

## About MBM Engineering College

M.B.M Engineering College is one of the oldest college in India which was established on 15 August 1951, by the Government of Rajasthan. MBM offers courses of study in engineering leading to the degrees of Bachelor of Engineering, Master of Engineering, Doctor of Philosophy (Ph.D.), and Post Graduate Diploma.

The college is committed to providing its students with quality education that combines rigorous academic study and developing a far more ambitious, integrated and influential environment that will best serve the nation.

## Prerequisite

- Basic knowledge in the field of power electronics converter.
- MATLAB Simulink.
- Basic soldering in PCB.
- Basic knowledge of embedded systems.

## Features of STTP

- No prior knowledge of programming is required.
- Basic and advanced topics will be covered by Domain experts.
- Hardware implementation of Converter topology in open and closed loop configuration.
- Practical feedback loop design consideration

## Objective of STTP

This STTP is designed with an aim to discuss implementation aspects of Power Electronics Circuitry to the faculty members, PG and UG students of engineering colleges. It will fill the gap between Simulation and Hardware results of DC-DC converter. This is a 5-day training program on design, simulation & hardware implementation of DC-DC converter topology. This training program aims to give participants an overview of simulation and hardware implementation of control algorithms for dc-dc converter and practical feedback loop design consideration with hands on which will be carried out with 32-bit controller and MATLAB.

## Course Contents

STTP will cover:

- Overview of power electronics and semiconductor devices.
- DC-DC theory, design aspects, simulation and hardware in open loop.
- Application of ARM cortex controller in the field of power electronics.
- PWM generation using ARM cortex STM32 and MATLAB Simulink environment.
- Closed loop control of DC-DC converter.
- Simulation of control algorithms in MATLAB.
- Sensing of Electrical quantity using sensor and ADC.
- Hardware implementation of control algorithms with STM32 and MATLAB.
- Demonstration of VVVF drives for induction motor.

**Note: The online registration link is as follows:**  
[goo.gl/Jyupny](http://goo.gl/Jyupny)

## Registration Form

*TEQIP-III STTP on*

### Design, Simulation and Hardware Implementation of DC-DC Converters

22<sup>nd</sup> – 26<sup>th</sup> March, 2018

Name : .....

Designation : .....

Department : .....

Institute/Organisation:.....  
.....

Qualification : .....

Mailing Address : .....

.....

Mob No.: .....

E-mail: .....

## Registration Fee Details

Mode of Payment : ..... (Cash / DD / Online)

DD No. / Transaction ID : .....

Date of Payment : ..... Amount : .....

Demand Draft Should be in favour of Head, Electrical Engineering, JNVU, Jodhpur or Online payment can be done on the following details.

Bank Name and Branch : Bank of Baroda, University Campus, Jodhpur

IFSC Code : BARB0UNIJOD

Account No. 05710100002162

Account Name : Head Electrical Engineering

The above information provided is true and to the best of my knowledge. I agree to abide by the rules and regulation of the course.

Signature of Candidate

## Resource Person

- Prof. M.A. Mulla, SVNIT Surat
- Prof. Deepak M. Fulwani, IIT Jodhpur
- Prof. Jagdish Kumar, PEC University, Chandigarh
- Prof. Akhil Ranjan Garg, MBM Jodhpur
- Mr. Kakad Santosh Lakhmichand, MBM Jodhpur
- Ms. Khushboo Shah, MBM Jodhpur
- Mr. Jitendra Singh

## Dates to Remember

Last Date of Registration: 15<sup>th</sup> March, 2018

Course duration: 22<sup>nd</sup> – 26<sup>th</sup> March, 2018

## Eligibility Criteria

- M.Tech / M.E. Pursuing Students
- Ph.D. Scholars working in the area of Power Electronics
- Faculties of Engineering Colleges
- Industry person related to field of Power Electronics

## Registration Fee

- Research Scholars & PG students – INR 500/-
- Institute Faculty – INR 1500/-
- Industry Person – INR 3000/-

## Contact Person

**Mr. Kakad Santosh Lakhmichand,**

**Ms. Khushboo Shah**

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Department of Electrical Engineering, MBM  
Engineering College, Jodhpur  
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E-mail Id: stp.dshic18@gmail.com

## STTP Committee

### CHIEF PATRON

Prof. R.P. Singh, Vice Chancellor,  
JNV University, Jodhpur

### Patron

Prof. S.S. Mehta, Dean,  
Faculty of Engg., JNV University, Jodhpur

### Program Chair

Prof. Jayashri Vajpai,  
Head Electrical Engg. Department

### Coordinator

Prof. Akhil Ranjan Garg,  
Professor, Electrical Engg. Department &  
Hon. Secretary, Institute of Engineers, Jodhpur

### Co-Coordinator

Mr. Kakad Santosh Lakhmichand

Ms. Khushboo Shah

### Joint Secretary

Mr. Deepak Patel

### Advisory Committee

#### Convener

Prof. Avdhesh Sharma

#### Co-Convener

Prof. Deepak M. Fulwani

#### Members

Prof. M.K. Bhaskar

Prof. M.G. Soni

### Organising Committee

- Ms. Khamma Kanwar
- Ms. Santosh Meena
- Mr. Saurabh Chopra
- Mr. Ashish Godara
- Mr Divyanshu Malhotra

## TEQIP-III

### Short Term Training Program on

## Design, Simulation and Hardware Implementation of DC-DC Converters

22<sup>nd</sup> – 26<sup>th</sup> March, 2018

Organized by



Department of Electrical Engineering

**MBM Engineering College,  
Jodhpur, Rajasthan**

[www.mbm.ac.in](http://www.mbm.ac.in)

[www.jnvu.edu.in](http://www.jnvu.edu.in)

**In Collaboration with:**



**Institute of Engineers**



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**IIT Jodhpur**