

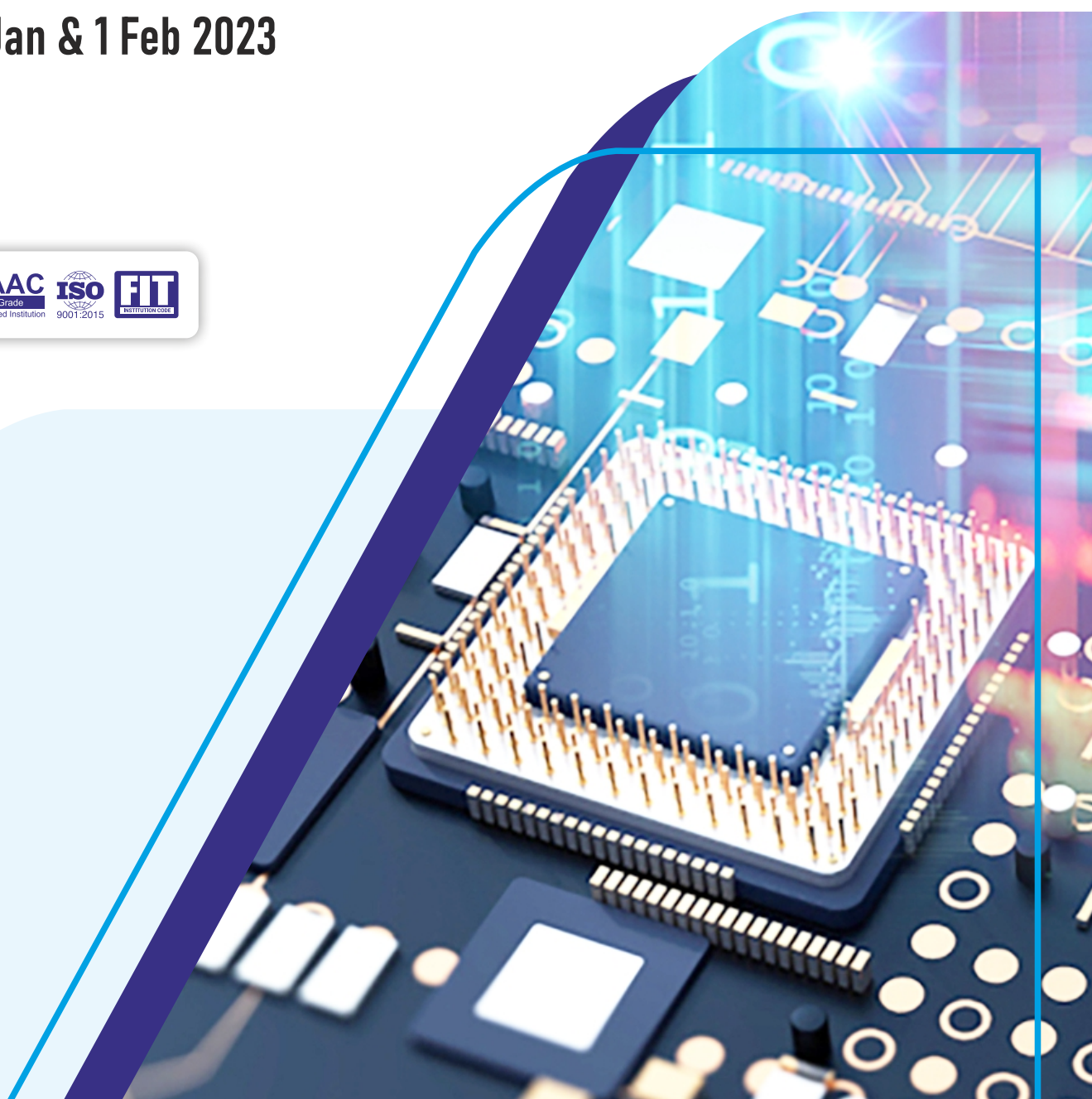


APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY SPONSORED

Three Day Faculty Development Program on

Hands-on Training on Design of Power Electronic Systems

30, 31 Jan & 1 Feb 2023



DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING
FEDERAL INSTITUTE OF SCIENCE AND TECHNOLOGY (FISAT)®
ANGAMALY

About the Programme

In this era of electric vehicles, power converters play an inevitable role. They are the pillars of consumer electronics, power supplies, electric vehicles etc. A sound knowledge of the various aspects of power converters is essential to design and develop appropriate power electronics circuits. The objective of this FDP is to give an insight about the fundamentals and recent developments in gate drivers, snubber circuits for power converters and different implementation platforms for digital controllers. It also aims to give a hands on exposure to PCB design and hardware implementation of gate driver circuits and magnetic circuits for power electronic systems. The sessions are handled by academic experts in these related fields and the participants get a chance to interact with them in the most beneficial way.

About the College

Federal Institute of Science And Technology (FISAT) is a private self-financing Engineering College, established and run by the Federal Bank Officers' Association Educational Society (FBOAES). The FBOAES is an initiative of the Federal Bank Officers' Association (FBOA), the sole representative body of the entire officers of the Federal Bank. Federal Institute of Science And Technology (FISAT) has a unique position in the professional education sector in south India. With the motto "Focus on Excellence", FISAT has been designed and developed to become a "Centre of Excellence" in professional education. FISAT has embarked on an ambitious plan to enhance the quality and value of education and develop high-quality individuals. The institution is accredited by NAAC with 'A' Grade. The institution also received the coveted ISO 9001: 2015 certification.

About the Department

The Department of Electrical and Electronics Engineering was started in 2002. The department offers B.Tech in Electrical and Electronics Engineering and M.Tech in Power Electronics and Power Systems. The department is backed by a team of motivated, dedicated and experienced faculty. The highlight of the department is the best infrastructure in all the laboratories, well appreciated by many guests and accreditation teams. The department envisages moulding graduates to become experts in their chosen fields, by encouraging them to become members of professional societies and broaden their knowledge. The department received NBA accreditation in the year 2020.

