



ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ

("ವಿಟಿಎಂ ಅಧಿನಿಯಮ ೧೯೯೪" ರ ಅಡಿಯಲ್ಲಿ ಕರ್ನಾಟಕ ಸರ್ಕಾರದಿಂದ ಸ್ಥಾಪಿತವಾದ ರಾಜ್ಯ ವಿಶ್ವವಿದ್ಯಾಲಯ)

Visvesvaraya Technological University

(State University of Government of Karnataka Established as per the VTU Act, 1994)

"Jnana Sangama" Belagavi-590018, Karnataka, India

Dr. Prasad B. Rampure
Registrar

Phone No.: (0831) 2498131
Fax No.: (0831) 2498134

VTU/BGM/ECE/SM-VTU/2026-27/83

Date: 18.08.2026

Circular

Sub: 05 Days Faculty Workshop on "Siemens EDA PCB Design".

Ref: 1. Hon'ble Vice Chancellor's approval dt: 07.08.2026.

2. VTU/BGM/ECE/SM-VTU/2026-27/68, dt: 07.08.2026.

With reference to the above and under ref. (2), the Last Date for registration to 05 Days Faculty Workshop on "Siemens EDA PCB Design" for the faculty members of VTU Centres, Affiliated, Autonomous and Constituent Colleges of the University is extended up to 24th AUG 2026.

The details of the said workshop is as below:

Date	Time	Venue
31 st August - 4 th September 2026	10.00 am to 5.30 pm	Siemens EDA, Training Room, 5 th Floor, Mercury / Jupiter Block, Prestige Tech Park, Ring Road, Kadubeesanahalli, Bengaluru-560 103.

The day wise agenda of the said workshop is enclosed.

Google link for registration: <https://forms.gle/aVvkTMvGV7ZHQSQh7>

Registration Fees: NIL

Last Date for Registration: **24th AUG 2026.**

The confirmation mail will be sent to the selected faculty members.

Note: No TA/DA will be paid to the participants and are also requested to make their own arrangements for Travel and Accommodation.

You are hereby requested to bring the contents of this circular to all the Faculty Members of your organization and nominate the faculty member willing to be the Master Trainer to train the faculty members and students.

Raw / 18/08/26
Registrar

Encl: Annexure-1 & 2 and Agenda of the workshop.

To,

1. The Principals of all the Engineering Colleges (Affiliated, Autonomous and Constituent) under VTU, Belagavi.
2. The Chairpersons / Program Coordinators of All Departments of VTU, Belagavi, Kalaburagi, Muddenahalli and Mysuru.
3. The Regional Directors (I/c), VTU, Belagavi, Kalaburagi, Mysuru and Bengaluru for circulation.

Copy to:

1. The Hon'ble Vice Chancellor, through the Sec. to VC, VTU, Belagavi for kind information.
2. The Chairperson, Dept. of ECE, VTU, Belagavi for information and needful.
3. The Director, ITISMU, VTU, Belagavi to publish in VTU website.



SIEMENS

Siemens EDA -VTU

Master Trainers –Faculty Workshop on PCB Design

Dates: 31st August to 4th September 2026

Venue: Siemens, JUPITER BLOCK, Prestige Tech Park 5th Floor, Marathahalli - Sarjapur Outer Ring Rd, Bengaluru, Karnataka 560103

Timings: 8:30 AM to 5:30 PM

Breakfast, Lunch and snacks are available at the venue

Introduction: While chip design is central to semiconductor products, the overall system performance also depends heavily on effective PCB design, circuit simulation, and electrical analysis. This workshop provides a foundational understanding of these areas and their role in developing high-performance electronic systems.

- We will explore the fundamentals of PCB design and the electrical challenges associated with high-performance systems. Participants will gain insights into PCB design methodologies, industry best practices, and how design platforms such as Xpedition can help streamline and optimize the PCB design flow.
- The workshop will also introduce circuit simulation concepts and demonstrate how simulation can be used to evaluate circuit behaviour and validate designs before hardware implementation.
- Furthermore, we will cover the fundamental principles of Signal Integrity (SI) and Power Integrity (PI) for PCB designs. Participants will learn about common SI/PI challenges and how simulation and analysis tools can be leveraged to identify potential issues, optimize designs, and achieve reliable system performance.

Learning Outcome: Participants will gain an understanding of key concepts in PCB Design, Circuit Simulation, Signal Integrity (SI), and Power Integrity (PI), along with hands-on experience using Xpedition and HyperLynx tools for PCB design, and analysis.

