







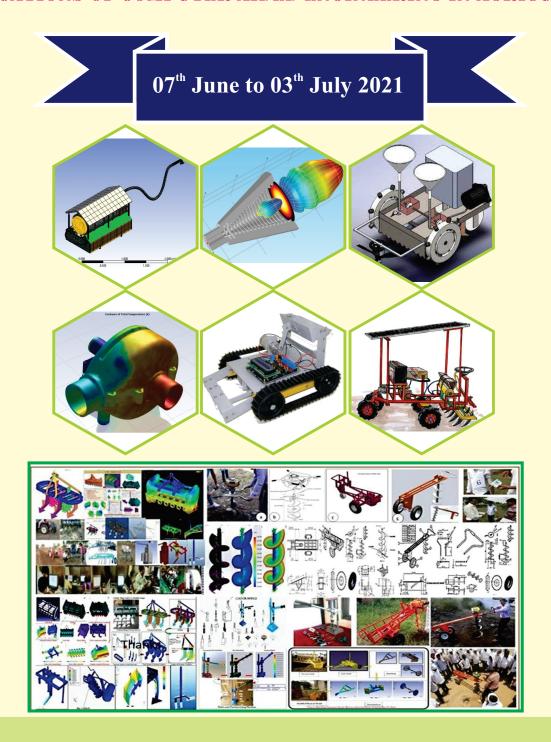


National Agriculture Higher Education Project
Centre of Excellence: Digital Farming Solutions for Enhancing Productivity by
Robots, Drones and AGV's (DFSRDA)
Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani (M.S.) INDIA

**National Level Online Hands on Four Week Training Programme** 

or

#### "APPLICATIONS OF COMPUTER AIDED ENGINEERING IN AGRICULTURE"



## **About University**

The Marathwada Krishi Vidyapeeth (Presently renamed as Vasantrao Naik Marathwada Krishi Vidyapeeth) established in 1972 on Land Grant pattern at Parbhani to fulfill the regional aspirations of fields, undertake research and facilitate technology transfer in marathwada region of Maharashtra.

Vasantrao Naik Marathwada Krishi Vidyapeeth (VNMKV) Parbhani, is one of the prestigious agricultural universities in India. Since its inception, it has gained recognition as an innovative organization in the term of education and research in agriculture. It takes care of research and facilitates agriculture technology transfer in marathwada region of Maharashtra.

## **About Project**

The Centre of excellence for Digital Farming solutions for Enhancing Productivity by Robots, Drones and AGV's (DFSRDA) Under Center for Advanced Agricultural Science and Technology (CAAST) is being implemented in Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani, Maharashtra under world bank Sponsored National Agricultural Higher Education Project (NAHEP) of Indian Council of Agricultural Research (ICAR), New Delhi, Government of India, Since 2019. The main objective of this center is to train PG/PhD students and faculties about advances in science and technology. The project is proposed on 50:50 cost sharing basis between the World Bank and the Government of India, implemented at VNMKV, Parbhani. Overall, the project aims to establish an advanced basic engineering hardware and software setup such as Mechatronics. CAD/CAM/CAE, 3-D Printers and Instrumentation Laboratories for Agribots, Agri-drones and Agri-AGVs., so that a holistic model can be developed to raise the standard of current agricultural education system that provides more jobs and is entrepreneurship oriented and on par with the global agriculture education standards.

As a part of this project, Centre of excellence for Digital Farming solutions for Enhancing Productivity by Robots, Drones and AGV's (DFSRDA), VNMKV, Parbhani is organizing National Level Online Hands on Four Week Training Programme on "Applications of Computer Aided Engineering in Agriculture"

## **Training Background**

Computer and software technologies nowa-days used in the design and manufacture of complex multifunction systems offer great benefits in terms of cost, time and labour savings. Students will get benefitted by performing various projects on agricultural applications like- design of implements, tools, machine elements, assembling of machine parts and machine design. ANSYS is Mechanical finite element analysis software is used to simulate computer models of structures, electronics or machine components for analyzing strength, toughness, elasticity, temperature distribution, electromagnetism, fluid flow, and other attributes. It is also used to determine, how a product will function with different specifications without building test products physically or conducting crash tests. Additionally, it develops and markets engineering simulation software for use across the product life cycle. Hence this platform will help to design efficient farm machinery and test it with different aspect virtually. "APPLICATIONS OF COMPUTER AIDED **ENGINEERING IN AGRICULTURE**" hands on training being organized by NAHEP-CAAST-DFSRDA, VNMKV, Parbhani from 07<sup>th</sup> June to 03<sup>rd</sup> July 2021 through online mode.

## **Objectives**

To give Agricultural students, researcher scholars, scientists, Faculties brief knowledge about CAD software in order to design systems, tools, automatic controls, machine elements, assembling of machine parts and machine design, Electrical, thermal analysis for analyse the field data. This Hands on training impart knowledge about designing and analysis of precision agricultural equipment's.

