



NAHEP-CAAST-VNMKV-DFSRDA center has been formulated by VNMKV with a total cost of Rupees 17.88 crore for three years starting from 2019-20 to 2022-23. The project is proposed on 50:50 cost sharing basis between the World Bank and the Government of India, implemented at VNMKV. 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 entrepreneurship oriented and on par with the global agriculture education standards. NAHEP-CAAST-VNMKV-DFSRDA is now embarking upon an ambitious step in further strengthening the digital farming solutions for enhancing productivity by robots, drones, and AGV's; with financial assistance of the World Bank and ICAR investing on infrastructure, competency and commitment of faculty, and attracting talented students to agriculture.

The NAHEP-CAAST-VNMKV-DFSRDA Centre, Parbhani is integrated by three interdisciplinary research divisions such as **Agri-bots**, **Agri-Drones and Agri-AGV's** based on four portfolios:

- 1. Climate-based Digital Knowledge Support Centre. (CDKS)
- 2. Seed/Seedling Processing and Nursery Automation Centre.(SSPN)
- 3. Smart Portable Machinery Centre. (SPM)
- 4. Food Processing Automation Centre. (FPA)

Contact Us

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About

Centre of excellence for Digital Farming solutions for Enhancing Productivity by Robots, Drones and AGV's (**DFSRDA**), VNMKV, Parbhani is organizing a "Two Week online training course on Basic practices of ANSYS 2020 R1 (Computation Software) in Agriculture" from May 11 to 29, 2020. 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 educate PG/PhD students and faculties about advances in science and technology.

Course Background

Advanced computational analysis tools and Precision Agriculture Mechanization is a very important input to agriculture for performing timely farm operations, reducing the cost of operations, reducing the utilization efficiency of costly inputs. Hence the farm machine should be designed properly by considering soil environment and material properties with their effects on each other during the operations. 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 aspects virtually.

Aim

This Online Training aims to develop an overall understanding of computation and robust fluid mechanical system analysis using ANSYS. The Students will acquire analytical technical skills. ANSYS is a complete solution for design engineering simulations, with all steps from geometry creation to optimization and results generation in a single, modern, easy-to-use environment. ANSYS has integrated geometry modeling based on ANSYS Space Claim technology and structural, fluids and electromagnetics solvers. ANSYS AIM Student is great if you are new to simulation and need an intuitive, cutting-edge simulation tool.

Objective

- 1.Basic introduction to advanced computational analysis software tool for scientific decision making in agricultural operations to researcher faculty and PG/PhD students.
- 2. Researcher Faculty and PG/PhD student's skill developments in ANSYS Simulation software for agricultural research problem.
- 3. Development of innovative models in agricultural research by structural, Computational Fluid Dynamics (CFD), electromagnetic (EM), Electro Mechanical Systems analysis.
- 4. PG/PhD Students and faculty involvement with exhaustive research by e-Training and hands on training practices for precision agricultural research problem solutions.

Targeted Audience:

Faculties, Scientists, Staff and Students of VNMKV, Parbhani and other Agriculture universities. KVK SMS are eligible to register.

Registration: Free Registration

Interested candidates can register here on URL Link: https://forms.gle/yCXYSu7SDDjoGAwi8

Last Date: May 11, 2020 & Time: up to 5.00 pm.

http://www.vnmkv.ac.in https://nahep.vnmkv.org.in https://elearn.vnmkv.org.in







TRAINERS



PATRON



Dr. A.S DHAWAN Vice-Chancellor VNMKV, Parbhani

DIRECTOR

NAHEP



Dr. R.C AGRAWAL National Director NAHEP, ICAR, Delhi

CHIEF-CONVENOR



Dr. PRABHAT KUMAR, National Coordinator, (M & E) NAHEP ICAR, Delhi

HOST DIRECTOR



Dr. D.N GHOKALE. Dean & DI VNMKV, Parbhani ORGANIZING SECRETARY



(ANSYS)



Dibuyanshu Kumar (EM) Application engineer (ANSYS)





Dr. GOPAL U. SHINDE Principal Investigator VNMKV, Parbhani



CO-CONVENOR

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Organized By

ICAR-National Agricultural Higher Education Project

Insys Centre For Advanced Agricultural Science and Technology (CAAST)

Digital Farming solutions for Enhancing Productivity by Robots, Drones and AGV's (DFSRDA) Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani-431402, Maharashtra, India

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