Prerequisite for Faculty attending the workshop:

1. Participants should have Xpedition & HyperLynx Software installed on their laptops. We kindly ask you to download and install the software before attending as we will be unable to support during the workshop.
 - a. Software binaries related to Xpedition & HyperLynx along with installation instruction document & demo video will be shared with all the registered participants a week before the workshop
2. Participants are to be from Electronics background with basic knowledge in – Electronic devices & circuits, Linear Integrated Circuits, Electromagnetics & Digital Communications

Day wise Agenda:

DAY 1 and 2: PCB Design

DAY 3: Circuit Simulation

DAY 4 and 5: Signal Integrity and Power Integrity

DAY 1 – 31st August 2026		
Time	Topic	Siemens EDA Tool Used
9:00 AM – 9:30 AM	Introduction to Workshop, logistics, Workshops Files, Installations	-
9:30 AM – 11:00 AM	Introduction to PCB Nomenclature Xpedition Library Management – Library concepts, symbols, footprints, pad stacks and component creation	-
11:00 AM – 11:15 AM: Coffee Break		
11:15 AM – 1:00 PM	Hands-on Xpedition Session I (Introduction to Xpedition)	Xpedition Library manager
1:00PM – 2:00 PM: LUNCH		
2:00 PM – 3:15 PM	Hands-on Xpedition Session II – Library Creation	Xpedition Library Manager
3:15 PM – 3:30 PM: Tea Break		
3:30 PM – 5:15 PM	Schematic Design Flow – Project setup, component placement, connectivity, constraints and schematic verification	Xpedition Designer

DAY 2 – 1 st September 2026		
Time	Topic	Siemens EDA Tool Used
9:00 AM – 11:00 AM	Hands-on Xpedition Session III – Schematic Design	Xpedition Designer
11:00 AM – 11:15 AM Coffee Break		
11:15 AM – 1:00 PM	PCB Layout FundAMentals – Board setup, stack-up, placement, constraints and routing concepts	Xpedition Layout
12:45 PM – 2:00 PM: LUNCH		
2:00 PM – 3:15 PM	Hands-on Xpedition Session IV – PCB Setup & Component Placement	Xpedition Layout
3:15 PM – 3:30 PM: Tea Break		
3:30 PM – 5:15 PM	Hands-on Xpedition Session V – PCB Routing & Design Verification	Xpedition Layout

DAY 3 – 2 nd September 2026		
Time	Topic	Siemens EDA Tool Used
9:00 AM – 11:00 AM	Introduction to HyperLynx AMS, AMS Capabilities – Types of Simulation	HyperLynx AMS
	Working with HyperLynx AMS – RLC Circuit	
11:00 AM – 11:15 AM Coffee Break		
11:15 AM – 1:00 PM	Working with SPICE models, S-parAMeter models – Frequency Domain Analysis	HyperLynx AMS
1:00 PM – 2:00 PM: LUNCH		
2:00 PM – 3:15 PM	H-Bridge Circuit – ParAMetric Sweep Analysis, Sensitivity Analysis, Monte-Carlo analysis Working with Op-AMP Circuits	HyperLynx AMS
3:15 PM – 3:30 PM: Tea Break		
3:30 PM – 5:15 PM	Regulated Power Supply Design, Switch Mode Power Supply Configurations	HyperLynx AMS

DAY 4 – 3 rd September 2026		
Time	Topic	SiemensEDA Tool Used
9:00 AM – 11:00 AM	Introduction to Signal Integrity – Stackup, Impedance calculations, Terminations, Discontinuities, Single-ended & Differential Signals	HyperLynx SI
11:00 AM – 11:15 AM Coffee Break		
11:15 AM – 1:00 PM	Hands-on HL Session I (Introduction to HyperLynx and First Lab in LineSim)	HyperLynx SI
1:00 PM – 2:00 PM: LUNCH		
2:00 PM – 3:15 PM	Hands-on Session (Working in HyperLynx, Crosstalk, Signal Integrity Analysis)	HyperLynx SI
3:00 PM – 3:30 PM: Tea Break		
3:30 PM – 5:15 PM	Hands-on Session (Post-Layout Analysis, Eye-Diagram, General Batch SI)	HyperLynx SI

DAY 5 – 4 th September 2026		
Time	Topic	Siemens EDA Tool Used
9:00 AM – 11:00 AM	Introduction to Power Integrity – Concepts, DC Drop Issues, Decoupling & Plane Noise effects.	HyperLynx PI
11:00 AM – 11:15 AM Coffee Break		
11:15 AM – 1:00 PM	Hands-on Session (DC Drop Analysis using HyperLynx)	HyperLynx PI
1:00 PM – 2:00 PM: LUNCH		
2:00 PM – 3:15 PM	Hands-on Session – Decoupling Analysis	HyperLynx PI
3:15 PM – 3:30 PM: Tea Break		
3:30 PM – 5:15 PM	Introduction to 3D Electromagnetic Field Solvers, why are they required? Types of Solvers, S-parameters Hands-on Session - S-parameter extraction	HyperLynx Advanced Solvers



ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ

("ವಿಟೀಯು ಅಧಿನಿಯಮ ೧೯೯೪" ರ ಅಡಿಯಲ್ಲಿ ಕರ್ನಾಟಕ ಸರ್ಕಾರದಿಂದ ಸ್ಥಾಪಿತವಾದ ರಾಜ್ಯ ವಿಶ್ವವಿದ್ಯಾಲಯ)

Visvesvaraya Technological University

(State University of Government of Karnataka Established as per the VTU Act, 1994)

"Jnana Sangama" Belagavi-590018, Karnataka, India

Dr. Prasad B. Rampure
Registrar

Phone No.: (0831) 2498131
Fax No.: (0831) 2498134

VTU/BGM/ECE/SM-VTU/2026-27/68

Date: 07.08.2026

Circular

Sub: 05 Days Faculty Workshop on "Siemens EDA PCB Design".

Ref: Hon'ble Vice Chancellor's approval dt: 07.08.2026.

With reference to the above, this is to inform that Visvesvaraya Technological University, Belagavi in association with Siemens EDA, Bengaluru is organizing 05 Days Faculty Workshop for the faculty members of VTU Centres, Affiliated, Autonomous and Constituent Colleges of the University @ Siemens EDA, Bengaluru. The workshop is aimed to train the nominated faculty members to serve as "Master Trainer" in PCB Design.

This workshop covers the fundamentals of PCB Design and Analysis using Siemens EDA Solutions, which includes:

- Design (using Xpedition)
- Library, Symbol and Footprints creation
- Schematic and Layout Design Analysis (using HyperLynx)
- Circuit Simulation
- Signal Integrity
- Power Integrity

Date	Time	Venue
31 st August - 4 th September 2026	10.00 am to 5.30 pm	Siemens EDA, Training Room, 5 th Floor, Mercury / Jupiter Block, Prestige Tech Park, Ring Road, Kadubeesanahalli, Bengaluru-560 103.

Hence, you are hereby requested to bring the contents of this circular to all the Faculty Members of your organization and nominate the faculty member willing to be the Master Trainer to train the faculty members and students.

Google link for registration: <https://forms.gle/aVvkTMvGV7ZHQSqh7>

Registration Fees: NIL

Last Date for Registration: 17th AUG 2026

The confirmation mail will be sent to the selected faculty members.

Note: No TA/DA will be paid to the participants and are also requested to make their own arrangements for Travel and Accommodation.

Raw/07/08/26

Registrar

Encl: Annexure-1 & 2.

To,

1. The Principals of all the Engineering Colleges (Affiliated, Autonomous and Constituent) under VTU, Belagavi.
2. The Chairpersons / Program Coordinators of All Departments of VTU, Belagavi, Kalaburagi, Muddenahalli and Mysuru.
3. The Regional Directors (I/c), VTU, Belagavi, Kalaburagi, Mysuru and Bengaluru for circulation.

Copy to:

1. The Hon'ble Vice Chancellor, through the Sec. to VC, VTU, Belagavi for kind information.
2. The Chairperson, Dept. of ECE, VTU, Belagavi for information and needful.
3. The Director, ITISMU, VTU, Belagavi to publish in VTU website.

NO OBJECTION CERTIFICATE

The applicant Prof./ Dr./Mr./Ms.....
of Dept. of of our
institution will be permitted to attend the **05 Days Faculty Workshop on "Siemens EDA-
PCB Design"** organized from **31st AUG - 4th September 2026 @ Siemens EDA, Bengaluru**

.....
Signature of HoD
with seal

.....
Signature of Principal /Head of Institute
with seal

DECLARATION BY THE PARTICIPATING FACULTY MEMBER

I hereby declare that, I will attend all the sessions of 05 Days Faculty Workshop on
"Siemens EDA-PCB Design" organized from **31st AUG - 4th September 2026 @ Siemens**
EDA, Bengaluru and take up the responsibility of training the faculty and students in
PCB Design as a Master Trainer, if selected.

Place:

Date:

.....
Signature of the Faculty Member

Role of Master Trainers

Master Trainers shall:

- Acquire advanced knowledge in PCB Design.
- Deliver workshops and training programs for faculty, staff, and students.
- Mentor peers in adopting new technologies and best practices.
- Develop and share resources such as training materials, learning modules, and implementation guidelines.
- Provide technical guidance as subject matter experts.
- Facilitate knowledge transfer.
- Support for curriculum enrichment.
- Monitor training outcomes and provide the feedback for continuous improvement.

--- ○ ○ ○ ○ ---