

ONE DAY FACULTY DEVELOPMENT PROGRAMME

ON

"Fundamentals of Multiphase Electric Drives"

(29th September, 2023) (Modified Date)

Organized by

Department of Electrical Engineering, NIT Warangal (Sponsored by Science and Engineering Research Board, Department of Science and Technology, Government of India)

Preamble:

This researcher's development programme is devoted to fundamental theory, recent developments, applications and research outcomes addressing the related theoretical and practical aspects on "Fundamentals of Multiphase Electric Drives".

Major Course Contents:

- Recent Developments and study of Power Electronic converters and Multiphase inverters.
- Recent Trends in Power Electronic drives for accurate and high dynamic performance of Multiphase Motor.
- Application of various Multiphase Electric Motor drives and its fundamental theory.
- Machine modelling for the application of Multiphase Electric drives.
- Design of current, voltage and speed sensor for motor drive application.
- Advanced speed control schemes (Field oriented control, direct torque control and predictive torque control schemes) for Multiphase induction motor and PMSM drives.
- Implementation of vector control schemes for Multiphase motor drive and its real time demonstration using real-time dSPACE platform.

Eligibility:

The program is open to the <u>Faculty</u> and <u>Research</u> <u>Scholars</u> of Engineering Colleges in India.

Faculty conducting this program:

The program will be conducted by the faculty members from NIT Warangal; Academicians in the concerned field from IITs/NITs/IIITs are invited to deliver lectures in the program. Speakers from industries are also expected to deliver as part of the course.

Registration Fee Particulars: NIL

How to apply:

A filled in form of application in the prescribed format duly signed and sponsored by appropriate authorities should reach the coordinator by e-mail only. It is mandatory to send scanned application form through e-mail to <u>vinaykumar@nitw.ac.in</u> as selection will be intimated only through email.

Selection Criteria:

Selection will be done based on first-come-first-serve basis to a maximum number of **25 No's**. The list of selected participants will be intimated through e-mail. Candidates will be issued satisfactory certificates on successful completion of the course.

Important dates:

Last date (Application)	24/09/2023
Selection List by E- mail	25/09/2023
Duration	29/09/2023

About NIT Warangal & Department:

The Department of Electrical Engineering is one of the oldest departments of the National Institute of Technology, Warangal (NITW). Established as one of the major departments of the Institute, since its inception in 1959, the Department of Electrical Engineering has been actively engaged in teaching and research in diverse fields of Electrical Engineering. With excellent faculty, the Department of Electrical Engineering offers undergraduate (B.Tech) and graduate (M.Tech) in Power Electronics & Drives, Power Systems and Smart Electric Grid and research (Ph.D) programmes.

The Department is strong with all faculty members holding PhD degrees and expertise in various fields. The broad areas of expertise include State Estimation and Real Time Control of Power Systems, Applications of ANN and Fuzzy Logic in Power Systems, Power System Deregulation, Power System Transients, Power Quality, EMTP applications in Power Systems, Relay Coordination, Application of Power Electronics to Power Quality Improvement and Industrial Drives, Hybrid Energy Storage Systems, DSP controlled Drives, Simulation of Power Electronic Converters and Drives Systems and Control of Special Machines.

Accommodation: Not Provided.

Warangal	ONE DAY FACULTY DEVELOPMENT PROGRAMME ON "Fundamentals of Multiphase Electric Drives" (29th September, 2023) (Modified Date)					
	(Sponse	artment of Electrical ored by Science and	ized by Engineering, NIT Warangal Engineering Research Board, echnology, Government of India)			
1. Name :			SPONSORSHIP CERTIFICATE			
 Designation Institution Email : Address for 	: : Correspondence:		Dr. /Mr. /Ms is an employee of our Institute/Organization and is hereby sponsored to participate in the training programme on "Fundamentals of Multiphase Electric Drives" , sponsored by SERB, DST, Govt., INDIA on 29th September , 2023 at EED, NIT Warangal.			
6. Educational C	Qualification:		Signature of Head of Institution (with seal)			
7. Subjects tau	ight so far:		Address for correspondence Post your application form by e-mail only			
	her courses/worksho	ps attended:	Note: The selected candidates are required to attend day TRAINING PROGRAMME at 8 AM for registration			
 9. Experience (Teaching: 10. Accommoda 	Research:	Industry:	Dr. T Vinay Kumar Assistant Professor Department of Electrical Engineering, National Institute of Technology Warangal, WARANGAL - 506 004, Telangana State, India.			

E-mail the scanned copies of filled-in and duly signed application form vinaykumar@nitw.ac.in

For more enquiries please contact: Mobile: +91- 9885281148

Signature of the Applicant

Coordinator

Dr. T Vinay Kumar Assistant Professor Department of Electrical Engineering, National Institute of Technology Warangal, WARANGAL - 506 004, Telangana State, India.

Workshop Schedule (offline platform)

FRI (29 th	09:00 – 10:30 AM	11:00 – 01:00 PM	1:00 - 1:55 PM	2:00 - 3:00 PM	3:00- 3:30 PM	3:30 – 5:00 PM
September, 2023)	Fundamentals of Electric Drives (VTS)	Control of Electric Drives (TVK)	Lunch	Control Techniques for Multi-phase Electric Drives(TVK)	-	Multiphase Electric Drives Lab (TVK)

attend a one ation.

Declaration

The information provided is true to the best of my knowledge. If selected, I agree to abide by the rules and regulations of the training program and shall attend the course for the entire duration. I also undertake the responsibility to inform the Coordinator in case, I am unable to attend the course.

VTS - Prof. VT Somasekhar TVK: Dr. T. Vinay Kumar