone development
- Guidance on usage of web pages creation



Government Degree College, Chintapalli
Affiliated to Andhra University
Chintapalli, Alluri Sitharama Raju -District, AP.

Phone no: 9666739207.

Email.ID: gdcchintapalli@gmail.com



PHOTO GALLERY

PM USHA Coordinator	Dr.V.Ramana ,lecturer in Zoology
Organizing secretaries	Dr.D.Kejiya,lecturer in English Sri I.Raveendra naik , lecturer in chemistry
Programme convenors	T Uma Lecturer In Zoology k.purna rao lecturer in botany
Students representatives	k.Anu (2 nd bsc comp science) B.Bhargavi (1 st BA (HISTORY)

DAY -1



DAY -2



DAY -3



DAY - 4



DAY -5





Government Degree College, Chintapalli
Affiliated to Andhra University
Chintapalli, Alluri Sitharama Raju -District, AP.

Phone no: 9666739207.

Email.ID: gdcchintapalli@gmail.com



“AERIAL DRONE PILOT TRAINING PROGRAM”

5 DAYS CERTIFICATE COURSE ON “AERIAL DRONE PILOT TRAINING PROGRAM”

Schedule for 5 Day syllabus

Day	Topic	Sub -topic
1	Types of Agricultural Drones	Agricultural Drones
2	Agricultural Drones	Agricultural Drones
3	Practical Session on Drones	Types of Agricultural Drones
4	Practical Session on Drones	Agricultural Drones
5	Exams	Agricultural Drones