VISION

To prepare the students to meet the demands of growing industries and to mould them into successful professionals, globally competent and morally upright, in the field of Electrical and Electronics Engineering, contributing to nation building and the progress of humanity.

MISSION

- ◆ To impart quality and value based education enabling the students to become solution providers for the growing challenges in the industry and society.
- ◆ To create awareness among the students, the impact of Electrical and Electronics Engineering in the global scenario and the challenges of electrical based industries and organizations.
- ◆ To enhance the competitiveness of the graduates for higher studies by promoting research and development in the field of electrical and as well as interdisciplinary subjects.

Organizing Committee

Chief Patron

Mr. Shimith P R, Chairman, FISAT

Patron

Dr. Manoj George, Principal, FISAT

Advisory Committee

1. Dr. C. Sheela, Vice Principal, FISAT
2. Dr. P R Mini, Dean, FISAT

Convenors

Dr. Archana R, HoD, Dept of EEE, FISAT

Dr. Parvathy R, Professor, Dept of EEE, FISAT

Co-ordinators

1. Ms. Surya Natarajan,
Assistant Professor, Sr. Grade, Dept. of EEE
2. Ms. Jyothy G K,
Assistant Professor, Spl. Grade, Dept. of EEE

Registration

- ◆ Faculty Members from various APJAKTU affiliated engineering colleges can apply.
- ◆ No. of participants is limited to 30.
- ◆ Certificates will be issued to registered participants who attend all the sessions.
- ◆ Use the following link or scan the following QR code for registration.
- ◆ No registration fee for faculty from APJAKTU affiliated engineering colleges.
- ◆ Last date for registration - Jan 22, 2023.

Registration link is : <https://forms.gle/qwvvvP4T5Aijs6LW7A>



Course Contents

1. Power Semiconductor devices - Interpreting datasheet and Introduction to wide band gap devices
2. Snubber Design, Heat Sink Selection and Loss Calculation of Power Converters
3. Introduction to PCB design using KiCAD software and Hands- on Session
4. Design of magnetic circuits for Power converters and Hands-on session
5. Design of gate drivers for power converters and Hands-on Session
6. Implementation of Digital Controllers for Power converters
7. STM 32 programming for power converters

The sessions are handled by academic experts in these related fields and the participants get a chance to interact with them in the most beneficial way

For More Details :

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