



African-Asian Rural Development  
Organization (AARDO)



Indian Institute of Technology  
Kanpur (IIT Kanpur)

## Agricultural Practices using Drones: Plan, Design, Build, and Fly Training Program (14th-22nd Nov., 2024)

Date:	<b>14-11-2024</b>
Time	<b>Topic / Session / Venue: Outreach &amp; MedTech</b>
9:00 - 10:30 AM	Inaugural Session / Prof. Bushra Ateeq
10:30 - 11:00 AM	High Tea
11:00 - 12:30 PM	Latest Developments in Drone Technology / Prof. J Ramkumar
12:30 - 14:00 PM	<i>Lunch</i>
14:00 – 15:30 PM	Need for Drone in Developing Nations/ Prof. J Ramkumar
15:30 – 16:00 PM	High Tea
16:00 – 17:30 PM	Technology for Enhancing Crop Life / Mr. Nikky Jha
Date:	<b>15-11-24</b>
Time	<b>Topic / Session / Venue: Outreach &amp; MedTech</b>
9:00 - 10:30 AM	Introduction to Design Thinking / Prof. J Ramkumar
10:30 - 11:00 AM	High Tea
11:00 - 12:30 PM	Design Thinking - Tools and Practice / Mr. Abhinav Sharma
12:30 - 14:00 PM	<i>Lunch</i>
14:00 – 15:30 PM	Joint Technology Development with Farmers / Mr. Akshay Srivastava
15:30 – 16:00 PM	High Tea
16:00 – 17:30 PM	AI Inspection Techniques using Drones Data / Mr. Varun Tiwari
Date:	<b>16-11-24</b>
Time	Topic
Field exposure and observing farm health, outstation visit	
Date:	<b>17-11-24</b>
Time	<b>Topic / Session / Venue: Outreach &amp; MedTech</b>
9:00 - 10:30 AM	Lab. Practice on Drone Components / Prof. J Ramkumar
10:30 - 11:00 AM	High Tea
11:00 - 12:30 PM	Drone Data Analysis / Mr. Deepak Mishra
12:30 - 14:00 PM	<i>Lunch</i>
14:00 – 15:30 PM	Drone Surveys for Precise Data Collection / Mr. Abhinav Sharma
15:30 – 16:00 PM	High Tea
16:00 – 17:30 PM	Lab. Visit, Fabrication Machines for Drone Components / Dr. Amandeep Singh Oberoi

Date:	<b>18-11-24</b>
Time	Topic
	Field visit, Fragrance & Flavour Development Centre, Kannauj (Prof. Shakti Vinay Shukla and associates)
Date:	<b>19-11-2024</b>
Time	<b>Topic / Session / Venue: Outreach &amp; MedTech</b>
9:00 - 10:30 AM	Overview of Local and International Drone Regulations / Dr. Manish Saraswat
10:30 - 11:00 AM	High Tea
11:00 - 12:30 PM	Designing the Drone Using the Software / Dr. Manish Saraswat
12:30 - 14:00 PM	<i>Lunch</i>
14:00 – 15:30 PM	Drone Battery Management / Mr. Priyanshu Roy
15:30 – 16:00 PM	High Tea
16:00 – 17:30 PM	Hands-on Practice under Laboratory Conditions / Dr. Amandeep Singh Oberoi
Date:	<b>20-11-24</b>
Time	<b>Topic / Session / Venue: Outreach &amp; MedTech</b>
9:00 - 10:30 AM	Safety Checklist and Risk Assessment / Prof. J. Ramkumar
10:30 - 11:00 AM	High Tea
11:00 - 12:30 PM	Building it at the Lab / Mr. Priyanshu Roy
12:30 - 14:00 PM	<i>Lunch</i>
14:00 – 15:30 PM	Basic Flight Maneuvers / Dr. Manish Saraswat
15:30 – 16:00 PM	High Tea
16:00 – 17:30 PM	Take-Off, Hovering, Landing / Mr. Priyanshu Roy
Date:	<b>21-11-24</b>
Time	<b>Topic / Session / Venue: Outreach &amp; MedTech</b>
9:00 - 10:30 AM	Software Training / Dr. Manish Saraswat
10:30 - 11:00 AM	High Tea
11:00 - 12:30 PM	Materials Selection, strength vs weight / Dr. Abhishek Verma
12:30 - 14:00 PM	<i>Lunch</i>
14:00 – 15:30 PM	Responding to Unexpected Situations / Mr. Priyanshu Roy
15:30 – 16:00 PM	High Tea
16:00 – 17:30 PM	Take-Off, Controlled Flight / Mr. Jitendra Kumar Sharma
Date:	<b>22-11-24</b>
Time	<b>Topic / Session / Venue: Outreach &amp; MedTech</b>
9:00 - 10:30 AM	Rapid Prototyping of Drone Parts/ Dr. Amandeep Singh Oberoi
10:30 - 11:00 AM	High Tea
11:00 - 12:30 PM	Routine Maintenance and Cleaning / Dr. Vyom Sharma
12:30 - 14:00 PM	<i>Lunch</i>
14:00 – 15:30 PM	Emergency Landing Techniques / Dr. Abhishek Verma
15:30 – 16:00 PM	High Tea
16:00 – 17:30 PM	Addressing Common Technical Issues. Valedictory Ceremony / Dr. Shalabh

**Speakers:**

- Prof. Janakarajan Ramkumar - Indian Institute of Technology Kanpur
- Dr. Amandeep Singh Oberoi - Indian Institute of Technology Kanpur
- Prof. Shakti Vinay Shukla and team - Fragrance & Flavour Development Centre, Kannauj
- Mr. Abhinav Sharma - Indian Institute of Technology Kanpur
- Mr. Akshay Srivastava - LCB Fertilizers Private Limited, Padrauna
- Mr. Varun Tiwari - Ekarigari Systems Pvt. Ltd., Kanpur
- Mr. Deepak Mishra - Indian Institute of Technology Kanpur
- Mr. Nikky Jha - SaptKrishi Scientific Private Limited, Bhagalpur
- Dr. Manish Saraswat - Lloyd Skills Centre, LIET, Noida
- Mr. Priyanshu Roy - Lloyd Skills Centre, LIET, Noida
- Dr. Vyom Sharma - Indian Institute of Technology Dharwad
- Dr. Abhishek Verma - National Institute of Technology, Rourkela
- Dr. Shalabh - Indian Institute of Technology Kanpur