## **Hands on Training Schedule**

No of Week	Date	Time	Topic Covered
1	07-11 June 2021	10 to 12 PM	ANSYS Mechanical
		04 to 06 PM	
2	14 to 18 June 2021	10 to 12 PM	ANSYS CFD
		04 to 06 PM	
3	21 to 25 June 2021	10 to 12 PM	ANSYS LF EM
		04 to 06 PM	
4	28 to 03 July 2021	10 to 02 PM	ANSYS HFSS

## **Target Audience**

All M.Sc., M.Tech., Ph.D. Research scholar and F a c u l t y o f I C A R - D e e m e d t o b e Universities/SAUs/CAUs/CUs/ other UGC recognized Universities, Engineering colleges and Research Institutes are eligible to apply.

#### **About Selection**

- 1) The Whatsapp Group of the selected candidates will be formed at least one day before the start of the online training and the communications regarding the online training will be posted in the group.
- 2) Alternatively Candidates can keep accessing the CAAST-VNMKV website (<a href="https://nahep.vnmkv.org.in">https://nahep.vnmkv.org.in</a>) regarding the selection, preferable on the day before the start of the training.
- 3) Lead lectures through online platform will be conducted along with online interaction. The link, ID and password for joining the online session will be communicated through Whatsapp group of the selected candidates 30 minutes before the start of the session.
- 4) Certificates will be issued only those participants who will complete all online session and assignments.

## **Training Outcomes**

#### **Methodology for conduct of Training**

Pre and Post Evaluation: Pre and Post certificate course evaluation will be carried out to evaluate the impact of the certificate training

**Evaluation :** There will be evaluation of the candidates at the end of each week, and a final evaluation towards

the end of the course. The evaluation will be in the form of MCQs, descriptive questions, and power point presentations, as the case may be.

**Feedback**: Candidates need to provide the feedback/attendadence towards the end of each session.

**Prerequities:** The candidates should have knowledge of CAD, FEA, FEM, CAE Analysis in their UG/PG/Ph.D Degree course is required.

## Registration

Duration of Online Training: 07<sup>th</sup> June to 03<sup>th</sup> July, 2021

Registration Fee (Non Refundable):

Online Training Fee: Rs. 100/- for All Students, Rs. 500/- for All Faculty,

**Account Detailes:** 

**Account Name** : Comptroller, Vasantrao

Naik Marathwada Krishi Vidyapeeth Account Number : 38639565001

**Bank Branch**: State Bank of India,

Branch: MKV, Parbhani (MS) India.
IFSC Code : SBIN0020317
MICR Code : 431002203

or use QR code provided here. SCAN & PAY



**Important Dates:** 

PG, PhD Students, Faculties, Scientists and Staff of Vasantrao Naik Krishi Vidyapeeth, Parbhani and other Agricultural Universities, KVK S M S, A g r i c u l t u r e / E n g i n e e r i n g Institutes/Organizations and Farm machinery experts from Agriculture/Farm machinery departments are eligible to register and are requested to take advantage of the National level hands on training on "APPLICATIONS OF COMPUTER AIDED ENGINEERING IN AGRICULTURE" from the 07th June to 03th July 2021 online mode by following all guidelines of COVID-19.

https://docs.google.com/forms/d/e/1FAIpQLSew ZZSvgcv1-NGl44RkSEOx1Bz\_4dYDi49teBsv0NK-VAKkgA/viewform

Last date of registration: June 05, 2021 Confirmation of admission to the candidates: June 06, 2021

Online Training Language: English

# **National Level Online Hands on Four Week Training Programme**

on

### "APPLICATIONS OF COMPUTER AIDED ENGINEERING IN AGRICULTURE"

07th June to 03th July, 2021 Time: 11.00 Hrs

#### **Patrons**



**Dr. A. S. Dhawan**Vice-Chancellor
VNMKV, Parbhani



Dr. R. C. Agrawal
National Director
NAHEP, ICAR, New Delhi



Dr. D. N. Gokhale DI & Dean F/A VNMKV, Parbhani



**Dr. Prabhat Kumar**National Co-ordinator
NAHEP, ICAR, New Delhi

Convenor



Dr. G.U. Shinde
Principal Investigator
NAHEP-CAAST-DFSRDA
VNMKV, Parbhani

**Organizing Secretary** 



Er. Ravikumar Kalloji Research Associate (AGVs), NAHEP-CAAST-DFSRDA VNMKV, Parbhani M. 9533933360

Er. Shivanand Shivpuje Junior Research Fellow NAHEP-CAAST-DFSRDA VNMKV, Parbhani

**Training Coordinator** 

Er. Apurva Deshmukh
Junior Engineer (JE)
NAHEP-CAAST-DFSRDA
VNMKV, Parbhani

**Co-Organizing Secretary** 



Dr. A.S. Kakade Senior Research Fellow NAHEP-CAAST-DFSRDA VNMKV, Parbhani M. 8087520720

Er. Gopal Raner
Junior Engineer (Agri. Engi.)
NAHEP-CAAST-DFSRDA
VNMKV, Parbhani