

Power Quality Training

Bridging the Gap between
Academia and Industry



VAST Power System



18th-31st March 2021



GOSSEN METRAWATT



**JEF TECHNO
SOLUTIONS PVT. LTD.**



MERUS POWER

**Department of Electrical and Electronics Engineering
Vidya Academy of Science & Technology**

Affiliated to APJ Abdul Kalam Technological University & Approved by AICTE
A Unit of Vidya International Charitable Trust

Thalakottukara P.O., Kecheri, Thrissur - 680501, Kerala, India

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www.vidyaacademy.ac.in





Power Quality Training

With the changing times and the evolution of technology, a constant urge for improvement in all the areas in the engineering sector is crucial. No engineering branch can afford to stay away from timely updating its knowledge reserve. In the electrical engineering sector the power transmission, distribution and consumption are now the latest fields where the changes are taking place rapidly. In earlier days, the electrical engineering fraternity and the general public were satisfied with the simple logic of power being generated at a place, transmitted through the lines, and consumed at different places. But now the consumption pattern of the society has changed, the types of loads which are consuming the power have changed. These changes meant that the grid operators had to resort to strict and effective measures to ensure that the supply is maintained without interruption and has led to the introduction of a term power quality. Just as the name suggests, the quality of power is being monitored so that the grid as a whole operates at its maximum efficiency. The concept of power quality is going to get strengthened in the upcoming decade as the electrical power sector slowly takes the steps for being the smart grid. The first step for giving due emphasis to the power quality of the grid, has already been taken by the Central Electricity Authority (CEA) by imposing a penalty when power quality violations are noticed. Therefore, it is inevitable that the future career opportunities in electrical engineering sector, are now going to be centered around power quality monitoring, analysis and mitigation. The present generation of engineering students and academicians are therefore bound to have a basic knowledge about the various aspects of power quality in order to get ready for the future requirements in the field.

It is at this context that Vidya Academy of Science and Technology launches its first power quality training course, which is a unique attempt at bridging the gap between the academics and the industry.

Objectives

1. Recognize the symptoms of power quality problems.
2. Measure the power quality variables correctly.
3. Generate reports and trends based on the data generated.
4. Analyze the data collected.
5. Do a minor project on the topic.

Contents of the training

- Hands-on training session on power quality analyzers installed at different locations of the campus.
- Hands-on training session on harmonic analyzing software.
- Session on power quality problems and solutions, importance of lightning and grounding.
- Remote access of German power quality lab.
- Hands on training on PQVIEW software



JEF Techno Solution, India.
Gossen Metrawatt GmbH, German
Merus Power, Finland.

REGISTER NOW

<http://bit.ly/PQTrainingVAST>



2,000/-

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INAUGURAL SCHEDULE



18th March 2021

12.30 PM-1.15 PM

Prayer

Welcome Speech : Dr Mary P. Varghese

Inauguration & Inaugural Address : Dr Santhosh Prasannan (Chairman, VICT)

Presidential Address : Dr Saji C.B. Principal, VAST

Keynote Address : Dr P. Rajan, Director KSEB (Transmission, Operations & REES)

Program Overview : Dr Sudha Balagopalan (Dean Academics, VAST)

E-launch of the PQ Trainers' Club: Dr V.N.Krishnachandran (Vice Principal, VAST)

Special Address : Er Michael Schulze (Gossen Metrawatt, Germany)

: Er Anil Kumar P (JEF Techno Solutions Bangalore)

Presence

Er P.K. Asokan (Chief Patron, VICT), Er G. Mohanachandran (ED, VICT), Mr P.K. Unnirajan (AD, VICT), Mr Suresh Lal (AFD, VICT), Er Devarajan (PD, VICT), Mr Manu Raghurajan (Coordinator, VTC) & Dr Kala Barathan (Head, VTC)

Panel Discussion - 1 Hour 30 Minutes

Vote of Thanks : Mr. Vishmurach K.R.(Program coordinator)



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SCHEDULE OF POWER QUALITY TRAINING PROGRAMME

Date	Time (IST)	Topic & Mode of delivery	Resource Person
18/03/2021 Thursday	FN	Lecture & Demo: PQ Issues, Standards, EMI - conducted and Radiated Emissions, New Regulations 	Dr. Sudha Balagopalan (Dean Academics, VAST) Er. Anil Kumar P (JEF Techno Solutions, Bangalore)
	AN	Inauguration and Panel Discussion 	All dignitaries of the college, our esteemed collaborators and eminent panellists
19/03/2021 Friday	FN	Hands on: Installation & Monitoring of power quality using PQ analysers	Er. Jomon P C & Mr. Anand (JEF Techno Solutions, Bangalore) assisted by Trainers' club(VAST)
	AN	Hands on: Download data & use DRANVIEW & DATAVIEW software for data analysis	Er. Jomon P C & Mr. Anand (JEF Techno Solutions, Bangalore) assisted by Trainers' club(VAST)
22/03/2021 Monday	FN	Lecture & Demo: PQ meter, Block Diagram, Function and installation	Er. Jomon P C & Mr. Anand (JEF Techno Solutions, Bangalore) assisted by Trainers' Club(VAST)
	AN	Lecture: Innovative Power Electronics Solutions for the Energy Transition	Er. Pedro Esteban (Merus Power, Finland)
23/03/2021 Tuesday	FN	Lecture with case studies: PQ Issues and Grounding, Lightning Protection and Surge.	Er. Ronak Desai (JEF Techno Solutions, Bangalore) Er. Varadharajan K V (JEF Techno Solutions, Bangalore)
	AN	Demo: PQ View Software	Er. Michael Schulze (Gossen Metrawatt GmbH, Germany) & Er. Anil Kumar P (JEF Techno Solutions, Bangalore)
24/03/2021 Wednesday	FN	Lecture: Overview of the previous sessions and PQ analyser. Test Paper: - Power Quality	PQ Trainers' Club, VAST
	AN	Hands on Remote Lab: PQ Meter Virtual Lab at Gossen Metrawatt Germany	Er. Michael Schulze (Gossen Metrawatt GmbH, Germany)
25/03/21- 30/03/21		Project	-
26/03/2021 Friday	AN	Cyber Security from PQ Meters 	Er. Engel Sacha, CEO, Camille Bauer, Switzerland
31/03/2021 Wednesday	AN	Valedictory function with on-line certificate distribution & trainee feedback. 	Er. Michael Schulze as the Guest of honour & Er. Anil Kumar P as the special guest.

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