Summer Training Program on

# CLIMATE SMART AND SUSTAINABLE AGRICULTURE USING CUTTING-EDGE TECHNOLOGY AND IOT



Offering Institute: AIT Extension,

Asian Institute of Technology

Training Dates: 10 - 21 June 2024

**Registration** 05 May 2024 **Deadline:** 31 May 2024

(Thai and any Student with on-arrival Thai Visa Option)

Training Starts: 10 June 2024

### **BACKGROUND**

Agriculture has been the backbone of human civilization for thousands of years. As the world population continues to grow, from the current 7.6 billion to 8.6 billion in 2030 and 9.8 billion in 2050, the demand for food and resources is rapidly increasing. This demand poses significant challenges to the agriculture sector, which must produce more food with limited resources, while also addressing the challenges of climate change and environmental sustainability. In response, there has been a growing movement towards smarter, more sustainable, and self-sufficient agriculture practices, utilizing new technologies such as the Internet of Things (IoT), Remote sensing and Geographical information systems (RSGIS), Artificial Intelligence (AI), Machine learning (ML), etc., to improve yields and reduce waste. This summer training program will orient students (undergraduate and graduate), from any background, on viable and efficient strategies for sustainable agriculture through smart and precision farming practices, and the application of cutting-edge technologies and IoT in agricultural sector. The student participants, majoring on or with keen interest in the intersection of ICT, digital transformation, business, and agriculture across the globe, will have ample opportunities to listen and interact with experts from the technology field as well as experts who are applying those technologies in agricultural sector. Lessons learned from demonstrations/field practices and realworld application of technologies will be a vital part of this summer training program. Besides technical input sessions and hands-on training, the summer program will expose the students to the international and multicultural learning and knowledge exchange system at AIT, and to the culture and practices in Thailand. The program will be held in Thailand and coordinated by AIT Extension of Asian Institute of Technology (AIT).



### TRAINING CONTENTS

- Introduction to Climate-Smart Agriculture & Technological Interventions
- Improving Crop Productivity using Innovative Agricultural Technologies: South and Southeast Asian Perspective
- Climate Resilient Sustainable Agriculture: a Real Alternative to False Solutions
- Digital Agricultural Technologies: application of Internet of Things (IoT) & Sensors Technology for Crop Management
- Drone Technology: introduction to Drones and Sensors, Planning and Execution of Drone Flight Surveys
- Experiential Learning on Digital and Smart Agricultural Devices: pilot demonstration and large-scale production
- Hands on training on Precision Farming Technologies: Efficient Water and Inputs Management, Integrated Nutrient and Soil Health Management, Eco-friendly Weed Management and Controlling Pest Infestation



- Experiential Learning on Digital and Smart Agricultural Devices: pilot demonstration and large-scale production
- Exposure Visit on Sustainable and Integrated Farming Practices using Technological Interventions and Innovations in Thailand
- Exposure Visit to Model Smart Farm and Small-Scale Farming Practices using Cutting-Edge Technology to combat Climate Change in Thailand
- Soft skill training on Leadership and Management Capabilities and Skills for the Farm of the Future
- Brainstorming on key takeaways, action planning & way forward

TO REGISTER SCAN ME



http://forms.gle/oRTCd7uHUHrd2xF38



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## CLIMATE SMART AND SUSTAINABLE AGRICULTURE USING CUTTING-EDGE TECHNOLOGY AND IOT PROPOSAL





### Training Fee USD 1,500/-

(Inclusive of training-related expenses, excluding accommodation and subsistence allowances. AIT will assist in booking accommodation)



### **Medium of Instruction:**

The medium of instruction of this program will be English. Where discussions are in Thai, such as during field or organization visits, a local Thai interpreter will be available to assist.



### **Certificate:**

Successful Candidate will be awarded with Certificate of Completion



### **Training Design:**

The training program will include technical input sessions, interactive lectures, practical sessions and field exercises / workshops, Key Learning Points (KLP), Group Action Plan/Project (GAP), experience sharing sessions and exposure visits to organizations and farmers' plots practicing Climate Resilient, Smart and Sustainable Agriculture using cutting-edge technologies and IoT.



### For any discount on multiple admission / registration, please contact:

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### **General Contact/Query:**

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